

Correlation to New Mexico Science Content Standards
CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
I.1.1.01 8	Scientific Thinking and Practice	Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.	Evaluate the accuracy and reproducibility of data and observations.	24 repeatability of investigations is necessary for verification 29 recognize that repeatability of investigations is 33 recognize repeatability of investigation is necessary for verification of evidence 43 recognize that repeatability of investigation is necessary for validation of scientific evidence 43 analysis of error 44 analysis of errors in both measurements and interpretation 45 analysis of errors in measurement	5 collaboration 5 repeatability of results 5 analysis of errors in measurement

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I.1.1.01 7	Scientific Thinking and Practice	Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.	Use a variety of print and web resources to collect information, inform investigations, and answer a scientific question or hypothesis.	107	Internet research	32	use web to gather information
				242	use web to get info	47	use web and print resources to research and gather information
				269	use web to collect information		
				317	using web to find information	65	background research
				323	Internet research	81	Internet research
				339	use web to find information	82	Internet research and print research
				359	use web to collect information	82	background research
				360	use web or print sources to collect info	84	print and Internet research

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page		Volume 2 Investigation Manual page	
I.1.1.02 7	Scientific Thinking and Practice	Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.	Use models to explain the relationships between variables being investigated.	60	graphs	14	construct a graphical model
				61	making and evaluating graphs	15	construct a graphical model
				61	interpretations of patterns in data	17	make graph from data
				62	constructing a graph	22	make model from data
				63	constructing graph from data	27	making a graph from data
				184	interpretations of patterns from data	110	lab notebook
				222	harmonic motion graphs	111	making graphs
				294	making a graph		
				340	make and evaluate graphs		

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I.1.1.02 8	Scientific Thinking and Practice	Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.	Use a variety of technologies to gather, analyze and interpret scientific data.	12	measurement	4	measurements
				61	interpretations of patterns in data	5	measurement and selecting appropriate tools
				76	measurements	13	selecting ramp and photogates
				102	design experiments	49	measuring
				184	interpretations of patterns from data	77	measurements
				184	measuring	95	measuring
				401	design experiment—including choosing equipment	96	measuring
				411	design experiment with appropriate equipment	97	measuring
						98	measuring
						101	measurements
						102	measurements
						103	measurements

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
I.1.1.03 8	Scientific Thinking and Practice	Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.	Know how to recognize and explain anomalous data.	24 repeatability of investigations is necessary for verification 24 error in experiments 29 recognize that repeatability of investigations is 33 recognize repeatability of investigation is necessary for verification of evidence 43 recognize that repeatability of investigation is necessary for validation of scientific evidence 43 analysis of error 44 analysis of errors in both measurements and interpretation 45 analysis of errors in measurement 184 systematic error	5 repeatability of results 5 errors in data 5 analysis of errors in measurement

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
I.I.I.1 6	Scientific Thinking and Practice	Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.	Construct appropriate graphs from data and develop qualitative and quantitative statements about the relationships between variables being investigated.	29 construct explanations supported by direct and indirect evidence 60 graphs 61 making and evaluating graphs 61 analyze trends from data 61 interpretations of patterns in data 62 constructing a graph 63 constructing graph from data 184 interpretations of patterns from data 222 harmonic motion graphs 242 explanations based on observations 294 making a graph 340 make and evaluate graphs 404 construct explanations based on data 444 explanations based on evidence	6 construct reasonable explanations supported by direct and indirect data 14 explain using data 14 construct a graphical model 15 construct a graphical model 17 make graph from data 22 make model from data 27 making a graph from data 38 construct explanations based on evidence 40 constructing explanations 49 explanations based on evidence 110 lab notebook 111 making graphs

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
I.1.1.2 6	Scientific Thinking and Practice	Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.	Examine the reasonableness of data supporting a proposed scientific explanation.	24 repeatability of investigations is necessary for verification 29 recognize that repeatability of investigations is 33 recognize repeatability of investigation is necessary for verification of evidence 41 analyze hypothesis based on data 43 recognize that repeatability of investigation is necessary for validation of scientific evidence 43 analysis of error 44 analysis of errors in both measurements and interpretation 45 analyze scientific hypotheses based on evidence 45 analysis of errors in measurement	5 repeatability of results 5 analysis of errors in measurement 10 analyze hypothesis based on observation 20 analyze hypothesis based on comparison with evidence

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page		Volume 2 Investigation Manual page	
I.1.1.3 6	Scientific Thinking and Practice	Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.	Justify predictions and conclusions based on data.	29	construct explanations supported by direct and indirect evidence	6	construct reasonable explanations supported by direct and indirect data
				31	review scientific hypothesis based on comparison with evidence	14	explain using data
				63	make predictions	38	construct explanations based on evidence
				242	explanations based on observations	40	constructing explanations
				340	make predictions based on data	49	explanations based on evidence
				404	construct explanations based on data	55	make predictions based on observations
				444	explanations based on evidence	58	make predictions on observed data
						82	make predictions based on inferences from data

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
I.I.II.01 7	Scientific Thinking and Practice	Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.	Describe how bias can affect scientific investigation and conclusions.	24 repeatability of investigations is necessary for verification 29 recognize that repeatability of investigations is 33 recognize repeatability of investigation is necessary for verification of evidence 43 recognize that repeatability of investigation is necessary for validation of scientific evidence	5 collaboration 5 repeatability of results
I.I.II.01 8	Scientific Thinking and Practice	Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.	Examine alternative explanations for observations.	61 interpretations of patterns in data 184 interpretations of patterns from data	
I.I.II.02 8	Scientific Thinking and Practice	Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.	Describe ways in which science differs from other ways of knowing and from other bodies of knowledge (e.g., experimentation, logical arguments, skepticism).	28 recognizing that scientific knowledge is a process of learning 32 recognition that science is a process	

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page		Volume 2 Investigation Manual page
I.I.II.02 7	Scientific Thinking and Practice	Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.	Critique procedures used to investigate a hypothesis.	102	design experiments	
				401	design experiment—including choosing equipment	
				411	design experiment with appropriate equipment	
I.I.II.03 7	Scientific Thinking and Practice	Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.	Analyze and evaluate scientific explanations.	41	analyze hypothesis based on data	10 analyze hypothesis based on observation
				45	analyze scientific hypotheses based on evidence	20 analyze hypothesis based on comparison with evidence

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page		
I.I.II.03 8	Scientific Thinking and Practice	Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.	Know that scientific knowledge is built on questions posed as testable hypotheses, which are tested until the results are accepted by peers.	24	repeatability of investigations is necessary for verification	5	collaboration
				24	repeatability of investigations is necessary for verification	5	repeatability of results
				29	recognize that repeatability of investigations is	5	repeatability of results
				29	recognize that repeatability of investigations is	13	conduct car/ramp experiment
				33	recognize repeatability of investigation is necessary for verification of evidence	58	conduct scientific vocabulary
				33	recognize repeatability of investigation is necessary for verification of evidence		
				43	recognize that repeatability of investigation is necessary for validation of scientific evidence		
				43	recognize that repeatability of investigation is necessary for validation of scientific evidence		

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
I.I.II.1 6	Scientific Thinking and Practice	Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.	Understand that scientific knowledge is continually reviewed, critiqued, and revised as new data become available.	28 recognizing that scientific knowledge is a process of learning 32 recognition that science is a process 32 evaluate how research shapes scientific knowledge	
I.I.II.2 6	Scientific Thinking and Practice	Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.	Understand that scientific investigations use common processes that include the collection of relevant data + observations, accurate measurements, identification + control of variables, + logical reasoning to formulate hypotheses and explanations.	28 recognizing that scientific knowledge is a process of learning 32 recognition that science is a process 32 describe steps of the scientific method 34 recognizing variables 41 recognizing and controlling variables in observations and experiments 45 identifying cause and effect relationships 54 variables 401 scientific method	10 recognize and control variables 13 conduct car/ramp experiment 24 control variables 43 recognizing and controlling variables 58 conduct scientific vocabulary 80 recognizing and controlling variables

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
I.I.II.3 6	Scientific Thinking and Practice	Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.	Understand that not all investigations result in defensible scientific explanations.	24 repeatability of investigations is necessary for verification 28 interpreting observations and proposing explanations 29 recognize that repeatability of investigations is 33 recognize repeatability of investigation is necessary for verification of evidence 43 recognize that repeatability of investigation is necessary for validation of scientific evidence 43 analysis of error 44 analysis of errors in both measurements and interpretation 45 analysis of errors in measurement 270 interpreting observations and making explanations	5 repeatability of results 5 analysis of errors in measurement 7 interpreting observations and proposing explanations 58 interpret observations 76 interpret observations 80 interpret observations

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page		Volume 2 Investigation Manual page	
I.I.III.01 7	Scientific Thinking and Practice	Use mathematical ideas, tools, and techniques to understand scientific knowledge.	Understand that the number of data (sample size) influences the reliability of a prediction.	43	analysis of error	5	analysis of errors in measurement
				44	analysis of errors in both measurements and interpretation	55	make predictions based on observations
				45	analysis of errors in measurement	58	make predictions on observed data
				61	interpretations of patterns in data	82	make predictions based on inferences from data
				63	make predictions		
				184	interpretations of patterns from data		
				340	make predictions baed on data		

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page		
I.I.III.01 8	Scientific Thinking and Practice	Use mathematical ideas, tools, and techniques to understand scientific knowledge	Use mathematical expressions and techniques to explain data and observations and to communicate findings (e.g., formulas and equations, significant figures, graphing, sampling, estimation, mean).	29	communication is important to science	9	calculate speed
				36	using algebraic models	14	construct a graphical model
				42	basic statistical analysis of data—average	15	construct a graphical model
				45	basic statistical analysis	17	make graph from data
				48	averages	22	make model from data
				60	graphs	23	making measurements
				61	interpretations of patterns in data	27	calculate speed
				61	making and evaluating graphs	27	making a graph from data
				62	constructing a graph	29	find the mechanical advantage
				63	constructing graph from data	32	communicating as essential to science
				63	know that scientific knowledge can be in the form of models	56	find the mass/volume ratio
				64	determining slope of a line	83	scientific knowledge is sometimes in the form of models
				66	determining slope	93	communicating results is essential to science
				76	line graphs	110	lab notebook
				83	using algebraic formulas	111	reading graphs
				86	using algebraic models	111	making graphs
				98	using algebraic model		
115	using algebraic models						

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				138	
				184	
				200	
				222	
				227	
				269	
				294	
				340	
				340	
				364	
				444	

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page		Volume 2 Investigation Manual page	
I.I.III.02 8	Scientific Thinking and Practice	Use mathematical ideas, tools, and techniques to understand scientific knowledge	Create models to describe phenomena.	60	graphs	14	construct a graphical model
				61	making and evaluating graphs	15	construct a graphical model
				62	constructing a graph	17	make graph from data
				63	constructing graph from data	22	make model from data
				63	know that scientific knowledge can be in the form of models	27	making a graph from data
				76	line graphs	83	scientific knowledge is sometimes in the form of models
				222	harmonic motion graphs	110	lab notebook
				294	making a graph	111	making graphs
				340	make and evaluate graphs		
				340	line graphs		

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
I.I.III.03 7	Scientific Thinking and Practice	Use mathematical ideas, tools, and techniques to understand scientific knowledge.	Select and use an appropriate model to examine a phenomenon.	60 graphs 61 making and evaluating graphs 62 constructing a graph 63 constructing graph from data 63 know that scientific knowledge can be in the form of models 76 line graphs 222 harmonic motion graphs 294 making a graph 340 make and evaluate graphs 340 line graphs	14 construct a graphical model 15 construct a graphical model 17 make graph from data 22 make model from data 27 making a graph from data 83 scientific knowledge is sometimes in the form of models 110 lab notebook 111 making graphs

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
I.I.III.1 6	Scientific Thinking and Practice	Use mathematical ideas, tools, and techniques to understand scientific knowledge.	Evaluate the usefulness and relevance of data to an investigation.	24 repeatability of investigations is necessary for verification 28 interpreting observations and proposing explanations 29 recognize that repeatability of investigations is 33 recognize repeatability of investigation is necessary for verification of evidence 43 recognize that repeatability of investigation is necessary for validation of scientific evidence 43 analysis of error 44 analysis of errors in both measurements and interpretation 45 analysis of errors in measurement 61 interpretations of patterns in data 184 interpretations of patterns from data 270 interpreting observations and making explanations	5 repeatability of results 5 analysis of errors in measurement 7 interpreting observations and proposing explanations 58 interpret observations 76 interpret observations 80 interpret observations

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page		Volume 2 Investigation Manual page	
I.I.III.2 6	Scientific Thinking and Practice	Use mathematical ideas, tools, and techniques to understand scientific knowledge.	Use probabilities, patterns, and relationships to explain data and observations.	60	graphs	14	construct a graphical model
				61	making and evaluating graphs	15	construct a graphical model
				61	analyze trends from data	17	make graph from data
				61	interpretations of patterns in data	22	make model from data
				62	constructing a graph	27	making a graph from data
				63	constructing graph from data	110	lab notebook
				184	interpretations of patterns from data	111	making graphs
				222	harmonic motion graphs		
				294	making a graph		
				340	make and evaluate graphs		

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.I.01 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Know how to use density, boiling point, freezing point, conductivity, and color to identify various substances.	4 mass 5 physical properties of matter 5 mass and volume 24 mass of objects 174 compare materials—density and mass 298 compare objects using properties—mass and density 299 compare objects based on volume 300 compare objects based on density 301 compare objects using density 303 compare objects and materials using mass and volume and density 303 physical properties of matter 303 understand that a substance has characteristic properties 306 compare objects using density	36 electrical conductivity of various materials 56 compare objects based on mass and volume and density 74 compare materials based on density 101 volume 103 volume 104 volume 105 volume 106 mass 107 mass 108 mass

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
				307	
				compare objects based on density	
				308	
				compare objects based on density	
				309	
				compare objects based on density	
				316	
				classify materials based on physical properties	
				317	
				classify materials based on properties	
				344	
				chemical and physical properties	
				350	
				physical and chemical properties	
				357	
				classify by chemical and physical properties	
				357	
				melting and boiling points	
				358	
				physical properties of gold	

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II.I.I.02 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Distinguish between metals and non-metals.	345	recognizing groups or families on the periodic table	65	identify groups or families on periodic table
				346	identify metals and nonmetals on the periodic table	67	identify metals and nonmetals and metalloids
				348	recognizing metals and nonmetals and metalloids	67	recognizing groups or families
				348	recognizing groups and families of periodic table		
				350	recognizing groups and families and periodic table		
				353	groups on periodic table		

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.I.03 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Understand the differences among elements, compounds, and mixtures by: classification of materials as elements, compounds, or mixtures and interpretation of chemical formulas	20 recognize that compounds are composed of elements 314 compounds composed of elements 314 formation of NaCl crystals 363 recognize that compounds are made of elements 364 compounds are composed of elements 367 demonstrate that when two or more substances are combined new properties are seen 368 difference between ionic and covalent bonds 370 new substances are formed when two substances combine and it has new properties	71 new substances are formed when substances combine 77 how new substances are formed in chemical reactions

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II.I.I.04 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Identify the protons, neutrons, and electrons within an atom and describe their locations (i.e., in the nucleus or in motion outside the nucleus).	174	structure of atoms—electrons and protons and neutrons	59	understand the structure of an atom based on protons and neutrons and electrons
				324	atoms are made up of proton and neutron and electron	62	understand the structure of an atom based on protons and neutrons and electrons
				325	protons neutrons and electrons	62	structure of an atom
				326	basic properties of an atom and the three subatomic particles	69	structure of an atom
				329	structure of an atom and three smaller particles	70	three subatomic particles—charge and mass
				331	three subatomic particles and their charge	70	structure of an atom
				339	properties of subatomic materials		
				339	structure of atoms		

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page	
II.I.I.05 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Explain that elements are organized in the periodic table according to their properties.	343	explain common chemical properties of elements in relation to the periodic table	61 periodic table
				345	recognizing groups or families on the periodic table	64 build and describe periodic table
				345	describe periodic table	65 identify groups or families on periodic table
				345	common chemical properties in relation to the periodic table	66 periodic table
				348	common chemical properties of elements based on relation to periodic table	67 recognizing groups or families
				348	recognizing groups and families of periodic table	67 periodic table
				348	describing periodic table	68 periodic table
				349	explain common chemical properties in relation to placement on periodic table	
				350	recognizing groups and families and periodic table	
				350	describe periodic table	
				351	explain common chemical properties of elements in relation to periodic table	

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				352	properties in relation to periodic table
				352	describe periodic table
				353	groups on periodic table
				353	chemical properties in relation to periodic table
				357	describe characteristics based on place in periodic table
				369	properties of elements in relation to the periodic table
				371	explain the chemical properties of elements in relation to periodic table
				372	explain chemical properties based on location in periodic table
				374	chemical properties based on placement in periodic table

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II.I.I.06 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Know that compounds are made of two or more elements, but not all sets of elements can combine to form compounds.	20	recognize that compounds are composed of elements	71	new substances are formed when substances combine
				20	elements combine in constant proportions	77	how new substances are formed in chemical reactions
				314	formation of NaCl crystals		
				314	compounds composed of elements		
				363	recognize that compounds are made of elements		
				364	compounds are composed of elements		
				365	explain chemical reactions in terms of atoms and molecules		
				366	understand that atoms combine in constant proportions to form compounds		
				367	elements combine in certain proportions to form compounds		
				367	demonstrate that when two or more substances are combined new properties are seen		

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				368 understand that elements combine in constant proportions to form compounds	
				368 difference between ionic and covalent bonds	
				370 understand that elements combine in constant proportions in compounds	
				370 new substances are formed when two substances combine and it has new properties	
				371 elements combine in constant proportions in compounds	
				410 chemical reactions in terms of atoms and molecules	

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II.I.I.07 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Know that phase changes are physical changes that can be reversed (e.g., evaporation, condensation, melting).	5	properties of solids and liquids and gas	52	common phase changes
				280	physical differences between phases of matter	53	states of matter based on arrangement and motion of atoms
				280	phases of matter	53	phase changes
				281	phase changes		
				301	physical differences between states of matter		
				310	explain matter states based on arrangement of atoms		

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II.1.1.08 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Describe various familiar physical and chemical changes that occur naturally (e.g., snow melting, photosynthesis, rusting, burning).	5	chemical changes such as burning	52	common phase changes
				281	phase changes	53	phase changes
				344	difference between chemical and physical changes	77	difference between chemical and physical changes
				344	simple chemical changes—rusting		
				407	differences between chemical and physical change		
				407	simple chemical changes		
				407	simple chemical changes		
				408	difference between physical and chemical change		
				413	difference between chemical and physical change		
II.1.1.09 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Identify factors that influence the rate at which chemical reactions occur (e.g., temperature, concentration).	400	pH and reactivity		
				437	different types of reactions—factors that affect reaction rates		
				437	reaction rates		

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II.I.I.1 6	Content of Science	Know the forms and properties of matter and how matter interacts.	Understand that substances have characteristic properties and identify the properties of various substances (e.g., density, boiling point, solubility, chemical reactivity).	5 physical properties of matter 303 understand that a substance has characteristic properties 303 physical properties of matter 314 formation of NaCl crystals 316 classify materials based on physical properties 317 classify materials based on properties 343 explain common chemical properties of elements in relation to the periodic table 344 chemical and physical properties 345 common chemical properties in relation to the periodic table 348 common chemical properties of elements based on relation to periodic table 349 explain common chemical properties in relation to placement on periodic table	71 new substances are formed when substances combine 77 how new substances are formed in chemical reactions

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				350	
				351	
				352	
				353	
				357	
				357	
				357	
				358	
				367	
				369	
				370	

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				371 explain the chemical properties of elements in relation to periodic table 372 explain chemical properties based on location in periodic table 374 chemical properties based on placement in periodic table	
II.I.I.10 8	Content of Science	Know the forms and properties of matter and how matter interacts.	Know that chemical reactions can absorb energy (endothermic reactions) or release energy (exothermic reactions).	414 explain how energy is manifested in chemical reactions—exothermic and endothermic 415 how energy is manifested in chemical reactions 421 energy manifested in chemical reactions	78 how energy is manifested in chemical reactions
II.I.I.2 7	Content of Science	Know the forms and properties of matter and how matter interacts.	Know that the total amount of matter (mass) remains constant although its form, location, and properties may change (e.g., matter in the food web).	16 how energy flows in an ecosystem	79 investigate law of conservation of mass 80 law of conservation of mass

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II.I.I.2 6	Content of Science	Know the forms and properties of matter and how matter interacts.	Use properties to identify substances (e.g., for minerals: the hardness, streak, color, reactivity to acid, cleavage, fracture).	303 understand that a substance has characteristic properties 316 classify materials based on physical properties 317 classify materials based on properties 344 chemical and physical properties 350 physical and chemical properties 357 classify by chemical and physical properties 357 melting and boiling points 358 physical properties of gold	

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II.I.I.3 6	Content of Science	Know the forms and properties of matter and how matter interacts.	Know that there are about 100 known elements that combine to produce compounds in living organisms and nonliving substances.	20 recognize that compounds are composed of elements 314 compounds composed of elements 314 formation of NaCl crystals 345 describe periodic table 348 describing periodic table 350 describe periodic table 352 describe periodic table 363 recognize that compounds are made of elements 364 compounds are composed of elements 367 demonstrate that when two or more substances are combined new properties are seen 368 difference between ionic and covalent bonds 370 new substances are formed when two substances combine and it has new properties 429 general understanding of composition of living cells	61 periodic table 64 build and describe periodic table 66 periodic table 67 periodic table 68 periodic table 71 new substances are formed when substances combine 77 how new substances are formed in chemical reactions

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
				434 understanding that fats and carbohydrates and proteins make up cells 435 know that fats help make up cells 436 cells contain protein	
II.1.1.3 7	Content of Science	Know the forms and properties of matter and how matter interacts.	Identify characteristics of radioactivity, including: <ul style="list-style-type: none"> • decay in time of some elements to others • release of energy • damage to cells. 	330 basic concepts of radioactivity and decay of one atom into another 331 radioactivity 340 radioactivity and decay 420 conceptually explain what nuclear reactions are 420 nuclear reactions and creating energy	60 radioactivity 63 radioactivity

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.I.4 6	Content of Science	Know the forms and properties of matter and how matter interacts.	Know the differences between chemical and physical properties and how these properties can influence the interactions of matter.	316 classify materials based on physical properties 317 classify materials based on properties 343 explain common chemical properties of elements in relation to the periodic table 344 difference between chemical and physical changes 344 chemical and physical properties 345 common chemical properties in relation to the periodic table 348 common chemical properties of elements based on relation to periodic table 349 explain common chemical properties in relation to placement on periodic table 350 physical and chemical properties 351 explain common chemical properties of elements in relation to periodic table	77 difference between chemical and physical changes

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
				352	
				properties in relation to periodic table	
				353	
				chemical properties in relation to periodic table	
				357	
				melting and boiling points	
				357	
				describe characteristics based on place in periodic table	
				357	
				classify by chemical and physical properties	
				358	
				physical properties of gold	
				369	
				properties of elements in relation to the periodic table	
				371	
				explain the chemical properties of elements in relation to periodic table	
				372	
				explain chemical properties based on location in periodic table	
				374	
				chemical properties based on placement in periodic table	
				407	
				differences between chemical and physical change	
				408	
				difference between physical and chemical change	

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
				413 difference between chemical and physical change	
II.1.1.4 7	Content of Science	Know the forms and properties of matter and how matter interacts.	Describe how substances react chemically in characteristic ways to form new substances (compounds) with different properties (e.g., carbon and oxygen combine to form carbon dioxide in respiration).	314 formation of NaCl crystals 365 explain chemical reactions in terms of atoms and molecules 367 demonstrate that when two or more substances are combined new properties are seen 370 new substances are formed when two substances combine and it has new properties 410 chemical reactions in terms of atoms and molecules	71 new substances are formed when substances combine 77 how new substances are formed in chemical reactions

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.I.5 7	Content of Science	Know the forms and properties of matter and how matter interacts.	Know that chemical reactions are essential to life processes.	16 how plants use energy 259 photosynthesis 364 understand biomolecules 391 photosynthesis 407 metabolism is a collection of reactions 427 how simple molecules are rearranged into new molecules in living things 428 understand biomolecules 430 special bonding properties of carbon 430 metabolism as interrelated chemical reactions 431 concept of photosynthesis 432 how simple molecules are rearranged into new molecules in living things 432 metabolism as an interrelated collection of chemical reactions 434 photosynthesis 435 carbon and hydrogen and oxygen make up biomolecules 435 metabolism	81 carbon and hydrogen and nitrogen and oxygen combine to form biomolecules 82 understand that carbon and hydrogen and nitrogen and oxygen combine to form biomolecules

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
				436	
				436	
				437	
				438	
				440	
				441	

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page		
II.I.II.01 8	Content of Science	Explain the physical processes involved in the transfer, change, and conservation of energy.	Know that energy exists in many forms and that when energy is transformed some energy is usually converted to heat.	5	conversion of energy types	26	transformation of energy from one form to another
				6	energy conversions	27	transformation of energy from one form to another
				10	conversion of energy		
				15	types and forms of energy		
				15	conversion of energy from one form to another		
				16	conversion of energy from one form to another		
				31	basic forms of energy—heat		
				88	friction as a source of energy dissipation		
				89	friction as a source of energy dissipation		
				92	friction		
				130	basic forms of energy		
				131	conversion of energy from potential to kinetic		
				148	forms of energy (i.e. wind)		
				149	conversions of energy		
150	energy conversions						

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.II.02 8	Content of Science	Explain the physical processes involved in the transfer, change, and conservation of energy.	Know that kinetic energy is a measure of the energy of an object in motion and potential energy is a measure of an object's position or composition.	10 conservation of energy (i.e. potential and kinetic) 17 energy as stored work 130 law of conservation of energy 136 concept of energy as stored work 137 energy is stored work	
II.I.II.04 8	Content of Science	Explain the physical processes involved in the transfer, change, and conservation of energy.	Know that electrical energy is the flow of electrons through electrical conductors that connect sources of electrical energy to points of use, including: electrical current paths through parallel and series circuits.	192 electric current 196 electric circuits	36 series circuit 37 parallel circuit 37 series circuit
II.I.II.05 8	Content of Science	Explain the physical processes involved in the transfer, change, and conservation of energy.	Understand how light and radio waves carry energy through vacuum or matter by: straight-line travel unless an object is encountered, and reflection by a mirror, refraction by a lens, absorption by a dark object.	249 speed of light 251 nature of light in terms of waves and energy info flow 261 mirrors reflect light 263 refraction of light 263 reflection of light 264 reflection explained	48 refraction of light 48 refractive optics such as lenses

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.II.06 8	Content of Science	Explain the physical processes involved in the transfer, change, and conservation of energy.	Understand that vibrations of matter (e.g., sound, earthquakes, water waves) carry wave energy, including: sound transmission through solids, liquids, and gases.	225 waves transmit energy 234 speed of sound 235 sound as a wave 236 sound as a wave 236 sound waves and different media 240 why sound is a wave 242 sound as a wave	44 wave as oscillation in a medium
II.I.II.1 6	Content of Science	Explain the physical processes involved in the transfer, change, and conservation of energy.	Identify various types of energy (e.g., heat, light, mechanical, electrical, chemical, nuclear).	15 types and forms of energy 31 basic forms of energy—heat 130 basic forms of energy 148 forms of energy (i.e. wind)	
II.I.II.2 6	Content of Science	Explain the physical processes involved in the transfer, change, and conservation of energy.	Understand that heat energy can be transferred through conduction, radiation and convection.	287 heat conduction 289 natural and forced convection 290 thermal radiation	

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.II.3 6	Content of Science	Explain the physical processes involved in the transfer, change, and conservation of energy.	Know that there are many forms of energy transfer but that the total amount of energy is conserved (i.e., that energy is neither created nor destroyed).	10 conservation of energy (i.e. potential and kinetic) 130 law of conservation of energy 131 conservation of energy 134 conservation of energy in a broader context	
II.I.II.4 6	Content of Science	Explain the physical processes involved in the transfer, change, and conservation of energy.	Understand that some energy travels as waves (e.g., seismic, light, sound), including: the sun as source of energy for many Earth processes; different wavelengths of sunlight; vibrations of matter; different speeds through different materials	225 waves transmit energy 226 frequency and amplitude and wavelength of waves 227 the speed of waves 235 wavelength and frequency 237 wavelength of sound 250 energy and color of light 259 explain how colors of light relate to wavelength	44 wavelength and frequency and speed of waves

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.III.01 8	Content of Science	Describe and explain forces that produce motion in objects.	Know that there are fundamental forces in nature (e.g., gravity, electromagnetic forces, nuclear forces).	190 compare and contrast electrical force and magnetic force 197 electric forces are very strong 206 magnetic vs electric force 214 how coils concentrate magnetic field 327 compare and contrast the strong force and the electromagnetic force	
II.I.III.02 8	Content of Science	Describe and explain forces that produce motion in objects.	Know that a force has both magnitude and direction.	99 force as vector 100 force as vector 110 conceptual understanding of force as a vector	11 vectors have magnitude and direction

Correlation to New Mexico Science Content Standards
CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.III.03 8	Content of Science	Describe and explain forces that produce motion in objects.	Analyze the separate forces acting on an object at rest or in motion (e.g., gravity, elastic forces, friction), including how multiple forces reinforce or cancel one another to result in a net force that acts on an object.	94 net force 96 concept of net force 98 net force 99 net force 99 net force 101 net force 109 concept of net force 110 concept of net force 113 concept of net force 115 concept of net force 116 net force	
II.I.III.04 8	Content of Science	Describe and explain forces that produce motion in objects.	Know that electric charge produces electrical fields and magnets produce magnetic fields.	190 compare and contrast electrical force and magnetic force 203 what is a magnet 204 concept of force fields 204 concept of magnetic field 206 magnetic vs electric force 214 how coils concentrate magnetic field	35 concept of electric current 39 magnetic field

Correlation to New Mexico Science Content Standards
CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.III.05 8	Content of Science	Describe and explain forces that produce motion in objects.	Know how a moving magnetic field can produce an electric current (generator) and how an electric current can produce a magnetic field	209 electromagnetic induction explained 214 relationship between magnetic field and electric charge	40 investigate relationship between magnetism and electricity using electromagnets
II.I.III.06 8	Content of Science	Describe and explain forces that produce motion in objects.	Know that Earth has a magnetic field.	204 concept of force fields	
II.I.III.07 8	Content of Science	Describe and explain forces that produce motion in objects.	Know that an object's motion is always described relative to some other object or point (i.e., frame of reference).		

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.III.08 8	Content of Science	Describe and explain forces that produce motion in objects.	Understand and apply Newton's Laws of Motion: Objects in motion will continue in motion and objects at rest will remain at rest unless acted upon by an unbalanced force (inertia).	68 quantitative understanding of acceleration as a rate of change of velocity 79 changes in motion require force 80 forces needed to change motion 89 changes in motion require application of force 96 change in motion require force 100 Newton's first law 108 changes in motion require force 109 change in motion requires force 124 Newton's first law	23 Newton's second law

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.III.1 7	Content of Science	Describe and explain forces that produce motion in objects.	Know that forces cause motion in living systems, incl. the principle of a lever and how it gives mech adv to a muscular/skeletal system to lift objects; forces in specific systems in the human body (how heart generates blood pressure...)	112 force is an action with potential to change motion	
II.I.III.1 6	Content of Science	Describe and explain forces that produce motion in objects.	Know that every object exerts gravitational force on every other object dependent on the masses and distance of separation (e.g., motions of celestial objects, tides).	70 72 82 96 100 100 154 156 157 158 160 effect of gravity on motion projectile explained effect of gravity on objects effects of gravity gravity how gravity affects motion Newton's law of universal gravitation effect of gravity on motion role of gravity in solar system role of gravity in universe effect of gravity on motion of objects	

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.I.III.2 6	Content of Science	Describe and explain forces that produce motion in objects.	Know that gravitational force is hard to detect unless one of the objects (e.g., Earth) has a lot of mass.	70 effect of gravity on motion 72 projectile explained 82 effect of gravity on objects 96 effects of gravity 100 gravity 100 how gravity affects motion 154 Newton's law of universal gravitation 156 effect of gravity on motion 157 role of gravity in solar system 158 role of gravity in universe 160 effect of gravity on motion of objects	

Correlation to New Mexico Science Content Standards
CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.II.II.01 8	Content of Science	Understand how traits are passed from one generation to the next and how species evolve.	Understand that living organisms are made mostly of molecules consisting of a limited number of elements (e.g., carbon, hydrogen, nitrogen, oxygen).	8 living organisms and DNA 364 understand biomolecules 428 understand biomolecules 429 general understanding of composition of living cells 429 biomolecules 430 special bonding properties of carbon 434 understanding that fats and carbohydrates and proteins make up cells 435 carbon and hydrogen and oxygen make up biomolecules 435 know that fats help make up cells 436 cells contain protein	81 carbon and hydrogen and nitrogen and oxygen combine to form biomolecules 82 understand that carbon and hydrogen and nitrogen and oxygen combine to form biomolecules

Correlation to New Mexico Science Content Standards
CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.II.II.03 8	Content of Science	Understand how traits are passed from one generation to the next and how species evolve.	Describe the widespread role of carbon in the chemistry of living systems.	364 understand biomolecules 427 special properties of carbon that make possible a great variety and complexity of biomolecules 428 special bonding properties of carbon 428 understand biomolecules 429 general understanding of composition of living cells 430 special bonding properties of carbon 434 special bonding properties of carbon 434 understanding that fats and carbohydrates and proteins make up cells 435 carbon and hydrogen and oxygen make up biomolecules 435 know that fats help make up cells 436 cells contain protein	81 explain how special bonding properties of carbon make possible the great variety and complexity of biomolecules 81 carbon and hydrogen and nitrogen and oxygen combine to form biomolecules 82 understand that carbon and hydrogen and nitrogen and oxygen combine to form biomolecules

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.II.III.01 8	Content of Science	Understand the structure of organisms and the function of cells in living systems.	Describe how cells use chemical energy obtained from food to conduct cellular functions (i.e., respiration).	432 cellular respiration	
II.II.III.02 8	Content of Science	Understand the structure of organisms and the function of cells in living systems.	Explain that photosynthesis in green plants captures the energy from the sun and stores it chemically.	16 how plants use energy 259 photosynthesis 391 photosynthesis 431 concept of photosynthesis 434 photosynthesis	
II.II.III.03 8	Content of Science	Understand the structure of organisms and the function of cells in living systems.	Describe how chemical substances can influence cellular activity (e.g., pH).	400 pH and reactivity	
II.III.I.01 8	Content of Science	Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.	Understand how energy from the sun and other stars, in the form of light, travels long distances to reach Earth.	176 explain how stars form and features of life cycle 176 compare the Sun to other stars 178 explain how stars produce energy 178 how stars produce energy	

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CPO Science Physical Science (Middle School)

Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.III.I.02 8	Content of Science	Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.	Explain how the properties of light (e.g., emission, reflection, refraction) emitted from the sun and stars are used to learn about the universe, including: distances in the solar system and the universe and temperatures of different stars.	158 moon reflects light 161 reflected planet light 164 how astronomical instruments help us understand the universe 166 astronomical instruments help us understand units 171 how astronomical instruments help us understand universe 172 astronomical instruments help us understand universe 173 astronomical instruments used to understand universe 177 explain use of light years 179 light years 180 light years 181 light years 182 how astronomical instruments increase our understanding of universe 183 how astronomical instruments have increased our knowledge of universe	

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.III.I.03 8	Content of Science	Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.	Understand how gravitational force acts on objects in the solar system and the universe, including: similar action on masses on Earth and on other objects in the solar system and explanation of the orbits of the planets around the sun.	70 effect of gravity on motion 72 projectile explained 82 effect of gravity on objects 96 effects of gravity 100 gravity 100 how gravity affects motion 154 Newton's law of universal gravitation 156 orbits of planets and moons and other bodies 156 effect of gravity on motion 157 role of gravity in solar system 157 describe orbits of planets 158 role of gravity in universe 158 orbit of moon 160 effect of gravity on motion of objects 164 other bodies in solar system 164 orbits of other bodies in the solar system 166 compare orbits of planets 169 orbits of moons	32 orbit of the moon

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
				170 orbits of other moons 171 compare orbits of planets in solar system 173 orbits on bodies in solar system	
II.III.I.1 6	Content of Science	Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.	Describe the objects in the universe, including: • billions of galaxies, each containing billions of stars • different sizes, temperatures, and colors of stars in the Milky Way galaxy.	179 general characteristics of universe—galaxies 179 relationship of solar system to the universe 180 characteristics of the universe 181 description of galaxy as we know it	33 general characteristics of the solar system 34 relationship of the solar system to the universe—Milky Way galaxy

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.III.I.1 7	Content of Science	Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.	Explain why Earth is unique in our solar system in its ability to support life.	165 compare Earth to other planets with respect to supporting life 166 compare planets to Earth 168 compare other planets with Earth with respect to supporting life 169 compare other planets to Earth with respect to supporting life 173 compare Earth to other planets with respect to supporting life 286 Earth compared with other planets with respect to supporting life	
II.III.I.2 6	Content of Science	Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.	Locate the solar system in the Milky Way galaxy.	179 relationship of solar system to the universe	34 relationship of the solar system to the universe—Milky Way galaxy

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page		
II.III.I.3 6	Content of Science	Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.	Identify the components of the solar system, and describe their defining characteristics and motions in space, including: sun as medium size star, sun's composition and energy production; planets, their moons, asteroids.	156	orbits of planets and moons and other bodies	32	orbit of the moon
				157	describe orbits of planets	34	know general structure of the solar system
				158	orbit of moon		
				160	place of Earth in the solar system		
				161	general structure of the solar system		
				162	general position of Earth		
				163	general structure of solar system		
				164	orbits of other bodies in the solar system		
				164	other bodies in solar system		
				165	general structure of solar system		
				166	classify and compare planets		
				166	compare orbits of planets		
				167	classify and compare planets		
				168	classify planets		
				169	classify planets		
				169	orbits of moons		
				170	orbits of other moons		

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
				170	classify and compare planets
				171	compare orbits of planets in solar system
				171	compare and classify planets
				172	classify planets
				173	orbits on bodies in solar system
				173	classify planets
				175	explain and diagram the structure of the Sun
				176	compare the Sun to other stars
				176	explain how stars form and features of life cycle
				178	explain how stars produce energy
				178	how stars produce energy
				184	structure of sun

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.III.I.4 6	Content of Science	Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.	Know that the regular and predictable motions of the Earth-moon-sun system explain phenomena on Earth, including: Earth's motion in relation to a year, day, seasons, phases of moon, eclipses, tides, shadows; moon's orbit in relation to phases of moon.	158 phases of the moon 159 properties of the moon 159 the moon's effect on tides on Earth 167 Earth and moon relationship 167 relationship between Earth and sun and summer and winter	

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
II.III.II.4 6	Content of Science	Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's systems.	Describe the composition (i.e., nitrogen, oxygen, water vapor) and strata of Earth's atmosphere, and differences between the atmosphere of Earth and those of other planets.	165 166 168 169 173 286 356	compare Earth to other planets with respect to supporting life compare planets to Earth compare other planets with Earth with respect to supporting life compare other planets to Earth with respect to supporting life compare Earth to other planets with respect to supporting life Earth compared with other planets with respect to supporting life describe components of the atmosphere

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
III.I.1.01 8	Science and Society	Explain how scientific discoveries and inventions have changed individuals and societies	Analyze the interrelationship between science and technology (e.g., germ theory, vaccines).	7 relationship between science and technology 8 engineers design practical devices for solving problems 30 historical context and perspective of discoveries 31 historical context of specific scientific discovery 90 relationship between science and technology—maglev trains 91 relationship between science and applied technology 122 rocket technology 123 new technologies 338 connection between science and technology	
III.I.1.03 8	Science and Society	Explain how scientific discoveries and inventions have changed individuals and societies	Describe how technological revolutions have significantly influenced societies (e.g., energy production, warfare, space exploration).	30 historical context and perspective of discoveries 31 historical context of specific scientific discovery 359 societal impact of scientific knowledge	

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Standard #: Grade	Strand	Benchmark	Performance Standard	Volume 1 Student Text page	Volume 2 Investigation Manual page
III.I.1.04 8	Science and Society	Explain how scientific discoveries and inventions have changed individuals and societies	Critically analyze risks and benefits associated with technologies related to energy production.	23 using hybrid cars 148 economic and environmental consequences of wind 148 efficiency of energy conversions in wind power 149 economic and environmental impact of wind energy 149 efficiency of wind power	
III.I.1.1 6	Science and Society	Explain how scientific discoveries and inventions have changed individuals and societies.	Examine the role of scientific knowledge in decisions (e.g., space exploration, what to eat, preventive medicine and medical treatment).	91 applications of science can affect the lives of individuals 359 societal impact of scientific knowledge	
III.I.1.2 6	Science and Society	Explain how scientific discoveries and inventions have changed individuals and societies.	Describe the technologies responsible for revolutionizing information processing and communications (e.g., computers, cellular phones, Internet).	8 engineering responsible for advances in communication technology	