

FAME Public Charter School

Scope and Sequence: Grade Third

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Subject/Unit Title: Science				
Estimated Time Frame (#of Days): 40 days				
Unit A: Survival of Living Things				
Chapter Title	Lesson Title	Objectives	CA State Standards	Assessments
1. How Plants Grow 10 days	Lesson 1: What do plants need?	<ol style="list-style-type: none"> 1. Identify air, water, soil, and light as four needs of plants. 2. Analyze how roots, stems, and leaves help plants survive. 3. Observe that leaf size and structure differ among plants. 	<p>1.a: Students know energy comes from the Sun to Earth in the form of light.</p> <p>3.a: Students know plants and animals have structures that serve different functions in growth, survival, and reproduction</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	Workbook
	Lesson 2: What do seeds do?	<ol style="list-style-type: none"> 1. Recognize that seeds need certain conditions to spout. 2. Conclude that seeds pass traits from mature plants to new plants. 3. List ways plants reproduce without using seeds. 4. Identify four ways in which seeds are dispersed. 	<p>3. Adaptations in physical structure or behavior may improve an organism's chance for survival. As a basis for understanding this concept:</p> <ul style="list-style-type: none"> • Students know plants and animals have structures that serve different functions in growth, survival, and reproduction. • Students know living things cause changes in the environment in which they 	Workbook

			<p>live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.</p> <ul style="list-style-type: none">• Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations. <p>5. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:</p> <ul style="list-style-type: none">• Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty	
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			<p>in the observation.</p> <ul style="list-style-type: none"> • Use numerical data in describing and comparing objects, events, and measurements. • Predict the outcome of a simple investigation and compare the result with the prediction. • Collect data in an investigation and analyze those data to develop a logical conclusion. 	
	<p>Lesson 3: How do plants make food?</p>	<p>1. Identify photosynthesis as an activity 2. Describe the role of chlorophyll in photosynthesis.</p>	<p>1.a: Students know energy comes from the Sun to Earth in the form of light.</p> <p>3.a: Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.</p> <p>5.b: Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p>	<p>Workbook</p>

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			5.e: Collect data in an investigation and analyze those data to develop a logical conclusion	
	Chapter Review	<ol style="list-style-type: none"> 1. Evaluate the impact of research and technology of scientific thought, society, and the environment. 2. Identify careers related to science. 3. Connect chapter concepts with the contribution of scientists. 4. Review chapter concepts. 	<p>3.a: Students know plants and animals have structures that serve different functions in growth, survival, and reproduction</p> <p>3.c: Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.</p> <p>5.a: Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.</p> <p>5.d: Predict the outcome of a simple investigation and compare the result with the prediction</p>	Chapter Test
2. Types of Animals 16 days	Lesson1: What is an animal?	<ol style="list-style-type: none"> 1. Observe and describe the habitats of organism. 2. Recognize that animals have similar needs: food, water, oxygen, and living space. 	3.a: Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.	Workbook

		<p>3. Describe how animals change their physical environments to meet their needs.</p> <p>3. Identify some inherited traits of animals.</p>	<p>3.b: Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.</p> <p>3.c: Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.</p> <p>3.e: Students know that some kinds of organisms that once lived on Earth have completely disappeared and that some of those resembled others that are alive today.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion.</p>	
	<p>Lesson 2: What are mammals and birds?</p>	<p>1. Observe and identify characteristics among mammals and birds that allow each to survive.</p> <p>2. Analyze how adaptive characteristics help members of a species survive.</p>	<p>3.a: Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.</p> <p>3.c: Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.</p>	<p>Workbook</p>

			<p>3.d: Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.</p> <p>5.d: Predict the outcome of a simple investigation and compare the result with the prediction.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion.</p>	
	<p>Lesson 3: What are amphibians, fish, and reptiles?</p>	<p>1. Observe and identify characteristics among amphibians, fish, and reptiles that allow each to survive.</p> <p>2. Analyze how adaptive characteristics help individuals within a species survive.</p>	<p>3.a: Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.</p> <p>3.b: Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.</p> <p>3.d: Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations</p> <p>5. a: Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of</p>	<p>Workbook</p>

			<p>differences in the things being investigated, methods being used, or uncertainty in the observation.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion.</p>	
	<p>Lesson 4: What is extinction?</p>	<ol style="list-style-type: none"> 1. Predict what will happen to endangered animals whose populations are decreasing every year. 2. Compare endangered species status with threatened species status. 3. Identify current and past causes of extinction. 4. Recognize physical similarities between extinct species and species alive today. 	<p>3.c: Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.</p> <p>3.d: Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.</p> <p>3.e: Students know that some kinds of organisms that once lived on Earth have completely disappeared and that some of those resembled others that are alive today</p> <p>5.b: Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.</p> <p>5.c: Use numerical data in describing and</p>	<p>Workbook</p>

			<p>comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion.</p>	
	Chapter Review	<ol style="list-style-type: none"> 1. Connect chapter concepts with the history of science. 2. Connect chapter concepts with the contribution of scientist. 3. Extend chapter concepts with hands-on investigations. 4. Review chapter concepts. 	<p>3.a: Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.</p> <p>3.b: Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.</p> <p>3.c: Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.</p> <p>3.d: Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.</p> <p>3.e: Students know that some kinds of organisms that once lived on Earth have completely disappeared and that some of those resembled others that are alive today.</p>	Chapter Test

			5.e: Collect data in an investigation and analyze those data to develop a logical conclusion.	
3. Where Living Things Are Found 14 days	Lesson 1: What are ecosystems?	<ol style="list-style-type: none"> 1. Observe and describe the habitats of organisms within an ecosystem. 2. Recognize that organisms with similar needs compete with each other for resources. 3. Describe environmental changes that may cause some organisms to thrive, become ill, or perish. 	<p>3.b: Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.</p> <p>3.c: Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.</p> <p>3.d: Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion.</p>	Workbook
	Lesson 2: What are forest ecosystems?	1. Identify some living things that make their homes in forest	3.b: Students know examples of diverse life	Workbook

		<p>ecosystems. 2. Recognize that living things have characteristics for surviving in different forest environments.</p>	<p>forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.</p> <p>3.c: Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.</p> <p>3.d: Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion.</p>	
	<p>Lesson 3: What is a desert ecosystem?</p>	<p>1. Identify some living things that make their homes in desert ecosystems. 2. Recognize that living things have characteristics for surviving in desert environments.</p>	<p>3.a: Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.</p> <p>3.b: Students know examples of diverse life forms in different environments, such as</p>	<p>Workbook</p>

			<p>oceans, deserts, tundra, forests, grasslands, and wetlands.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
	<p>Lesson 4: What are water ecosystems?</p>	<p>1. Identify the two main types of water ecosystems.</p> <p>2. Give examples of living things that live in each type of water ecosystem.</p> <p>3. Conclude that living things in water ecosystems meet their needs in different ways.</p>	<p>3.b: Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.</p> <p>5. a: Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	<p>Workbook</p>
	<p>Chapter Review</p>	<p>1. Evaluate that impact of research and technology on scientific thought, society, and</p>	<p>3.b: Students know examples of diverse life forms in different environments, such as</p>	<p>Chapter Test</p>

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		<p>the environment.</p> <p>2. Identify careers related to science.</p> <p>3. Connect chapter concepts with the contributions of scientists.</p> <p>4. Review chapter concepts.</p>	<p>oceans, deserts, tundra, forests, grasslands, and wetlands.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
Unit Project and Wrap Up				
Subject/Unit Title: Science				
Estimated Time Frame (#of Days): 22 days				
Unit B: The Solar System				
Chapter Title	Lesson Title	Objectives	CA State Standards	Assessments
<p>1. Earth, the Water Planet</p> <p>10 days</p>	Lesson 1: What is Earth Like?	<p>1. Identify where water is found</p> <p>2. Describe the forms of water.</p> <p>3. Describe why water is important.</p>	<p>1.c: Students know machines and living things convert stored energy to motion and heat</p> <p>4.d: Students know that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth.</p> <p>5.a: Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used,</p>	Workbook

			<p>or uncertainty in the observation.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
	<p>Lesson 2: How do the moon and earth interact?</p>	<p>1. Describe the moon’s phases.</p> <p>2. Identify what causes eclipses.</p>	<p>2.a: Students know sunlight can be blocked to create shadows</p> <p>4.b: Students know the way in which the Moon's appearance changes during the four-week lunar cycle</p> <p>4.d: Students know that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth</p> <p>5.b: Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p>	<p>Workbook</p>

			<p>5.d: Predict the outcome of a simple investigation and compare the result with the prediction.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
	<p>Lesson 3: What causes Earth's seasons?</p>	<ol style="list-style-type: none"> 1. Describe why there are seasons. 2. Identify the cause of day and night. 	<p>2.a: Students know sunlight can be blocked to create shadows</p> <p>4.c: Students know telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye.</p> <p>4.d: Students know that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	<p>Workbook</p>

	<p>Chapter Review</p>	<ol style="list-style-type: none"> 1. Evaluate that impact of research and technology on scientific thought, society, and the environment. 2. Identify careers related to science. 3. Connect chapter concepts with the contributions of scientists. 4. Extend chapter concepts with hands-on investigations. 5. Review chapter concepts. 	<p>4.b: Students know the way in which the Moon's appearance changes during the four-week lunar cycle.</p> <p>4.c: Students know telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye.</p> <p>4.e: Students know the position of the Sun in the sky changes during the course of the day and from season to season.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion.</p>	<p>Chapter Test</p>
<p>2. The Solar System and Beyond</p> <p>12 days</p>	<p>Lesson 1: What is the solar system?</p>	<ol style="list-style-type: none"> 1. Identify the solar system's nine planets. 2. Describe other bodies in the solar systems. 	<p>4.d: Students know that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth</p> <p>5.c: Use numerical data in describing and comparing objects,</p>	<p>Workbook</p>

			<p>events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
	<p>Lesson 2: What is beyond the solar system?</p>	<p>1. Describe what constellations are.</p> <p>2. Describe how telescopes help us see stars.</p>	<p>4.a: Students know the patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons</p> <p>4.c: Students know telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	<p>Workbook</p>
	<p>Lesson 3: How do people study the solar system?</p>	<p>1. Construct and use a simple telescope.</p> <p>2. Compare and contrast radio and optical telescopes.</p> <p>3. Describe how crewed missions differ from space probes.</p>	<p>2.b: Students know light is reflected from mirrors and other surfaces</p> <p>4.c: Students know telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye</p> <p>5.b: Differentiate evidence from</p>	<p>Workbook</p>

			<p>opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p>	
	<p>Chapter Review</p>	<ol style="list-style-type: none"> 1. Connect chapter concepts with the history of science. 2. Connect chapter concepts with the contributions of scientists. 3. Extend chapter concepts with hands-on investigations. 4. Review chapter concepts. 	<p>4.a: Students know the patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons.</p> <p>4.c: Students know telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye.</p> <p>5. a: Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.</p>	<p>Chapter Test</p>

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			<p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion.</p>	
Unit Project and Wrap Up				
Subject/Unit Title: Science				
Estimated Time Frame (#of Days): 33 days				
Unit C: Investigating Matter and Energy				
Chapter Title	Lesson Title	Objectives	CA State Standards	Assessments
1 Properties of Matter 10 days	Lesson 1: What are physical properties of matter?	<p>1. Observe physical properties of matter.</p> <p>2. Identify matter as a solid, liquid, or gas.</p>	<p>1.e: Students know matter has three forms: solid, liquid, and gas.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	Workbook
	Lesson 2: What are	1. Identify matter as solids,	1.e: Students know matter has	Workbook

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	solids, liquids, and gases?	liquids, or gases. 2. Describe evaporation.	three forms: solid, liquid, and gas. 1.f: Students know evaporation and melting are changes that occur when the objects are heated. 1.h: Students know all matter is made of small particles called atoms, too small to see with the naked eye. 5.d: Predict the outcome of a simple investigation and compare the result with the prediction. 5.e: Collect data in an investigation and analyze those data to develop a logical conclusion	
	Lesson 3: How can matter be measured?	1. Demonstrate how to gather information about mass and volume by using appropriate tools to identify physical properties of matter.	5.c: Use numerical data in describing and comparing objects, events, and measurements. 5.e: Collect data in an investigation and analyze those data to develop a logical conclusion	Workbook
	Chapter Review	1. Connect chapter concepts with the history of science. 2. Connect chapter concepts with the contributions of scientists. 3. Extend chapter concepts with hands-on investigations.	1.e: Students know matter has three forms: solid, liquid, and gas. 1.f: Students know evaporation and melting are changes that occur when the objects are heated.	Chapter Test

		<p>4. Review chapter concepts.</p>	<p>1.h: Students know all matter is made of small particles called atoms, too small to see with the naked eye.</p> <p>5.d: Predict the outcome of a simple investigation and compare the result with the prediction.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
<p>2. Changes in Matter</p> <p>6 days</p>	<p>Lesson 1: What are physical changes?</p>	<p>1. Recognize that matter has multiple forms and can be changed from one form to another.</p>	<p>1.e: Students know matter has three forms: solid, liquid, and gas.</p> <p>1.f: Students know evaporation and melting are changes that occur when the objects are heated.</p> <p>1.g: Students know that when two or more substances are combined, a new substance may be formed with properties that are different from those of the original materials</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.d: Predict the outcome of a</p>	<p>Workbook</p>

			<p>simple investigation and compare the result with the prediction.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
	<p>Lesson 2: What are chemical changes?</p>	<p>1. Describe a chemical change.</p> <p>2. Recognize that when two or more substances combine, a new substance may form that has properties different from the original substances.</p>	<p>1.f: Students know evaporation and melting are changes that occur when the objects are heated.</p> <p>1.g: Students know that when two or more substances are combined, a new substance may be formed with properties that are different from those of the original materials</p> <p>5.b: Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.d: Predict the outcome of a simple investigation and compare the result with the prediction</p>	<p>Workbook</p>
	<p>Chapter Review</p>	<p>1. Evaluate that impact of research and technology on</p>	<p>1.g: Students know that when two or more substances are combined,</p>	<p>Chapter Test</p>

		<p>scientific thought, society, and the environment.</p> <ol style="list-style-type: none"> 2. Identify careers related to science. 3. Connect chapter concepts with the contributions of scientists. 4. Extend chapter concepts with hands-on investigations. 5. Review chapter concepts 	<p>a new substance may be formed with properties that are different from those of the original materials.</p> <p>1.h: Students know all matter is made of small particles called atoms, too small to see with the naked eye</p> <p>5. a: Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
<p>3. Energy 10 days</p>	<p>Lesson 1: How is Energy Stored?</p>	<ol style="list-style-type: none"> 1. Demonstrate one way energy can be used to move objects. 2. Identify sources of energy and the different forms energy can take. 3. Compare various kinds of stored energy. 	<p>1.a: Students know energy comes from the Sun to Earth in the form of light.</p> <p>1.b: Students know sources of stored energy take many forms, such as food, fuel, and batteries.</p> <p>1.c: Students know machines and living things convert stored energy</p>	<p>Workbook</p>

			<p>to motion and heat.</p> <p>1.d:Students know energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current, and by moving objects</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.d: Predict the outcome of a simple investigation and compare the result with the prediction.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
	<p>Lesson 2: How does energy move?</p>	<p>1. Observe that energy can travel as a wave.</p> <p>2. Recognize that energy moves out of a battery and into other objects.</p> <p>3. Describe how thermal energy moves as heat.</p>	<p>1.a: Students know energy comes from the Sun to Earth in the form of light.</p> <p>1.b: Students know sources of stored energy take many forms, such as food, fuel, and batteries.</p> <p>1.c: Students know machines and living things convert stored energy to motion and heat.</p> <p>1.d:Students know energy can be carried from one place to another</p>	<p>Workbook</p>

			<p>by waves, such as water waves and sound waves, by electric current, and by moving objects</p> <p>1.h: Students know all matter is made of small particles called atoms, too small to see with the naked eye</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
	<p>Lesson 3: How can Energy be changed?</p>	<p>1. Observe that energy can change from one form to another.</p> <p>2. Describe how machines and living things can convert stored energy into motion and heat.</p> <p>3. Recognize that heat is sometimes produced as a waste product of motion.</p>	<p>1.a: Students know energy comes from the Sun to Earth in the form of light.</p> <p>1.b: Students know sources of stored energy take many forms, such as food, fuel, and batteries.</p> <p>1.c: Students know machines and living things convert stored energy to motion and heat.</p> <p>1.d: Students know energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current, and by moving objects</p> <p>5. a: Repeat observations to improve accuracy and know that the results of similar scientific</p>	<p>Workbook</p>

			<p>investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.</p> <p>5.c: Use numerical data in describing and comparing objects, events, and measurements.</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
	<p>Chapter Review</p>	<ol style="list-style-type: none"> 1. Evaluate that impact of research and technology on scientific thought, society, and the environment. 2. Identify careers related to science. 3. Connect chapter concepts with the contributions of scientists. 4. Extend chapter concepts with hands-on investigations. 5. Review chapter concepts 	<p>1.a: Students know energy comes from the Sun to Earth in the form of light.</p> <p>1.b: Students know sources of stored energy take many forms, such as food, fuel, and batteries.</p> <p>1.c: Students know machines and living things convert stored energy to motion and heat.</p> <p>1.d: Students know energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current, and by moving objects</p> <p>1.h: Students know all matter is</p>	<p>Chapter Test</p>

			made of small particles called atoms, too small to see with the naked eye 5.e: Collect data in an investigation and analyze those data to develop a logical conclusion	
4. Light 7 days	Lesson 1: How does light behave?	1. Explain how light travels. 2. Describe what can occur when light strikes an object.	2.a: Students know sunlight can be blocked to create shadows. 2.b: Students know light is reflected from mirrors and other surfaces. 2.c: Students know the color of light striking an object affects the way the object is seen. 2.d: Students know an object is seen when light traveling from the object enters the eye 5.c: Use numerical data in describing and comparing objects, events, and measurements. 5.e: Collect data in an investigation and analyze those data to develop a logical conclusion	Workbook
	Lesson 2: How are light and color related?	1. Describe what causes a rainbow. 2. Explain how light and color are related	2.b: Students know light is reflected from mirrors and other surfaces.	Workbook

			<p>2.c:Students know the color of light striking an object affects the way the object is seen.</p> <p>2.d: Students know an object is seen when light traveling from the object enters the eye</p> <p>5.e: Collect data in an investigation and analyze those data to develop a logical conclusion</p>	
	<p>Chapter Review</p>	<p>1. Connect chapter concepts with the history of science</p> <p>2. Connect chapter concepts with the contributions of scientists.</p> <p>4. Extend chapter concepts with hands-on investigations.</p> <p>5. Review chapter concepts</p>	<p>1.b: Students know sources of stored energy take many forms, such as food, fuel, and batteries.</p> <p>1.d:Students know energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current, and by moving objects</p> <p>2.b: Students know light is reflected from mirrors and other surfaces.</p> <p>2.c:Students know the color of light striking an object affects the way the object is seen.</p> <p>2.d: Students know an object is seen when light traveling from the object enters the eye</p>	<p>Chapter Test</p>

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			5.e: Collect data in an investigation and analyze those data to develop a logical conclusion	
Unit Project and Wrap Up				
Subject/Unit Title: Science				
Estimated Time Frame (#of Days): 20 days				
Unit Extension Chapters				
Chapter Title	Lesson Title	Objectives	CA State Standards	Assessments
1. Living Things Depend on One Another 10 days	Lesson 1: How do animals get food?	1. Recognize that the energy most living things get from food originated with the sun. 2. Conclude that all living things get energy from food. 3. Identify characteristics of living things that help them get food.		Workbook
	Lesson 2: What are food chains?	1. Recognize that animals depend on plants and other animals for energy. 2. Identify a food chain as a model that shows the movement of food and energy through a community.		Workbook

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	Lesson 3: What are food webs?	<ol style="list-style-type: none"> 1. Observe that some organisms in an ecosystem compete with each other for food. 2. Recognize that more than one food chain exists in a community. 3. Conclude that the individual organisms in a food web can be eaten by many other organisms. 		Workbook
	Chapter Review	<ol style="list-style-type: none"> 1. Connect chapter concepts with the history of science 2. Connect chapter concepts with the contributions of scientists. 4. Extend chapter concepts with hands-on investigations. 5. Review chapter concepts 		Chapter Test
<p>2. Rocks, Minerals, and Fossils</p> <p>10 days</p>	Lesson 1: What are minerals and rocks?	<ol style="list-style-type: none"> 1. Describe what minerals and rocks are. 2. Give examples of the uses of minerals and rocks. 3. Identify the solid and liquid portions of Earth’s structure. 		Workbook
	Lesson 2: How do rocks form?	<ol style="list-style-type: none"> 1. Identify the three types of rocks and how they form. 2. Describe the way people use rocks. 		

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		3. Describe the sequence of events in the rock cycle that can change one type of rock into another.		
	Lesson 3: What are fossils?	1. Describe how fossils form. 2. Give examples of the different types of fossils. 3. Describe how fossils show that life has changed.		Workbook
	Chapter Review	1. Connect chapter concepts with the history of science 2. Connect chapter concepts with the contributions of scientists. 4. Extend chapter concepts with hands-on investigations. 5. Review chapter concepts		Chapter Test