

Inquiry Investigations™
Forensic Science MODULE - 1013062
Grades: 7-10

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Kentucky Standards
Science
Grade 7

CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-7-STM.	Big Idea: Structure and Transformation of Matter (Physical Science) - A basic understanding of matter is essential to the conceptual development of other big ideas in science. During the middle years, physical and chemical changes in matter are observed, and students begin to relate these changes to the smaller constituents of matter - namely, atoms and molecules. The use of models (and an understanding of their scales and limitations) is an effective means of learning about the structure of matter. Looking for patterns in properties is also critical to comparing and explaining differences in matter. (Academic Expectations 2.1, 2.2, 2.4, 2.5)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-STM-U-1.	Program of Studies: Understandings - Students will understand that equal volumes of different substances usually have different weights. <ul style="list-style-type: none"> Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-STM-U-3.	Program of Studies: Understandings - Students will understand that elements, as well as compounds, can be classified according to their similar properties, including how they react with each other and how they may be used. The patterns, which allow classification, can be used to infer or understand real life applications for those substances. <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-STM-S-4.	Program of Studies: Skills and Concepts - Students will observe reactions between substances that produce new substances very different from the reactants <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-7-	Big Idea: Motion and Forces (Physical Science) - Whether

	MF.	observing airplanes, baseballs, planets, or people, the motion of all bodies is governed by the same basic rules. At the middle level, qualitative descriptions of the relationship between forces and motion will provide the foundation for quantitative applications of Newton's Laws. (Academic Expectations 2.1, 2.2, 2.3)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-MF-S-1.	<p>Program of Studies: Skills and Concepts - Students will use appropriate tools and technology (e.g., timer, meter stick, balance, spring scale) to investigate the position, speed and motion of objects</p> <ul style="list-style-type: none"> Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-7-UD.	Big Idea: Unity and Diversity (Biological Science) - All matter is comprised of the same basic elements, goes through the same kinds of energy transformations, and uses the same kinds of forces to move. Living organisms are no exception. In middle school, students begin to compare, contrast, and classify the microscopic features of organisms - the cells, as well as investigate reproduction as the essential process to the continuation of all species. Expected patterns of genetic traits are predicted. Distinctions are made between learned behaviors and inherited traits. Emphasis at every level should be placed upon the understanding that while every living thing is composed of similar small constituents that combine in predictable ways, it is the subtle variations within these small building blocks that account for both the likenesses and differences in form and function that create the diversity of life. (Academic Expectations 2.1, 2.2, 2.3, 2.4)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-UD-U-1.	<p>Program of Studies: Understandings - Students will understand that specialized structures called genes are located in the chromosomes of each living cell. These structures have the task of passing on characteristics that make offspring resemble their parents (heredity).</p> <ul style="list-style-type: none"> Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-UD-U-2.	<p>Program of Studies: Understandings - Students will understand that inherited traits of an offspring come directly from the genes of the parent, while learned traits are acquired after birth through interactions with the offspring's surroundings</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Case Activity 4: The Second Examination Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile

		<p>Frequency Calculations</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-UD-U-4.	<p>Program of Studies: Understandings - Students will understand that sexual reproduction creates variations among offspring, gradually contributing to a wide variety of life.</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-UD-U-5.	<p>Program of Studies: Understandings - Students will understand that the observable differences among humans are minor compared to their internal similarity, as evidenced by the ability of people from all over the world to physically mix through reproduction, blood transfusions and organ transplants.</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles Forensic Science: Unit 3 Case Activity 1: The Stain in Question Forensic Science: Unit 3 Case Activity 2: The Glowing Light Forensic Science: Unit 3 Case Activity 3: The False Positive Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns Forensic Science: Unit 6 Activity 5: Blood Analysis Teacher Resource CD: Fingerprinting Teacher Resource CD: The Case of the Telling Blood Group Teacher Resource CD: Trace Evidence Virtual Laboratory: ABO-Rh Blood Typing
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-UD-S-2.	<p>Program of Studies: Skills and Concepts - Students will research and describe the role of genes/chromosomes in the passing of information from one generation to another (heredity)</p>

		<ul style="list-style-type: none"> Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-UD-S-4.	<p>Program of Studies: Skills and Concepts - Students will research variations within species that result from sexual reproduction</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-UD-S-5.	<p>Program of Studies: Skills and Concepts - Students will compare the physiological similarities among people from geographically and culturally diverse origins</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles Forensic Science: Unit 3 Case Activity 1: The Stain in Question Forensic Science: Unit 3 Case Activity 2: The Glowing Light Forensic Science: Unit 3 Case Activity 3: The False Positive Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns Forensic Science: Unit 6 Activity 5: Blood Analysis Teacher Resource CD: Fingerprinting Teacher Resource CD: The Case of the Telling Blood Group Teacher Resource CD: Trace Evidence Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-7-BC.	<p>Big Idea: Biological Change (Biological Science) - The only thing certain is that everything changes. At the middle school level, students study relationships among populations and ecosystems that contribute to the success or demise of a specific population or species. Students construct basic explanations that can account for the great diversity among organisms. (Academic Expectations 2.1, 2.2, 2.5, 2.6)</p>
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-	<p>Program of Studies: Understandings - Students will understand that results of scientific investigations are seldom exactly the same, but if</p>

	BC-U-4.	<p>the differences are large it is important to try to figure out why. Keeping careful records is important to help investigate what might have caused the differences.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
AE/SKILLS & CONCEPTS/ORGANIZER	SC-7-BC-S-4.	<p>Program of Studies: Skills and Concepts - Students will compare the results from a variety of investigations (based on similar hypotheses) to identify differences between their outcomes/conclusions and propose reasonable explanations for those discrepancies</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3:

The Bloody Cloth - DNA Profile Analysis

- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The

		<p>Careless Forger</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.AE.	Academic Expectation
GOAL/UNDERSTANDINGS/SUBDOMAIN	AE.1.	Students are able to use basic communication and mathematics skills for purposes and situations they will encounter throughout their lives.
AE/SKILLS & CONCEPTS/ORGANIZER	1.2.	<p>Students make sense of the variety of materials they read.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard

- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
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- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.3.</p>	<p>Students make sense of the various things they observe.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The

Questioned Parentage

- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
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- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3:

		<p>Demonstrating Locard's Principle</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.4.</p>	<p>Students make sense of the various messages to which they listen.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper

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<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.5-1.9.</p>	<p>Students use mathematical ideas and procedures to communicate, reason, and solve problems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills

- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
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- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Simulating DNA Analysis • Virtual Laboratory: ABO-Rh Blood Typing
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<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.10.</p>	<p>Students organize information through development and use of classification rules and systems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
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- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The

		<p>Fraudulent Thread</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.11.</p>	<p>Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper

		<p>Mark</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4:
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		<p>Detecting Trace Amounts of Blood</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.12.</p>	<p>Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The

Solitary Fingerprint

- Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint
- Forensic Science: Unit 1 Case Activity 3: The Paper Mark
- Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint
- Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of

Human Blood

- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
- Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks
- Forensic Science: Unit 6 Activity 1: Toxicological Analysis
- Forensic Science: Unit 6 Activity 2: Chromatographic Analysis
- Forensic Science: Unit 6 Activity 3: Fingerprint Analysis
- Forensic Science: Unit 6 Activity 4: Document Analysis
- Forensic Science: Unit 6 Activity 5: Blood Analysis
- Virtual Laboratory: ABO-Rh Blood Typing

<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.16.</p>	<p>Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1:
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		<p>Applying the Kastle-Meyer Test for the Presence of Blood</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis
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		<ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.AE.	Academic Expectation
GOAL/UNDERSTANDINGS/SUBDOMAIN	AE.2.	Students shall develop their abilities to apply core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, practical living studies, and vocational studies to what they will encounter throughout their lives.
AE/SKILLS & CONCEPTS/ORGANIZER	2.1.	<p>Science: Students understand scientific ways of thinking and working and use those methods to solve real-life problems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question

		<ul style="list-style-type: none"> • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4:
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		<p>Analyzing Writing Inks</p> <ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>2.2.</p>	<p>Science: Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1:

Modeling a DNA Profile

- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The

		<p>Peculiar Letter T</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>2.4.</p>	<p>Science: Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4:

		<p>Latent Fingerprints on Smooth Surfaces</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
CATEGORY	KY.CC.	Core Content for Assessment v.4.1
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-07-3.4.	Unity and Diversity: In middle school, students begin to compare, contrast and classify the microscopic features of organisms - the cells, as well as investigate reproduction as the essential process to the continuation of all species. Expected patterns of genetic traits are predicted. Distinctions are made between learned behaviors and inherited traits.
AE/SKILLS & CONCEPTS/ORGANIZER	SC-07-3.4.1.	<p>Biological Science: Students will describe the role of genes/chromosomes in the passing of information from one generation to another (heredity); compare inherited and learned traits.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Teacher Resource CD: Simulating DNA Analysis

Kentucky Standards
Science
Grade 8

CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-8-UD.	Big Idea: Unity and Diversity (Biological Science) - All matter is comprised of the same basic elements, goes through the same kinds of energy transformations, and uses the same kinds of forces to move. Living organisms are no exception. In middle school, students begin to compare, contrast, and classify the microscopic features of organisms - the cells, as well as investigate reproduction as the essential process to the continuation of all species. Expected patterns of genetic traits are predicted. Distinctions are made between learned behaviors and inherited traits. Emphasis at every level should be placed upon the understanding that while every living thing is composed of similar small constituents that combine in predictable ways, it is the subtle variations within these small building blocks that account for both the likenesses and

		differences in form and function that create the diversity of life. (Academic Expectations 2.1, 2.2, 2.3, 2.4)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-8-UD-U-1.	<p>Program of Studies: Understandings - Students will understand that all cells contain specialized parts that are structured to efficiently perform the cell's essential functions.</p> <ul style="list-style-type: none"> Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-8-UD-S-1.	<p>Program of Studies: Skills and Concepts - Students will investigate, model and explain the functions of the specialized parts within the cell</p> <ul style="list-style-type: none"> Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-8-UD-S-4.	<p>Program of Studies: Skills and Concepts - Students will describe the role of genes/chromosomes in the passing of information from one generation to another (heredity)</p> <ul style="list-style-type: none"> Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-8-UD-S-6.	<p>Program of Studies: Skills and Concepts - Students will collect and analyze information to answer questions about factors influencing heredity and learned behaviors and explain how scientific knowledge has been modified as new information is revealed</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Case Activity 4: The Second Examination Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-9-UD-S-7.	<p>Program of Studies: Skills and Concepts - Students will research and discuss the impact of technological advances, and explore the ethical questions they often create</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint Forensic Science: Unit 1 Case Activity 3: The Paper Mark

- Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint
- Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood

		<ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
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CATEGORY	KY.PS.	Program of Studies 2006
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GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-8-BC.	<p>Big Idea: Biological Change (Biological Science) - The only thing certain is that everything changes. At the middle school level, students study relationships among populations and ecosystems that contribute to the success or demise of a specific population or species. Students construct basic explanations that can account for the great diversity among organisms.</p>
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		(Academic Expectations 2.1, 2.2, 2.5, 2.6)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-8-BC-U-3.	<p>Program of Studies: Understandings - Students will understand that scientists cannot always control experimental conditions to obtain evidence. When that is not possible, they try to observe as wide a range of natural occurrences as possible to be able to identify patterns.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group

		<ul style="list-style-type: none"> • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint
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		<p>Analysis</p> <ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-8-I.	<p>Big Idea: Interdependence (Unifying Concepts) - It is not difficult for students to grasp the general notion that species depend on one another and on the environment for survival. But their awareness must be supported by knowledge of the kinds of relationships that exist among organisms, the kinds of physical conditions that organisms must cope with, the kinds of environments created by the interaction of organisms with one another and their physical surroundings, and the complexity of such systems. In middle school, students should be guided from specific examples of the interdependency of organisms to a more systematic view of the interactions that take place among organisms and their surroundings. Students growing understanding of systems in general will reinforce the concept of ecosystems. Stability and change in ecosystems can be considered in terms of variables such as population size, number and kinds of species, productivity, and the effect of human intervention. (Academic Expectations 2.1, 2.2, 2.3, 2.4)</p>
AE/SKILLS & CONCEPTS/ORGANIZER	SC-8-I-S-4.	<p>Program of Studies: Skills and Concepts - Students will evaluate the risks and benefits of human actions affecting the environment and identify which populations will be harmed or helped. Use a variety of data/ sources to support or defend a position related to a proposed action, both orally and in writing. Analyze the validity of other arguments</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
CATEGORY	KY.AE.	Academic Expectation
GOAL/UNDERSTANDINGS/SUBDOMAIN	AE.1.	<p>Students are able to use basic communication and mathematics skills for purposes and situations they will encounter throughout their lives.</p>
AE/SKILLS & CONCEPTS/ORGANIZER	1.2.	<p>Students make sense of the variety of materials they read.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black

		<p>Plastic Bag</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The
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		<p>Artist's Brush</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.3.</p>	<p>Students make sense of the various things they observe.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark

- Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint
- Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood

		<ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
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<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.4.</p>	<p>Students make sense of the various messages to which they listen.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The
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		<p>Forged Fingerprint</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3:
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		<p>Human Blood Group Analysis</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
AE/SKILLS & CONCEPTS/ORGANIZER	1.5-1.9.	Students use mathematical ideas and procedures to communicate, reason, and solve problems.

		<ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2:
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Applying the Precipitin Test for the Presence of Human Blood

- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
- Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks
- Forensic Science: Unit 6 Activity 1: Toxicological Analysis
- Forensic Science: Unit 6 Activity 2: Chromatographic Analysis
- Forensic Science: Unit 6 Activity 3: Fingerprint Analysis
- Forensic Science: Unit 6 Activity 4: Document Analysis
- Forensic Science: Unit 6 Activity 5: Blood Analysis
- Teacher Resource CD: Analyzing Writing Inks
- Teacher Resource CD: Simulating DNA Analysis

		<ul style="list-style-type: none"> Virtual Laboratory: ABO-Rh Blood Typing
AE/SKILLS & CONCEPTS/ORGANIZER	1.10.	<p>Students organize information through development and use of classification rules and systems.</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint Forensic Science: Unit 1 Case Activity 3: The Paper Mark Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Case Activity 4: The Second Examination Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles Forensic Science: Unit 3 Case Activity 1: The Stain in Question Forensic Science: Unit 3 Case Activity 2: The Glowing Light Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door

		<ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis
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		<ul style="list-style-type: none"> • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.11.</p>	<p>Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The

Glowing Light

- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
- Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks

		<ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.12.</p>	<p>Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6:

		<p>Genetic Analysis of DNA Profiles</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills
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		<ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.16.</p>	<p>Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms

		<ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
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		<ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.AE.	Academic Expectation
GOAL/UNDERSTANDINGS/SUBDOMAIN	AE.2.	Students shall develop their abilities to apply core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, practical living studies, and vocational studies to what they will encounter throughout their lives.
AE/SKILLS & CONCEPTS/ORGANIZER	2.1.	<p>Science: Students understand scientific ways of thinking and working and use those methods to solve real-life problems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The

		<p>Second Examination</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The
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		<p>Curious Line</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>2.2.</p>	<p>Science: Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3:

		<p>Practicing Fingerprint Identification Skills</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn
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		<p>Sleeve</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>2.4.</p>	<p>Science: Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The

		<p>Solitary Fingerprint</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
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CATEGORY	KY.CC.	Core Content for Assessment v.4.1
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-08-3.4.	Unity and Diversity: In middle school, students begin to compare, contrast and classify the microscopic features of organisms - the cells, as well as investigate reproduction as the essential process to the continuation of all species. Expected patterns of genetic traits are predicted. Distinctions are made between learned behaviors and inherited traits.
AE/SKILLS & CONCEPTS/ORGANIZER	SC-08-3.4.1.	<p>Biological Science: Students will explain the relationship between structure and function of the cell components using a variety of representations.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis

CATEGORY	KY.CC.	Core Content for Assessment v.4.1
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-08-3.5.	Biological Change: At the middle school level, students study relationships among populations and ecosystems that contribute to the success or demise of a specific population or species. Students construct basic explanations that can account for the great diversity among organisms.
AE/SKILLS & CONCEPTS/ORGANIZER	SC-08-3.5.1.	<p>Biological Science: Students will draw conclusions and make inferences about the consequences of change over time that can account for the similarities among diverse species.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile

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Grade 9**

CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	H-STM.	Big Idea: Structure and Transformation of Matter (Physical Science) - A basic understanding of matter is essential to the conceptual development of other big ideas in science. By high school, students will be dealing with evidence from both direct and indirect observations (microscopic level and smaller) to

		<p>consider theories related to change and conservation of matter. The use of models (and an understanding of their scales and limitations) is an effective means of learning about the structure of matter. Looking for patterns in properties is also critical to comparing and explaining differences in matter. (Academic Expectations 2.1, 2.2, 2.4, 2.5)</p>
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-STM-U-7.</p>	<p>Program of Studies: Understandings - Students will understand that chemical reactions have a variety of essential real-world applications, such as oxidation and various metabolic processes.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-STM-U-9.</p>	<p>Program of Studies: Understandings - Students will understand that accurate record-keeping, openness and replication are essential for maintaining credibility with other scientists and society.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A

Closer Look at STR Polymorphisms

- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of

		<p>the Hudson Doggerel</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-1.	<p>Program of Studies: Skills and Concepts - Students will classify samples of matter from everyday life as being elements, compounds, or mixtures</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Teacher Resource CD: Analyzing Writing Inks
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-9.	<p>Program of Studies: Skills and Concepts - Students will investigate the role of intermolecular or intramolecular interactions on the physical properties (solubility, density, polarity, boiling/melting points) of compounds</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-11.	<p>Program of Studies: Skills and Concepts - Students will relate the structure of water to its function as the universal solvent</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Teacher Resource CD: Analyzing Writing Inks
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-13.	<p>Program of Studies: Skills and Concepts - Students will create and/or interpret graphs and equations to depict and analyze patterns of change</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-14.	<p>Program of Studies: Skills and Concepts - Students will explore real-life applications of a variety of chemical reactions (e.g., acids and bases, oxidation, rusting, tarnishing) and communicate findings/present</p>

		<p>evidence in an authentic form (transactive writing, public speaking, multimedia presentations)</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-15.	<p>Program of Studies: Skills and Concepts - Students will generate investigable questions and conduct experiments or non-experimental research to address them, using evidence to defend conclusions</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-MF.	<p>Big Idea: Motion and Forces (Physical Science) - Whether observing airplanes, baseballs, planets, or people, the motion of all bodies is governed by the same basic rules. At the middle level, qualitative descriptions of the relationship between forces and motion will provide the foundation for quantitative applications of Newton's Laws. These ideas are more fully developed at the high school level along with the use of models to support evidence of motion in abstract or invisible phenomena such as electromagnetism. (Academic Expectations 2.1, 2.2, 2.3)</p>
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-MF-S-3.	<p>Program of Studies: Skills and Concepts - Students will experimentally test conservation of momentum. Use tables, charts and graphs in making arguments and claims in oral and written presentations</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-MF-S-4.	<p>Program of Studies: Skills and Concepts - Students will create and analyze graphs, ensuring that they do not misrepresent results by using inappropriate scales or by failing to specify the axes clearly</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis

CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-EU.	<p>Big Idea: The Earth and the Universe (Earth/Space Science) - The Earth system is in a constant state of change. These changes affect life on Earth in many ways. At the high school level, most of the emphasis is on why these changes occur. An understanding of systems and their interacting components will enable students to evaluate supporting theories of Earth changes. The use of models and observance of patterns to explain common phenomena is essential to building a conceptual foundation and supporting ideas with evidence at all levels. Patterns play an important role as students seek to develop a conceptual understanding of gravity in their world and in the universe. High school is the time to bring all of the ideas together to look at the universe as a whole. Students will use evidence to evaluate and analyze theories related to the origin of the universe and all components of the universe. (Academic Expectations 2.1, 2.2, 2.3, 2.4)</p>
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-EU-U-8.	<p>Program of Studies: Understandings - Students will understand that curiosity, honesty, openness and skepticism are highly regarded in science, and are incorporated into the way science is carried out.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms

- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
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- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel

		<ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-UD.	Big Idea: Unity and Diversity (Biological Science) - All matter is comprised of the same basic elements, goes through the same kinds of energy transformations, and uses the same kinds of forces to move. Living organisms are no exception. At the high school level, an in-depth study of the specialization and chemical changes occurring at the cellular level builds upon the foundational ideas developed earlier to investigate deoxyribonucleic acid (DNA) and effects of alterations in DNA for an individual organism as well as for a species. Emphasis at every level should be placed upon the understanding that while every living thing is composed of similar small constituents that combine in predictable ways, it is the subtle variations within these small building blocks that account for both the likenesses and differences in form and function that create the diversity of life. (Academic Expectations 2.1, 2.3, 2.4, 2.5)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-U-2.	<p>Program of Studies: Understandings - Students will understand that within every cell are specialized parts for the transport of materials, energy transfer, protein building, waste disposal, information feedback and even movement. In addition, most cells in multi-cellular organisms perform specialized functions that others do not.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-U-3.	<p>Program of Studies: Understandings - Students will understand that DNA, composed of 4 nucleic acids, serves as the blueprint for the production of a variety of proteins. These dynamic and complicated proteins facilitate practically every function/process that occurs within the cell.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile

		<ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-U-4.	<p>Program of Studies: Understandings - Students will understand that the information passed from parents to offspring is coded in DNA molecules. The sorting and recombination of genes through sexual reproduction results in a great variety of gene combinations that can be used to make predictions about the potential traits of offspring.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-U-5.	<p>Program of Studies: Understandings - Students will understand that some new gene combinations make little difference, some can produce offspring with new and perhaps enhanced capabilities, while some may reduce the ability of the offspring to survive.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-S-1.	<p>Program of Studies: Skills and Concepts - Students will analyze the parts within a cell responsible for particular processes and create analogous models for those processes</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-S-3.	<p>Program of Studies: Skills and Concepts - Students will investigate the role of genes/chromosomes in the passing of information from one generation to another (heredity)</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-S-4.	<p>Program of Studies: Skills and Concepts - Students will graphically represent (e.g., pedigrees, punnet squares) and predict the outcomes of a variety of genetic combinations</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations

		<ul style="list-style-type: none"> Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-S-6.	<p>Program of Studies: Skills and Concepts - Students will describe the structure of DNA and explain its role in protein synthesis, cell replication and reproduction</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Case Activity 4: The Second Examination Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-S-11.	<p>Program of Studies: Skills and Concepts - Students will identify and investigate areas of current research/innovation in biological science. Make inferences/predictions of the effects of this research on society and/or the environment and support or defend these predictions with scientific data</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Case Activity 4: The Second Examination Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-BC.	<p>Big Idea: Biological Change (Biological Science) - The only thing certain is that everything changes. At the high school level, students evaluate the role natural selection plays in the diversity of species. Modern ideas of evolution provide a scientific explanation for three main sets of observable facts about life on Earth: the enormous number of different life forms we see about us, the systematic similarities in anatomy and molecular chemistry we see within that diversity, and the sequence of changes in fossils found in successive layers of rock that have been formed over more than a billion years. (Academic Expectations 2.1, 2.2, 2.5, 2.6)</p>

AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-BC-S-6.	<p>Program of Studies: Skills and Concepts - Students will distinguish between a scientific law, theory, hypothesis and unsupported supposition/claim</p> <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-ET.	<p>Big Idea: Energy Transformations (Unifying Concepts) - Energy transformations are inherent in almost every system in the universe - from tangible examples at the elementary level, such as heat production in simple Earth and physical systems to more abstract ideas beginning at middle school, such as those transformations involved in the growth, dying and decay of living systems. The use of models to illustrate the often invisible and abstract notions of energy transfer will aid in conceptualization, especially as students move from the macroscopic level of observation and evidence (primarily elementary school) to the microscopic interactions at the atomic level (middle and high school levels). Students in high school expand their understanding of constancy through the study of a variety of phenomena. Conceptual understanding and application of the laws of thermodynamics connect ideas about matter with energy transformations within all living, physical and Earth systems. (Academic Expectations 2.1, 2.2, 2.3, 2.4, 2.5)</p>
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-ET-U-12.	<p>Program of Studies: Understandings - Students will understand that technological problems often create a demand for new scientific knowledge, and new technologies make it possible for scientists to conduct their research more effectively or to conduct new lines of research. The availability of new technology often sparks scientific advances.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The

Telling Tissue

- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
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- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5:

		<p>Learning About Fabrics and Weave Patterns</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-ET-U-13.</p>	<p>Program of Studies: Understandings - Students will understand that technology affects society because it solves practical problems and serves human needs. Science affects society by stimulating thought or satisfying curiosity, or by influencing views of the world, or by providing knowledge necessary for new technological advances.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors

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- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-ET-S-14.</p>	<p>Program of Studies: Skills and Concepts - Students will describe how science and technology interact. Research and investigate the impact of technology on society and how technological advances have driven scientific research</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces

- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-I.	<p>Big Idea: Interdependence (Unifying Concepts) - It is not difficult for students to grasp the general notion that species depend on one another and on the environment for survival. But their awareness must be supported by knowledge of the kinds of relationships that exist among organisms, the kinds of physical conditions that organisms must cope with, the kinds of environments created by the interaction of organisms with one another and their physical surroundings, and the complexity of such systems At the high school level, the concept of an ecosystem should bring coherence to the complex array of relationships among organisms and environments that students have encountered. Students growing understanding of systems in general will reinforce the concept of ecosystems. Stability and change in ecosystems can be considered in terms of variables such as population size, number and kinds of species, productivity and the effect of human intervention. (Academic Expectations 2.1, 2.2, 2.3, 2.4)</p>
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-I-U-2.	<p>Program of Studies: Understandings - Students will understand that unique among organisms, humans have the capability to impact other species on a global scale both directly (e.g. selective breeding, genetic</p>

		<p>engineering, foreign species introductions) and indirectly (e.g. habitat crowding, pollution, climate change).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-I-U-5.</p>	<p>Program of Studies: Understandings - Students will understand that human creativity, inventiveness and ingenuity have brought new risks as well as improvements to human existence. People control technology and are ultimately responsible for its effects.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The

Telling Tissue

- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5:

		<p>Learning About Fabrics and Weave Patterns</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-I-U-7.</p>	<p>Program of Studies: Understandings - Students will understand that the critical assumptions behind any line of reasoning must be made explicit, so that the validity of the position being taken can be judged.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-I-S-8.</p>	<p>Program of Studies: Skills and Concepts - Students will investigate controversial scientific proposals (e.g., human cloning, genetic modification of crops, nuclear waste storage), use scientific evidence/data to support or defend a position and debate the ethical merits of implementing the proposed actions</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The

		<p>Second Examination</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
CATEGORY	KY.AE.	Academic Expectation
GOAL/UNDERSTANDINGS/SUBDOMAIN	AE.1.	Students are able to use basic communication and mathematics skills for purposes and situations they will encounter throughout their lives.
AE/SKILLS & CONCEPTS/ORGANIZER	1.2.	<p>Students make sense of the variety of materials they read.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis

- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket

		<ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
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<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.3.</p>	<p>Students make sense of the various things they observe.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1:
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Modeling a DNA Profile

- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
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- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
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- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
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- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
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- Forensic Science: Unit 5 Case Activity 2: The

		<p>Peculiar Letter T</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.4.</p>	<p>Students make sense of the various messages to which they listen.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue

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- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
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- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns

		<ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.5-1.9.</p>	<p>Students use mathematical ideas and procedures to communicate, reason, and solve problems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage

- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
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- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Simulating DNA Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.10.</p>	<p>Students organize information through development and use of classification rules and systems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces

- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5:

		<p>Learning About Fabrics and Weave Patterns</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.11.</p>	<p>Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2:

Identifying Fingerprint Ridge Details

- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The

		<p>Incriminating Headlamp</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.12.</p>	<p>Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black

		<p>Plastic Bag</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The
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		<p>Artist's Brush</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.16.</p>	<p>Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper

		<p>Mark</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4:
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		<ul style="list-style-type: none"> • Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.AE.	Academic Expectation
GOAL/UNDERSTANDINGS/SUBDOMAIN	AE.2.	Students shall develop their abilities to apply core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, practical living studies, and vocational studies to what they will encounter throughout their

		lives.
AE/SKILLS & CONCEPTS/ORGANIZER	2.1.	<p>Science: Students understand scientific ways of thinking and working and use those methods to solve real-life problems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door

		<ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document
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<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>2.2.</p>	<p>Science: Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5:

		<p>Practicing Genetic Analysis using DNA Profile Frequency Calculations</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1:
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		<p>Practicing Paper Analysis Skills</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>2.4.</p>	<p>Science: Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
<p>CATEGORY</p>	<p>KY.CC.</p>	<p>Core Content for Assessment v.4.1</p>
<p>GOAL/UNDERSTANDINGS/SUBDOMAIN</p>	<p>SC-HS-</p>	<p>Structure and Transformation of Matter: By high school,</p>

	1.1.	students will be dealing with evidence from both direct and indirect observations (microscopic level and smaller) to consider theories related to change and conservation of matter. The use of models (and an understanding of their scales and limitations) is an effective means of learning about the structure of matter. Looking for patterns in properties is also critical to comparing and explaining differences in matter.
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-1.1.5.	Physical Science: Students will explain the role of intermolecular or intramolecular interactions on the physical properties (solubility, density, polarity, conductivity, boiling/melting points) of compounds. <ul style="list-style-type: none"> Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-1.1.8.	Physical Science: Students will explain the importance of chemical reactions in a real-world context; justify conclusions using evidence/data from chemical reactions. <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
CATEGORY	KY.CC.	Core Content for Assessment v.4.1
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-HS-3.4.	Unity and Diversity: At the high school level, an in-depth study of the specialization and chemical changes occurring at the cellular level builds upon the foundational ideas developed earlier to investigate DNA and effects of alterations in DNA for an individual organism as well as for a species. Emphasis at every level should be placed upon the understanding that while every living thing is composed of similar small constituents that combine in predictable ways, it is the subtle variations within these small building blocks that account for both the likenesses and differences in form and function that create the diversity of life.
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.2.	Biological Science: Students will understand that most cell functions involve chemical reactions. Food molecules taken into cells react to provide the chemical constituents needed to synthesize other molecules. Both breakdown and synthesis are made possible by a large set of protein catalysts, called enzymes. The breakdown of some of the food molecules enables the cell to store energy in specific chemicals that are used to carry out the many functions of the cell. <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Teacher Resource CD: The Case of the Telling Blood Group
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.3.	Biological Science: Students will describe cell regulation (enzyme function, diffusion, osmosis, homeostasis); predict consequences of internal/external environmental change on cell function/regulation. <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis

		<ul style="list-style-type: none"> Teacher Resource CD: The Case of the Telling Blood Group
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.5.	<p>Biological Science: Students will explain the relationship between sexual reproduction (meiosis) and the transmission of genetic information; draw conclusions/make predictions based on hereditary evidence/data (pedigrees, punnet squares).</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Case Activity 4: The Second Examination Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.6.	<p>Biological Science: Students will understand that in all organisms and viruses, the instructions for specifying the characteristics are carried in nucleic acids. The chemical and structural properties of nucleic acids determine how the genetic information that underlies heredity is both encoded in genes and replicated.</p> <ul style="list-style-type: none"> Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.7.	<p>Biological Science: Students will classify organisms into groups based on similarities; infer relationships based on internal and external structures and chemical processes.</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint Forensic Science: Unit 1 Case Activity 3: The Paper Mark Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors

- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The

		<p>Peculiar Letter T</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.CC.	Core Content for Assessment v.4.1
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-HS-3.5.	<p>Biological Change: The only thing certain is that everything changes. The stage is set for high school students to evaluate the role natural selection plays in the diversity of species. Modern ideas of evolution provide a scientific explanation for three main sets of observable facts about life on earth: the enormous number of different life forms we see about us, the systematic similarities in anatomy and molecular chemistry we see within that diversity and the sequence of changes in fossils found in successive layers of rock that have been formed over more than a billion years (Science for All Americans, p. 67).</p>
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.5.1.	<p>Biological Science: Students will predict the impact on species of changes to 1) the potential for a species to increase its numbers, (2) the genetic variability of offspring due to mutation and recombination of genes, (3) a finite supply of the resources required for life, or (4) natural selection; propose solutions to real-world problems of endangered and extinct species.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile

Science
Grade 10

CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	H-STM.	<p>Big Idea: Structure and Transformation of Matter (Physical Science) - A basic understanding of matter is essential to the conceptual development of other big ideas in science. By high school, students will be dealing with evidence from both direct and indirect observations (microscopic level and smaller) to consider theories related to change and conservation of matter. The use of models (and an understanding of their scales and limitations) is an effective means of learning about the structure of matter. Looking for patterns in properties is also critical to comparing and explaining differences in matter. (Academic Expectations 2.1, 2.2, 2.4, 2.5)</p>
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-U-7.	<p>Program of Studies: Understandings - Students will understand that chemical reactions have a variety of essential real-world applications, such as oxidation and various metabolic processes.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-U-9.	<p>Program of Studies: Understandings - Students will understand that accurate record-keeping, openness and replication are essential for maintaining credibility with other scientists and society.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The

Second Examination

- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The

		<p>Curious Line</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-1.	<p>Program of Studies: Skills and Concepts - Students will classify samples of matter from everyday life as being elements, compounds, or mixtures</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Teacher Resource CD: Analyzing Writing Inks
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-9.	<p>Program of Studies: Skills and Concepts - Students will investigate the role of intermolecular or intramolecular interactions on the physical properties (solubility, density, polarity, boiling/melting points) of compounds</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-11.	<p>Program of Studies: Skills and Concepts - Students will relate the structure of water to its function as the universal solvent</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Teacher Resource CD: Analyzing Writing Inks
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-	<p>Program of Studies: Skills and Concepts - Students will create and/or</p>

	STM-S-13.	interpret graphs and equations to depict and analyze patterns of change <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-14.	Program of Studies: Skills and Concepts - Students will explore real-life applications of a variety of chemical reactions (e.g., acids and bases, oxidation, rusting, tarnishing) and communicate findings/present evidence in an authentic form (transactive writing, public speaking, multimedia presentations) <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-STM-S-15.	Program of Studies: Skills and Concepts - Students will generate investigable questions and conduct experiments or non-experimental research to address them, using evidence to defend conclusions <ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Case Activity 4: The Second Examination Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-MF.	Big Idea: Motion and Forces (Physical Science) - Whether observing airplanes, baseballs, planets, or people, the motion of all bodies is governed by the same basic rules. At the middle level, qualitative descriptions of the relationship between forces and motion will provide the foundation for quantitative applications of Newton's Laws. These ideas are more fully developed at the high school level along with the use of models to support evidence of motion in abstract or invisible phenomena such as electromagnetism. (Academic Expectations 2.1, 2.2, 2.3)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-MF-S-3.	Program of Studies: Skills and Concepts - Students will experimentally test conservation of momentum. Use tables, charts and graphs in making arguments and claims in oral and written presentations <ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Case Activity 4: The Second Examination Forensic Science: Unit 3 Case Activity 5: The

		Telling Trap Door
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-MF-S-4.	<p>Program of Studies: Skills and Concepts - Students will create and analyze graphs, ensuring that they do not misrepresent results by using inappropriate scales or by failing to specify the axes clearly</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-EU.	<p>Big Idea: The Earth and the Universe (Earth/Space Science) - The Earth system is in a constant state of change. These changes affect life on Earth in many ways. At the high school level, most of the emphasis is on why these changes occur. An understanding of systems and their interacting components will enable students to evaluate supporting theories of Earth changes. The use of models and observance of patterns to explain common phenomena is essential to building a conceptual foundation and supporting ideas with evidence at all levels. Patterns play an important role as students seek to develop a conceptual understanding of gravity in their world and in the universe. High school is the time to bring all of the ideas together to look at the universe as a whole. Students will use evidence to evaluate and analyze theories related to the origin of the universe and all components of the universe. (Academic Expectations 2.1, 2.2, 2.3, 2.4)</p>
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-EU-U-8.	<p>Program of Studies: Understandings - Students will understand that curiosity, honesty, openness and skepticism are highly regarded in science, and are incorporated into the way science is carried out.</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint Forensic Science: Unit 1 Case Activity 3: The Paper Mark Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue

- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
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- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns

		<ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-UD.	Big Idea: Unity and Diversity (Biological Science) - All matter is comprised of the same basic elements, goes through the same kinds of energy transformations, and uses the same kinds of forces to move. Living organisms are no exception. At the high school level, an in-depth study of the specialization and chemical changes occurring at the cellular level builds upon the foundational ideas developed earlier to investigate deoxyribonucleic acid (DNA) and effects of alterations in DNA for an individual organism as well as for a species. Emphasis at every level should be placed upon the understanding that while every living thing is composed of similar small constituents that combine in predictable ways, it is the subtle variations within these small building blocks that account for both the likenesses and differences in form and function that create the diversity of life. (Academic Expectations 2.1, 2.3, 2.4, 2.5)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-U-2.	<p>Program of Studies: Understandings - Students will understand that within every cell are specialized parts for the transport of materials, energy transfer, protein building, waste disposal, information feedback and even movement. In addition, most cells in multi-cellular organisms perform specialized functions that others do not.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-U-3.	Program of Studies: Understandings - Students will understand that DNA, composed of 4 nucleic acids, serves as the blueprint for the production of a variety of proteins. These dynamic and complicated proteins facilitate practically every function/process that occurs within the cell.

		<ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-U-4.	<p>Program of Studies: Understandings - Students will understand that the information passed from parents to offspring is coded in DNA molecules. The sorting and recombination of genes through sexual reproduction results in a great variety of gene combinations that can be used to make predictions about the potential traits of offspring.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-U-5.	<p>Program of Studies: Understandings - Students will understand that some new gene combinations make little difference, some can produce offspring with new and perhaps enhanced capabilities, while some may reduce the ability of the offspring to survive.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-S-1.	<p>Program of Studies: Skills and Concepts - Students will analyze the parts within a cell responsible for particular processes and create analogous models for those processes</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-S-3.	<p>Program of Studies: Skills and Concepts - Students will investigate the role of genes/chromosomes in the passing of information from one generation to another (heredity)</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-UD-S-4.	<p>Program of Studies: Skills and Concepts - Students will graphically represent (e.g., pedigrees, punnet squares) and predict the outcomes of a variety of genetic combinations</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 2 Case Activity 1: The

		<p>Questioned Parentage</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Teacher Resource CD: Simulating DNA Analysis
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-UD-S-6.</p>	<p>Program of Studies: Skills and Concepts - Students will describe the structure of DNA and explain its role in protein synthesis, cell replication and reproduction</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Teacher Resource CD: Simulating DNA Analysis
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-UD-S-11.</p>	<p>Program of Studies: Skills and Concepts - Students will identify and investigate areas of current research/innovation in biological science. Make inferences/predictions of the effects of this research on society and/or the environment and support or defend these predictions with scientific data</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
<p>CATEGORY</p>	<p>KY.PS.</p>	<p>Program of Studies 2006</p>

GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-BC.	Big Idea: Biological Change (Biological Science) - The only thing certain is that everything changes. At the high school level, students evaluate the role natural selection plays in the diversity of species. Modern ideas of evolution provide a scientific explanation for three main sets of observable facts about life on Earth: the enormous number of different life forms we see about us, the systematic similarities in anatomy and molecular chemistry we see within that diversity, and the sequence of changes in fossils found in successive layers of rock that have been formed over more than a billion years. (Academic Expectations 2.1, 2.2, 2.5, 2.6)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-BC-S-6.	<p>Program of Studies: Skills and Concepts - Students will distinguish between a scientific law, theory, hypothesis and unsupported supposition/claim</p> <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence
CATEGORY	KY.PS.	Program of Studies 2006
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-ET.	Big Idea: Energy Transformations (Unifying Concepts) - Energy transformations are inherent in almost every system in the universe - from tangible examples at the elementary level, such as heat production in simple Earth and physical systems to more abstract ideas beginning at middle school, such as those transformations involved in the growth, dying and decay of living systems. The use of models to illustrate the often invisible and abstract notions of energy transfer will aid in conceptualization, especially as students move from the macroscopic level of observation and evidence (primarily elementary school) to the microscopic interactions at the atomic level (middle and high school levels). Students in high school expand their understanding of constancy through the study of a variety of phenomena. Conceptual understanding and application of the laws of thermodynamics connect ideas about matter with energy transformations within all living, physical and Earth systems. (Academic Expectations 2.1, 2.2, 2.3, 2.4, 2.5)
AE/SKILLS & CONCEPTS/ORGANIZER	SC-H-ET-U-12.	<p>Program of Studies: Understandings - Students will understand that technological problems often create a demand for new scientific knowledge, and new technologies make it possible for scientists to conduct their research more effectively or to conduct new lines of research. The availability of new technology often sparks scientific advances.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4:

		<p>Latent Fingerprints on Smooth Surfaces</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The
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		<p>Fraudulent Thread</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-ET-U-13.</p>	<p>Program of Studies: Understandings - Students will understand that technology affects society because it solves practical problems and serves human needs. Science affects society by stimulating thought or satisfying curiosity, or by influencing views of the world, or by providing knowledge necessary for new technological advances.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint

- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-ET-S-14.</p>	<p>Program of Studies: Skills and Concepts - Students will describe how science and technology interact. Research and investigate the impact of technology on society and how technological advances have driven scientific research</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint

- Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
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CATEGORY	KY.PS.	Program of Studies 2006
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GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-H-I.	<p>Big Idea: Interdependence (Unifying Concepts) - It is not difficult for students to grasp the general notion that species depend on one another and on the environment for survival. But their awareness must be supported by knowledge of the kinds of relationships that exist among organisms, the kinds of physical conditions that organisms must cope with, the kinds of environments created by the interaction of organisms with one another and their physical surroundings, and the complexity of</p>
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		<p>such systems At the high school level, the concept of an ecosystem should bring coherence to the complex array of relationships among organisms and environments that students have encountered. Students growing understanding of systems in general will reinforce the concept of ecosystems. Stability and change in ecosystems can be considered in terms of variables such as population size, number and kinds of species, productivity and the effect of human intervention. (Academic Expectations 2.1, 2.2, 2.3, 2.4)</p>
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-I-U-2.</p>	<p>Program of Studies: Understandings - Students will understand that unique among organisms, humans have the capability to impact other species on a global scale both directly (e.g. selective breeding, genetic engineering, foreign species introductions) and indirectly (e.g. habitat crowding, pollution, climate change).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-I-U-5.</p>	<p>Program of Studies: Understandings - Students will understand that human creativity, inventiveness and ingenuity have brought new risks as well as improvements to human existence. People control technology and are ultimately responsible for its effects.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4:

		<p>Latent Fingerprints on Smooth Surfaces</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The
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		<p>Fraudulent Thread</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-I-U-7.</p>	<p>Program of Studies: Understandings - Students will understand that the critical assumptions behind any line of reasoning must be made explicit, so that the validity of the position being taken can be judged.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>SC-H-I-S-8.</p>	<p>Program of Studies: Skills and Concepts - Students will investigate controversial scientific proposals (e.g., human cloning, genetic modification of crops, nuclear waste storage), use scientific</p>

		<p>evidence/data to support or defend a position and debate the ethical merits of implementing the proposed actions</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
CATEGORY	KY.AE.	Academic Expectation
GOAL/UNDERSTANDINGS/SUBDOMAIN	AE.1.	Students are able to use basic communication and mathematics skills for purposes and situations they will encounter throughout their lives.
AE/SKILLS & CONCEPTS/ORGANIZER	1.2.	<p>Students make sense of the variety of materials they read.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage

- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
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<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.3.</p>	<p>Students make sense of the various things they observe.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6:
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Exposing Latent Fingerprints Using Vapors

- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2:

		<p>Making an Impression Cast</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.4.</p>	<p>Students make sense of the various messages to which they listen.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces

- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.5-1.9.</p>	<p>Students use mathematical ideas and procedures to communicate, reason, and solve problems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details

- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Simulating DNA Analysis • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.10.</p>	<p>Students organize information through development and use of classification rules and systems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint

- Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn

		<p>Sleeve</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.11.</p>	<p>Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The

		<p>Forged Fingerprint</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3:
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		<p>Human Blood Group Analysis</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
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AE/SKILLS & CONCEPTS/ORGANIZER	1.12.	Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different
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purposes.

- Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint
- Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint
- Forensic Science: Unit 1 Case Activity 3: The Paper Mark
- Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint
- Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of

Blood

- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
- Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks
- Forensic Science: Unit 6 Activity 1: Toxicological Analysis
- Forensic Science: Unit 6 Activity 2: Chromatographic Analysis
- Forensic Science: Unit 6 Activity 3: Fingerprint Analysis
- Forensic Science: Unit 6 Activity 4: Document Analysis
- Forensic Science: Unit 6 Activity 5: Blood Analysis

		<ul style="list-style-type: none"> • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>1.16.</p>	<p>Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group

		<ul style="list-style-type: none"> • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint
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		<p>Analysis</p> <ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
CATEGORY	KY.AE.	Academic Expectation
GOAL/UNDERSTANDINGS/SUBDOMAIN	AE.2.	Students shall develop their abilities to apply core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, practical living studies, and vocational studies to what they will encounter throughout their lives.
AE/SKILLS & CONCEPTS/ORGANIZER	2.1.	<p>Science: Students understand scientific ways of thinking and working and use those methods to solve real-life problems.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6:

Genetic Analysis of DNA Profiles

- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
- Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills

		<ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
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<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>2.2.</p>	<p>Science: Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
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- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns

		<ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
<p>AE/SKILLS & CONCEPTS/ORGANIZER</p>	<p>2.4.</p>	<p>Science: Students use the concept of scale and scientific models to explain the organization and functioning of living and nonliving things and predict other characteristics that might be observed.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details

		<ul style="list-style-type: none"> Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
CATEGORY	KY.CC.	Core Content for Assessment v.4.1
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-HS-1.1.	Structure and Transformation of Matter: By high school, students will be dealing with evidence from both direct and indirect observations (microscopic level and smaller) to consider theories related to change and conservation of matter. The use of models (and an understanding of their scales and limitations) is an effective means of learning about the structure of matter. Looking for patterns in properties is also critical to comparing and explaining differences in matter.
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-1.1.5.	Physical Science: Students will explain the role of intermolecular or intramolecular interactions on the physical properties (solubility, density, polarity, conductivity, boiling/melting points) of compounds. <ul style="list-style-type: none"> Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-1.1.8.	Physical Science: Students will explain the importance of chemical reactions in a real-world context; justify conclusions using evidence/data from chemical reactions. <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
CATEGORY	KY.CC.	Core Content for Assessment v.4.1
GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-HS-3.4.	Unity and Diversity: At the high school level, an in-depth study of the specialization and chemical changes occurring at the cellular level builds upon the foundational ideas developed earlier to investigate DNA and effects of alterations in DNA for an individual organism as well as for a species. Emphasis at every level should be placed upon the understanding that while every living thing is composed of similar small constituents that combine in predictable ways, it is the subtle variations within these small building blocks that account for both the likenesses and differences in form and function that create the diversity of life.
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.2.	Biological Science: Students will understand that most cell functions involve chemical reactions. Food molecules taken into cells react to provide the chemical constituents needed to synthesize other molecules. Both breakdown and synthesis are made possible by a large set of protein catalysts, called enzymes. The breakdown of some of the food molecules enables the cell to store energy in specific chemicals that are used to carry out the many functions of the cell. <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile Forensic Science: Unit 2 Skill Learning Activity 2:

		<p>The Discarded Cigarette - RFLP Profile Analysis</p> <ul style="list-style-type: none"> Teacher Resource CD: The Case of the Telling Blood Group
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.3.	<p>Biological Science: Students will describe cell regulation (enzyme function, diffusion, osmosis, homeostasis); predict consequences of internal/external environmental change on cell function/regulation.</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Teacher Resource CD: The Case of the Telling Blood Group
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.5.	<p>Biological Science: Students will explain the relationship between sexual reproduction (meiosis) and the transmission of genetic information; draw conclusions/make predictions based on hereditary evidence/data (pedigrees, punnet squares).</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Forensic Science: Unit 2 Case Activity 4: The Second Examination Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.6.	<p>Biological Science: Students will understand that in all organisms and viruses, the instructions for specifying the characteristics are carried in nucleic acids. The chemical and structural properties of nucleic acids determine how the genetic information that underlies heredity is both encoded in genes and replicated.</p> <ul style="list-style-type: none"> Teacher Resource CD: Simulating DNA Analysis
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.4.7.	<p>Biological Science: Students will classify organisms into groups based on similarities; infer relationships based on internal and external structures and chemical processes.</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint Forensic Science: Unit 1 Case Activity 3: The Paper Mark Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag

- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The

		<p>Fraudulent Thread</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
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CATEGORY	KY.CC.	Core Content for Assessment v.4.1
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GOAL/UNDERSTANDINGS/SUBDOMAIN	SC-HS-3.5.	<p>Biological Change: The only thing certain is that everything changes. The stage is set for high school students to evaluate the role natural selection plays in the diversity of species. Modern ideas of evolution provide a scientific explanation for three main sets of observable facts about life on earth: the enormous number of different life forms we see about us, the systematic similarities in anatomy and molecular chemistry we see within that diversity and the sequence of changes in fossils found in successive layers of rock that have been formed over</p>
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		more than a billion years (Science for All Americans, p. 67).
AE/SKILLS & CONCEPTS/ORGANIZER	SC-HS-3.5.1.	<p>Biological Science: Students will predict the impact on species of changes to 1) the potential for a species to increase its numbers, (2) the genetic variability of offspring due to mutation and recombination of genes, (3) a finite supply of the resources required for life, or (4) natural selection; propose solutions to real-world problems of endangered and extinct species.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile

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