

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

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Maryland Content Standards
Science
Grade 7

STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.A.1.	Constructing Knowledge: Design, analyze, or carry out simple investigations and formulate appropriate conclusions based on data obtained or provided.
INDICATOR	1.A.1.b.	<p>Develop the ability to clarify questions and direct them toward objects and phenomena that can be described, explained, or predicted by scientific investigations.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary 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-

		<p>Meyer Test for the Presence of Blood</p> <ul style="list-style-type: none"> • 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 3: The Incriminating Headlamp • 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 4: Learning to be a Layer Detective • 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 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.A.1.c.	<p>Explain and provide examples that all hypotheses are valuable, even if they turn out not to be true, if they lead to fruitful investigations.</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

		<p>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 • 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
INDICATOR	1.A.1.h.	<p>Use mathematics to interpret and communicate data.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint

		<p>Identification Skills</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 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • 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 • Teacher Resource CD: Simulating DNA Analysis • Virtual Laboratory: ABO-Rh Blood Typing
STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.B.1.	Applying Evidence and Reasoning: Review data from a simple experiment, summarize the data, and construct a logical argument about the cause-and-effect relationships in the experiment.
INDICATOR	1.B.1.a.	<p>Verify the idea that there is no fixed set of steps all scientists follow, scientific investigations usually involve the collection of relevant evidence, the use of logical reasoning, and the application of imagination in devising hypotheses and explanations to make sense of the collected evidence.</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

		<p>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: 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
INDICATOR	1.B.1.b.	Explain that what people expect to observe often affects what they actually do observe and that

scientists know about this danger to objectivity and take steps to try to avoid it when designing investigations and examining data.

- 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
INDICATOR	1.B.1.d.	<p>Describe the reasoning that lead to the interpretation of data and conclusions drawn.</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

		<ul style="list-style-type: none"> - 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
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INDICATOR	1.B.1.e.	<p>Question claims based on vague statements or on statements made by people outside their area of expertise.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Teacher Resource CD: Trace Evidence
STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.C.1.	Communicating Scientific Information: Develop explanations that explicitly link data from investigations conducted, selected readings and, when appropriate, contributions from historical discoveries.
INDICATOR	1.C.1.a.	<p>Organize and present data in tables and graphs and identify relationships they reveal.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
INDICATOR	1.C.1.b.	<p>Interpret tables and graphs produced by others and describe in words the relationships they show.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
INDICATOR	1.C.1.e.	<p>Explain how different models can be used to represent the same thing. What kind of a model to use and how complex it should be depend on its purpose. Choosing a useful model is one of the instances in which intuition and creativity come into play in science, mathematics, and engineering</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
INDICATOR	1.C.1.f.	<p>Participate in group discussions on scientific topics by restating or summarizing accurately what others have said, asking for clarification or elaboration, and expressing alternative positions.</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

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- 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 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

		<p>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
STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.D.1.	Technology: Explain that complex systems require control mechanisms.
INDICATOR	1.D.1.a.	<p>Explain that the choice of materials for a job depends on their properties and on how they interact with other materials.</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 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 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles

		<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 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 6 Activity 1: Toxicological 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
STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.D.3.	Technology: Analyze the value and the limitations of different types of models in explaining real things and processes.
INDICATOR	1.D.3.a.	<p>Explain that the kind of model to use and how complex it should be depends on its purpose and that it is possible to have different models used to represent the same thing.</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

		<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
INDICATOR	1.D.3.b.	<p>Explain, using examples that models are often used to think about processes that happen too slowly, too quickly, or on too small a scale to observe directly, or that are too vast to be changed deliberately, or that are potentially dangerous.</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
INDICATOR	1.D.3.c.	<p>Explain that models may sometimes mislead by suggesting characteristics that are not really shared with what is being modeled.</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		
STRAND / STANDARD	MD.3.0.	Life Science: The students will use scientific skills and processes to explain the dynamic nature of living things, their interactions, and the results from the interactions that occur over time.
TOPIC	3.B.1.	Cells: Gather and organize data to defend or argue the proposition that all living things are cellular (composed of cells) and that cells carry out the basic life functions.
INDICATOR	3.B.1.a.	Use microscopes or other magnifying instruments to observe, describe, and compare the cellular composition of different body tissues and organs in a variety of organisms (animals and plants). <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 4 Case Activity 1: The Artist's Brush • 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 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Teacher Resource CD: The Case of the Silent Sentinel
INDICATOR	3.B.1.b.	Based on data from readings and designed investigations, cite evidence to illustrate that the life functions of multicellular organisms (plant and animal) are carried out within complex systems of different tissues, organs and cells: Extracting energy from food; Getting rid of wastes; Making raw materials. <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
INDICATOR	3.B.1.d.	Collect data from investigations using single celled organisms, such as yeast or algae to explain that a single cell carries out all the basic life functions of a multicellular organism: Reproducing; Extracting energy from food; Getting rid of wastes. <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
INDICATOR	3.B.1.e.	Based on data compiled from a number of lessons completed, take and defend a position on the statement 'The way in which cells function is the same in all organisms.' <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
STRAND / STANDARD	MD.3.0.	Life Science: The students will use scientific skills and processes to explain the dynamic nature of living things, their interactions, and the results from the interactions that occur over time.
TOPIC	3.B.2.	Cells: Recognize and provide examples that human beings, like other organisms have complex body systems of cells, tissues and organs that interact to support an organism's growth and survival.
INDICATOR	3.B.2.a.	Describe and explain that the complex set of systems found in multicellular organisms are made up of different kinds of tissues and organs which are themselves composed of differentiated cells. <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

		<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 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
INDICATOR	3.B.2.b.	<p>Select several body systems and explain the role of cells, tissues and organs that effectively carry out a vital function for the organism, such as: Obtaining food and providing energy (digestive, circulatory, respiratory); Defense (nervous, endocrine, circulatory, muscular, skeletal, immune); Reproduction (reproductive, endocrine, circulatory); Waste removal (excretory, respiratory, circulatory); Breathing (respiratory, circulatory).</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
INDICATOR	3.B.2.d.	<p>Investigate ways in which the various organs and tissues function to serve the needs of cells for food, air, and waste removal.</p>

		<ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
STRAND / STANDARD	MD.3.0.	Life Science: The students will use scientific skills and processes to explain the dynamic nature of living things, their interactions, and the results from the interactions that occur over time.
TOPIC	3.C.1.	Genetics: Explain the ways that genetic information is passed from parent to offspring in different organisms.
INDICATOR	3.C.1.d.	<p>Use information about how the transfer of traits from parent or parents to offspring occurs, to explain how selective breeding for particular traits has resulted in new varieties of cultivated plants and domestic animals.</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
INDICATOR	3.C.1.e.	<p>Identify evidence to support the idea that there is greater variation among offspring of organisms that reproduce sexually than among those that reproduce asexually.</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile

**Maryland Content Standards
Science
Grade 8**

STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.A.1.	Constructing Knowledge: Design, analyze, or carry out simple investigations and formulate appropriate conclusions based on data obtained or provided.
INDICATOR	1.A.1.b.	<p>Develop the ability to clarify questions and direct them toward objects and phenomena that can be described, explained, or predicted by scientific investigations.</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 1: The Solitary 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

		<ul style="list-style-type: none"> • 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 3: The Incriminating Headlamp • 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 4: Learning to be a Layer Detective • 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 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.A.1.c.	<p>Explain and provide examples that all hypotheses are valuable, even if they turn out not to be true, if they lead to fruitful investigations.</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
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- 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
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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
- 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

		<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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.A.1.h.	<p>Use mathematics to interpret and communicate data.</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 • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • 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 • Teacher Resource CD: Simulating DNA Analysis • Virtual Laboratory: ABO-Rh Blood Typing
STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.B.1.	Applying Evidence and Reasoning: Review data from a simple experiment, summarize the data, and construct a logical argument about the cause-and-effect relationships in the experiment.
INDICATOR	1.B.1.a.	<p>Verify the idea that there is no fixed set of steps all scientists follow, scientific investigations usually involve the collection of relevant evidence, the use of logical reasoning, and the application of imagination in devising hypotheses and explanations to make sense of the collected evidence.</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
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- 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

		<p>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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.B.1.b.	<p>Explain that what people expect to observe often affects what they actually do observe and that scientists know about this danger to objectivity and take steps to try to avoid it when designing investigations and examining data.</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 • 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
INDICATOR	1.B.1.d.	Describe the reasoning that lead to the interpretation of data and conclusions drawn.

- 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
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- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
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- 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
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- 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

		<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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.B.1.e.	<p>Question claims based on vague statements or on statements made by people outside their area of expertise.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Teacher Resource CD: Trace Evidence
STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.C.1.	Communicating Scientific Information: Develop explanations that explicitly link data from investigations conducted, selected readings and, when appropriate, contributions from historical discoveries.
INDICATOR	1.C.1.a.	<p>Organize and present data in tables and graphs and identify relationships they reveal.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
INDICATOR	1.C.1.b.	<p>Interpret tables and graphs produced by others and describe in words the relationships they show.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
INDICATOR	1.C.1.e.	<p>Explain how different models can be used to represent the same thing. What kind of a model to use and how complex it should be depend on its purpose. Choosing a useful model is one of the instances in which intuition and creativity come into play in science, mathematics, and</p>

		<p>engineering</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
INDICATOR	1.C.1.f.	<p>Participate in group discussions on scientific topics by restating or summarizing accurately what others have said, asking for clarification or elaboration, and expressing alternative positions.</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

		<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 • 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
STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.D.1.	Technology: Explain that complex systems require control mechanisms.
INDICATOR	1.D.1.a.	Explain that the choice of materials for a job depends on their properties and on how they interact with other materials.

- Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint
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- 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
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- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
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- 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 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
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- Forensic Science: Unit 5 Case Activity 4: The Careless Forger

		<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 6 Activity 1: Toxicological 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
STRAND / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC	1.D.3.	Technology: Analyze the value and the limitations of different types of models in explaining real things and processes.
INDICATOR	1.D.3.a.	<p>Explain that the kind of model to use and how complex it should be depends on its purpose and that it is possible to have different models used to represent the same thing.</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
INDICATOR	1.D.3.b.	<p>Explain, using examples that models are often used to think about processes that happen too slowly, too quickly, or on too small a scale to observe directly, or that are too vast to be changed deliberately, or that are potentially dangerous.</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

		<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
INDICATOR	1.D.3.c.	<p>Explain that models may sometimes mislead by suggesting characteristics that are not really shared with what is being modeled.</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
STRAND / STANDARD	MD.4.0.	Chemistry: Students will use scientific skills and processes to explain the composition, structure, and interactions of matter in order to support the predictability of structure and energy transformations.
TOPIC	4.B.1.	Conservation of Matter: Provide evidence to support the fact that the idea of atoms explains conservation of matter.
INDICATOR	4.B.1.a.	<p>Use appropriate tools to gather data and provide evidence that equal volumes of different substances usually have different masses.</p> <ul style="list-style-type: none"> Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
STRAND / STANDARD	MD.4.0.	Chemistry: Students will use scientific skills and processes to explain the composition, structure, and interactions of matter in order to support the predictability of structure and energy transformations.
TOPIC	4.D.1.	Physical and Chemical Changes: Compare compounds and mixtures based on data from investigations and research.
INDICATOR	4.D.1.a.	<p>Cite evidence from investigations to explain how the components of mixtures can be separated.</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 Teacher Resource CD: The Case of the Silent Sentinel
INDICATOR	4.D.1.c.	<p>Analyze the results of research completed to develop a comparison of compounds and 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

STRAND / STANDARD	MD.4.0.	Chemistry: Students will use scientific skills and processes to explain the composition, structure, and interactions of matter in order to support the predictability of structure and energy transformations.
TOPIC	4.D.2.	Physical and Chemical Changes: Cite evidence and give examples of chemical properties of substances.
INDICATOR	4.D.2.b.	Use information gathered from investigations using indicators to classify materials as acidic, basic, or neutral. <ul style="list-style-type: none"> Forensic Science: Unit 6 Activity 1: Toxicological Analysis
STRAND / STANDARD	MD.4.0.	Chemistry: Students will use scientific skills and processes to explain the composition, structure, and interactions of matter in order to support the predictability of structure and energy transformations.
TOPIC	4.D.3.	Physical and Chemical Changes: Provide evidence to support the fact that common substances have the ability to change into new substances.
INDICATOR	4.D.3.a.	Investigate and describe the occurrence of chemical reactions using the following evidence: Color change; Formation of a precipitate or gas; Release of heat or light. <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 Teacher Resource CD: Fingerprinting Teacher Resource CD: Learning About Paper Teacher Resource CD: The Case of the Silent Sentinel
INDICATOR	4.D.3.e.	Provide examples to explain the difference between a physical change and a chemical change. <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors Teacher Resource CD: Fingerprinting Teacher Resource CD: Learning About Paper Teacher Resource CD: The Case of the Silent Sentinel

**Maryland Content Standards
Science
Grade 9**

STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.1.	The student will explain why curiosity, honesty, openness, and skepticism are highly regarded in science.
INDICATOR	1.1.1.	The student will recognize that real problems have more than one solution and decisions to accept one solution over another are made on the basis of many issues. <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 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
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- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T

		<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
INDICATOR	1.1.2.	<p>The student will modify or affirm scientific ideas according to accumulated evidence.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Teacher Resource CD: Trace Evidence
STRAND / STANDARD	MD.1.	<p>Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.</p>
TOPIC	1.2.	<p>The student will pose scientific questions and suggest investigative approaches to provide answers to questions.</p>
INDICATOR	1.2.1.	<p>The student will identify meaningful, answerable scientific questions.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary 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

		<ul style="list-style-type: none"> • 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 3: The Incriminating Headlamp • 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 4: Learning to be a Layer Detective • 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 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.2.2.	<p>The student will pose meaningful, answerable scientific questions. (NTB)</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary 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

		<p>Howard</p> <ul style="list-style-type: none"> • 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 3: The Incriminating Headlamp • 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 4: Learning to be a Layer Detective • 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 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.2.3.	<p>The student will formulate a working hypothesis.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence
INDICATOR	1.2.4.	<p>The student will test a working hypothesis. (NTB)</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
INDICATOR	1.2.5.	<p>The student will select appropriate instruments and materials to conduct an investigation.</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 Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.2.6.	<p>The student will identify appropriate methods for conducting an investigation (independent and dependent variables, proper controls, repeat trials, appropriate sample size, etc.).</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

		<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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.2.7.	<p>The student will use relationships discovered in the lab to explain phenomena observed outside the laboratory.</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

		<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 • 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
INDICATOR	1.2.8.	<p>The student will defend the need for verifiable data.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection

		<ul style="list-style-type: none"> Teacher Resource CD: Trace Evidence
STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.3.	The student will carry out scientific investigations effectively and employ the instruments, systems of measurement, and materials of science appropriately.
INDICATOR	1.3.1.	<p>The student will develop and demonstrate skills in using lab and field equipment to perform investigative techniques. (NTB)</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
INDICATOR	1.3.2.	<p>The student will recognize safe laboratory procedures.</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 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
INDICATOR	1.3.3.	<p>The student will demonstrate safe handling of the chemicals and materials of science. (NTB)</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

		<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
INDICATOR	1.3.4.	<p>The student will learn the use of new instruments and equipment by following instructions in a manual or from oral direction. (NTB)</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 • Virtual Laboratory: ABO-Rh Blood Typing
STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.4.	The student will demonstrate that data analysis is a vital aspect of the process of scientific inquiry and communication.
INDICATOR	1.4.1.	<p>The student will organize data appropriately using techniques such as tables, graphs, and webs (for graphs: axes labeled with appropriate quantities, appropriate units on axes, axes labeled with appropriate intervals, independent and dependent variables on correct axes, appropriate title).</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 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
INDICATOR	1.4.2.	<p>The student will analyze data to make predictions, decisions, or draw conclusions.</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

		<p>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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
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INDICATOR	1.4.4.	<p>The student will determine the relationships between quantities and develop the mathematical model that describes these relationships.</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 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 Skill Learning Activity 1: Modeling a DNA Profile • 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
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		<p>Patterns</p> <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 • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.4.5.	<p>The student will check graphs to determine that they do not misrepresent results.</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 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 Skill Learning Activity 1: Modeling a DNA Profile

		<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 • 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
INDICATOR	1.4.6.	<p>The student will describe trends revealed by data.</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 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 Skill Learning Activity 1: Modeling a DNA Profile
- 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 • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.4.7.	<p>The student will determine the sources of error that limit the accuracy or precision of experimental results.</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 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
INDICATOR	1.4.8.	<p>The student will use models and computer simulations to extend his/her understanding of scientific concepts. (NTB)</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
INDICATOR	1.4.9.	<p>The student will use analyzed data to confirm, modify, or reject a hypothesis.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence
STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.5.	The student will use appropriate methods for communicating in writing and orally the processes and results of scientific investigation.

INDICATOR	1.5.1.	<p>The student will demonstrate the ability to summarize data (measurements/observations).</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 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 Skill Learning Activity 1: Modeling a DNA Profile • 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
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		<p>Analysis Skills</p> <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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.5.2.	<p>The student will explain scientific concepts and processes through drawing, writing, and/or oral communication.</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 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
INDICATOR	1.5.3.	<p>The student will use computers and/or graphing calculators to produce the visual materials (tables, graphs, and spreadsheets) that will be used for communicating results. (NTB)</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 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
INDICATOR	1.5.4.	<p>The student will use tables, graphs, and displays to support arguments and claims in both written and oral communication.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
INDICATOR	1.5.5.	<p>The student will create and/or interpret graphics. (scale drawings, photographs, digital images, field of view, etc.)</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 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
INDICATOR	1.5.7.	<p>The student will use, explain, and/or construct various classification 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: 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

		<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 • 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
INDICATOR	1.5.8.	<p>The student will describe similarities and differences when explaining concepts and/or principles.</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

		<p>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 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
INDICATOR	1.5.9.	<p>The student will communicate conclusions derived through a synthesis of 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: 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

		<p>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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.6.	The student will use mathematical processes.
INDICATOR	1.6.4.	<p>The student will manipulate quantities and/or numerical values in algebraic equations.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis
STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.7.	The student will show that connections exist both within the various fields of science and among science and other disciplines including mathematics, social studies, language arts, fine arts, and technology.
INDICATOR	1.7.2.	<p>The student will identify and evaluate the impact of scientific ideas and/or advancements in technology on 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 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 • Teacher Resource CD: Fingerprinting
INDICATOR	1.7.6.	<p>The student will explain how development of scientific knowledge leads to the creation of new technology and how technological advances allow for additional scientific accomplishments.</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 Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting
STRAND / STANDARD	MD.3.	Concepts Of Biology: The student will demonstrate the ability to use scientific skills and processes (Core Learning Goal 1) and major biological concepts to explain the uniqueness and interdependence of living organisms, their interactions with the environment, and the continuation of life on earth.
TOPIC	3.2.	The student will demonstrate an understanding that all organisms are composed of cells which can function independently or as part of multicellular organisms.
INDICATOR	3.2.2.	<p>The student will conclude that cells exist within a narrow range of environmental conditions and changes to that environment, either naturally occurring or induced, may cause changes in the metabolic activity of the cell or organism.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis

STRAND / STANDARD	MD.3.	Concepts Of Biology: The student will demonstrate the ability to use scientific skills and processes (Core Learning Goal 1) and major biological concepts to explain the uniqueness and interdependence of living organisms, their interactions with the environment, and the continuation of life on earth.
TOPIC	3.3.	The student will analyze how traits are inherited and passed on from one generation to another.
INDICATOR	3.3.1.	<p>The student will demonstrate that the sorting and recombination of genes during sexual reproduction has an effect on variation in offspring.</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
INDICATOR	3.3.2.	<p>The student will illustrate and explain how expressed traits are passed from parent to offspring.</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
INDICATOR	3.3.3.	<p>The student will explain how a genetic trait is determined by the code in a DNA molecule.</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 -

		<p>RFLP Profile Analysis</p> <ul style="list-style-type: none"> • 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
STRAND / STANDARD	MD.3.	Concepts Of Biology: The student will demonstrate the ability to use scientific skills and processes (Core Learning Goal 1) and major biological concepts to explain the uniqueness and interdependence of living organisms, their interactions with the environment, and the continuation of life on earth.
TOPIC	3.6.	The student will investigate a biological issue and develop an action plan.
INDICATOR	3.6.1.	<p>The student will analyze the consequences and/or trade-offs between technological changes and their effect on the individual, society, and the environment. They may select topics such as bioethics, genetic engineering, endangered species, or food supply. (NTB)</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

		<ul style="list-style-type: none"> • 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
STRAND / STANDARD	MD.4.	Concepts Of Chemistry: The student will demonstrate the ability to use scientific skills and processes (Core Learning Goal 1) to explain composition and interactions of matter in the world in which we live.
TOPIC	4.2.	The student will explain how the properties of compounds are related to the arrangement and type of atoms they contain.
INDICATOR	4.2.3.	The student will describe the properties of solutions and explain how they form. <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

STRAND / STANDARD	MD.6.	Environmental Science: The student will demonstrate the ability to use the scientific skills and processes (Core Learning Goal 1) and major environmental science concepts to understand interrelationships of the natural world and to analyze environmental issues and their solutions.
TOPIC	6.3.	The student will analyze the relationships between humans and the earth's resources.
INDICATOR	6.3.4.	<p>The student will evaluate the interrelationship between humans and biological resources (At least - food production/agriculture; forest and wildlife resources; species diversity/genetic resources; integrated pest management; human health).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
STRAND / STANDARD	MD.6.	Environmental Science: The student will demonstrate the ability to use the scientific skills and processes (Core Learning Goal 1) and major environmental science concepts to understand interrelationships of the natural world and to analyze environmental issues and their solutions.
TOPIC	6.4.	The student will develop and apply knowledge and skills gained from an environmental issue investigation to an action project which protects and sustains the environment.
INDICATOR	6.4.1.	<p>Identify an environmental issue and formulate related research questions (Methods of gathering information may include: writing letters; performing a literature search; using the internet; interviewing experts).</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 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

		<p>Test for the Presence of Blood</p> <ul style="list-style-type: none"> • 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 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 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
INDICATOR	6.4.2.	<p>Design and conduct the research (Methods of data collection may include: field or laboratory; questionnaire/opinionnaire).</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 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 Skill Learning Activity 1: Modeling a DNA Profile • 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 • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	6.4.3.	<p>Interpret the findings to draw conclusions and make recommendations to help resolve the issue.</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

		<p>Analysis Skills</p> <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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
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Maryland Content Standards

Science

Grade 10

STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.1.	The student will explain why curiosity, honesty, openness, and skepticism are highly regarded in science.
INDICATOR	1.1.1.	<p>The student will recognize that real problems have more than one solution and decisions to accept one solution over another are made on the basis of many issues.</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
- 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

		<ul style="list-style-type: none"> Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.1.2.	<p>The student will modify or affirm scientific ideas according to accumulated evidence.</p> <ul style="list-style-type: none"> Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection Teacher Resource CD: Trace Evidence
STRAND / STANDARD	MD.1.	<p>Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.</p>
TOPIC	1.2.	<p>The student will pose scientific questions and suggest investigative approaches to provide answers to questions.</p>
INDICATOR	1.2.1.	<p>The student will identify meaningful, answerable scientific questions.</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 1: The Solitary 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

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • 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 4: Learning to be a Layer Detective • 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 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.2.2.	<p>The student will pose meaningful, answerable scientific questions. (NTB)</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary 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

		<ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • 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 4: Learning to be a Layer Detective • 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 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.2.3.	<p>The student will formulate a working hypothesis.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence
INDICATOR	1.2.4.	<p>The student will test a working hypothesis. (NTB)</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

		<ul style="list-style-type: none"> • 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
INDICATOR	1.2.5.	<p>The student will select appropriate instruments and materials to conduct an investigation.</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

		<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
INDICATOR	1.2.6.	<p>The student will identify appropriate methods for conducting an investigation (independent and dependent variables, proper controls, repeat trials, appropriate sample size, etc.).</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

		<ul style="list-style-type: none"> • 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 • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.2.7.	<p>The student will use relationships discovered in the lab to explain phenomena observed outside the laboratory.</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

		<p>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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.2.8.	<p>The student will defend the need for verifiable data.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Teacher Resource CD: Trace Evidence
STRAND / STANDARD	MD.1.	<p>Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.</p>
TOPIC	1.3.	<p>The student will carry out scientific investigations effectively and employ the instruments, systems of measurement, and materials of science appropriately.</p>
INDICATOR	1.3.1.	<p>The student will develop and demonstrate skills in using lab and field equipment to perform investigative techniques. (NTB)</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

		<ul style="list-style-type: none"> • 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
INDICATOR	1.3.2.	<p>The student will recognize safe laboratory procedures.</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 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
INDICATOR	1.3.3.	<p>The student will demonstrate safe handling of the chemicals and materials of science. (NTB)</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 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
INDICATOR	1.3.4.	<p>The student will learn the use of new instruments and equipment by following instructions in a manual or from oral direction. (NTB)</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

		<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
STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.4.	The student will demonstrate that data analysis is a vital aspect of the process of scientific inquiry and communication.
INDICATOR	1.4.1.	<p>The student will organize data appropriately using techniques such as tables, graphs, and webs (for graphs: axes labeled with appropriate quantities, appropriate units on axes, axes labeled with appropriate intervals, independent and dependent variables on correct axes, appropriate title).</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 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
INDICATOR	1.4.2.	<p>The student will analyze data to make predictions, decisions, or draw conclusions.</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

		<ul style="list-style-type: none"> • 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 • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.4.4.	<p>The student will determine the relationships between quantities and develop the mathematical model that describes these relationships.</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 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 Skill Learning Activity 1: Modeling a DNA Profile
- 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
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- 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

		<ul style="list-style-type: none"> • 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
INDICATOR	1.4.5.	<p>The student will check graphs to determine that they do not misrepresent results.</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 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 Skill Learning Activity 1: Modeling a DNA Profile • 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

		<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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.4.6.	<p>The student will describe trends revealed by data.</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 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 Skill Learning Activity 1: Modeling a DNA Profile • 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

		<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 • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.4.7.	<p>The student will determine the sources of error that limit the accuracy or precision of experimental results.</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 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
INDICATOR	1.4.8.	<p>The student will use models and computer simulations to extend his/her understanding of scientific concepts. (NTB)</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

		<ul style="list-style-type: none"> • 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
INDICATOR	1.4.9.	<p>The student will use analyzed data to confirm, modify, or reject a hypothesis.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence
STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.5.	The student will use appropriate methods for communicating in writing and orally the processes and results of scientific investigation.
INDICATOR	1.5.1.	<p>The student will demonstrate the ability to summarize data (measurements/observations).</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 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 Skill Learning Activity 1: Modeling a DNA Profile • 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

		<p>Patterns</p> <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 • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.5.2.	<p>The student will explain scientific concepts and processes through drawing, writing, and/or oral communication.</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 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
INDICATOR	1.5.3.	<p>The student will use computers and/or graphing calculators to produce the visual materials (tables, graphs, and spreadsheets) that will be used for communicating results. (NTB)</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 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast

INDICATOR	1.5.4.	<p>The student will use tables, graphs, and displays to support arguments and claims in both written and oral communication.</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
INDICATOR	1.5.5.	<p>The student will create and/or interpret graphics. (scale drawings, photographs, digital images, field of view, etc.)</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 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
INDICATOR	1.5.7.	<p>The student will use, explain, and/or construct various classification 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

		<ul style="list-style-type: none"> • 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 • 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
INDICATOR	1.5.8.	<p>The student will describe similarities and differences when explaining concepts and/or principles.</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 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

		<p>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 • Virtual Laboratory: ABO-Rh Blood Typing
INDICATOR	1.5.9.	<p>The student will communicate conclusions derived through a synthesis of 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: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin

		<p>Test for the Presence of Human Blood</p> <ul style="list-style-type: none"> • 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: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing
STRAND / STANDARD	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.6.	The student will use mathematical processes.
INDICATOR	1.6.4.	<p>The student will manipulate quantities and/or numerical values in algebraic equations.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis
STRAND /	MD.1.	Skills And Processes: The student will demonstrate ways of thinking and acting

STANDARD		inherent in the practice of science. The student will use the language and instruments of science to collect, organize, interpret, calculate, and communicate information.
TOPIC	1.7.	The student will show that connections exist both within the various fields of science and among science and other disciplines including mathematics, social studies, language arts, fine arts, and technology.
INDICATOR	1.7.2.	<p>The student will identify and evaluate the impact of scientific ideas and/or advancements in technology on 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

		<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 • Teacher Resource CD: Fingerprinting
INDICATOR	1.7.6.	<p>The student will explain how development of scientific knowledge leads to the creation of new technology and how technological advances allow for additional scientific accomplishments.</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
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- 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
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- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
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- 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

		<ul style="list-style-type: none"> • 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
STRAND / STANDARD	MD.3.	Concepts Of Biology: The student will demonstrate the ability to use scientific skills and processes (Core Learning Goal 1) and major biological concepts to explain the uniqueness and interdependence of living organisms, their interactions with the environment, and the continuation of life on earth.
TOPIC	3.2.	The student will demonstrate an understanding that all organisms are composed of cells which can function independently or as part of multicellular organisms.
INDICATOR	3.2.2.	<p>The student will conclude that cells exist within a narrow range of environmental conditions and changes to that environment, either naturally occurring or induced, may cause changes in the metabolic activity of the cell or organism.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis
STRAND / STANDARD	MD.3.	Concepts Of Biology: The student will demonstrate the ability to use scientific skills and processes (Core Learning Goal 1) and major biological concepts to explain the uniqueness and interdependence of living organisms, their interactions with the environment, and the continuation of life on earth.
TOPIC	3.3.	The student will analyze how traits are inherited and passed on from one generation to another.
INDICATOR	3.3.1.	<p>The student will demonstrate that the sorting and recombination of genes during sexual reproduction has an effect on variation in offspring.</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
INDICATOR	3.3.2.	<p>The student will illustrate and explain how expressed traits are passed from parent to offspring.</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

		<p>Polymorphisms</p> <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 Teacher Resource CD: Simulating DNA Analysis
INDICATOR	3.3.3.	<p>The student will explain how a genetic trait is determined by the code in a DNA molecule.</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
STRAND / STANDARD	MD.3.	<p>Concepts Of Biology: The student will demonstrate the ability to use scientific skills and processes (Core Learning Goal 1) and major biological concepts to explain the uniqueness and interdependence of living organisms, their interactions with the environment, and the continuation of life on earth.</p>
TOPIC	3.6.	<p>The student will investigate a biological issue and develop an action plan.</p>
INDICATOR	3.6.1.	<p>The student will analyze the consequences and/or trade-offs between technological changes and their effect on the individual, society, and the environment. They may select topics such as bioethics, genetic engineering, endangered species, or food supply. (NTB)</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 3 Case Activity 2: The Glowing Light
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- 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
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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
- 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

		<ul style="list-style-type: none"> Forensic Science: Unit 6 Activity 3: Fingerprint Analysis Forensic Science: Unit 6 Activity 4: Document Analysis Forensic Science: Unit 6 Activity 5: Blood Analysis
STRAND / STANDARD	MD.4.	Concepts Of Chemistry: The student will demonstrate the ability to use scientific skills and processes (Core Learning Goal 1) to explain composition and interactions of matter in the world in which we live.
TOPIC	4.2.	The student will explain how the properties of compounds are related to the arrangement and type of atoms they contain.
INDICATOR	4.2.3.	The student will describe the properties of solutions and explain how they form. <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
STRAND / STANDARD	MD.6.	Environmental Science: The student will demonstrate the ability to use the scientific skills and processes (Core Learning Goal 1) and major environmental science concepts to understand interrelationships of the natural world and to analyze environmental issues and their solutions.
TOPIC	6.2.	The student will investigate the interdependence of organisms within their biotic environment.
INDICATOR	6.2.4.	The student will provide examples and evidence showing that natural selection leads to organisms that are well suited for survival in particular environments (At least - coevolutionary relationships, e.g. symbiotic relationships; variation within a species increases survival potential; natural selection provides a mechanism for evolution; adaptations of organisms within biomes). <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
STRAND / STANDARD	MD.6.	Environmental Science: The student will demonstrate the ability to use the scientific skills and processes (Core Learning Goal 1) and major environmental science concepts to understand interrelationships of the natural world and to analyze environmental issues and their solutions.
TOPIC	6.4.	The student will develop and apply knowledge and skills gained from an environmental issue investigation to an action project which protects and sustains the environment.
INDICATOR	6.4.1.	Identify an environmental issue and formulate related research questions (Methods of gathering information may include: writing letters; performing a literature search; using the internet; interviewing experts). <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 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

		<ul style="list-style-type: none"> • 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 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 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis
INDICATOR	6.4.2.	<p>Design and conduct the research (Methods of data collection may include: field or laboratory; questionnaire/opinionnaire).</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 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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INDICATOR	6.4.3.	Interpret the findings to draw conclusions and make recommendations to help resolve the issue.

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- Teacher Resource CD: Trace Evidence
- Virtual Laboratory: ABO-Rh Blood Typing

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