

# ELEMENTARY SCIENCE GRADE 2 CURRICULUM

## Course 50220

Second grade students will learn the basic principles and practices of science in an integrated program. They study topics from Biology, Physical science, Earth science, and Ecology. Student will conduct investigations posing hypotheses, making observations, using scientific tools to collect data, analyze data, represent findings in models and draw conclusions. Major topics to be studied are: plant and animal adaptations to their habitats, natural resources, weather and seasons, fossils and dinosaurs, the properties of matter, forms of energy, forces and motion, the Solar System, and technology in our world.

### SECOND GRADE SCIENCE OUTLINE:

Goals	Skills	Summative Assessments	Time Frame	Main Resources
<ul style="list-style-type: none"> <li>• Learn that living things have unique characteristics which differ from nonliving things.</li> <li>• Identify similarities and differences in the life cycles of plants and animals.</li> <li>• Explain how parts of a plant work together to make the plant function.</li> <li>• Explain that living things can only survive if their needs are being met.</li> <li>• Recognize that everything is made of matter.</li> <li>• Explore and describe how different forms of energy cause changes.</li> <li>• Recognize that light from the sun is an important source of energy for living and nonliving systems.</li> <li>• Know that water exists in solid (ice) and liquid (water) form.</li> <li>• Describe how a plant or an animal is dependent on living and nonliving things in a habitat.</li> <li>• Describe how adaptations are important for survival.</li> <li>• Identify products and by-products derived from renewable resources.</li> <li>• Identify how people can reduce pollution.</li> </ul>	<ul style="list-style-type: none"> <li>• Participate in investigations about living and/or nonliving things to answer a question or to test a prediction.</li> <li>• Participate in simple investigations of physical characteristics of living things from the same species to answer a question or test a prediction.</li> <li>• Participate in simple investigations of changes in animals to answer a question or test a prediction.</li> <li>• Experiment and explain what happens when two or more substances are combined.</li> <li>• Participate in simple investigations of energy and motion to answer a question or to test a prediction.</li> <li>• Participate in simple investigations of earth structures, processes, and cycles to answer a question or to test a prediction.</li> <li>• Observe, describe, and predict seasonal patterns of sunrise and sunset.</li> <li>• Identify various technologies used in our lives.</li> </ul>	Chapter Assessments	1-year	Scott Foresman Science

**SECOND GRADE SCIENCE MAP:**

TIME FRAME	BIG IDEAS	CONCEPTS	ESSENTIAL QUESTIONS	STANDARDS	OBJECTIVES	DIFFERENTIATION	ASSESSMENT
Chpt. 1 (Weeks 1-2)	Chapter 1: All About Plants <ul style="list-style-type: none"> <li>Lesson 1: Parts of a Plant</li> <li>Lesson 2: Seed Germination</li> <li>Lesson 3: Grouping of Plants</li> <li>Lesson 4: Adaptation of Woodland Plants</li> <li>Lesson 5: Adaptation of Prairie Plants</li> <li>Lesson 6: Adaptation of Desert Plants</li> <li>Lesson 7: Adaptation of Marsh Plants</li> </ul>	Lesson 1 <ol style="list-style-type: none"> <li>Nutrients</li> <li>Plant needs</li> <li>Parts of a Plant</li> <li>Importance of Flowers</li> </ol> Lesson 2 <ol style="list-style-type: none"> <li>Difference of Fruits</li> <li>Traveling of the fruit of a maple tree</li> </ol> Lesson 3 <ol style="list-style-type: none"> <li>Plant part that protects seeds</li> <li>Seeds of pine trees</li> <li>Location of Ferns</li> </ol> Lesson 4 <ol style="list-style-type: none"> <li>Pine tree leaves</li> <li>Similarity of pine and maple trees</li> <li>Conditions of streams and rivers</li> <li>Leaves of a fanwort</li> </ol> Lesson 5 <ol style="list-style-type: none"> <li>Prairie environment</li> <li>Looks of a goldenrod</li> </ol> Lesson 6 <ol style="list-style-type: none"> <li>Protecting the leaves of an octopus tree</li> <li>The effects of shade on a desert plant</li> </ol>	Chapter 1: What do living things need? <ul style="list-style-type: none"> <li>Lesson 1: What are parts of a plant?</li> <li>Lesson 2: How are seeds scattered?</li> <li>Lesson 3: How are plants grouped?</li> <li>Lesson 4: How are some woodland plants adapted?</li> <li>Lesson 5: How are some prairie plants adapted?</li> <li>Lesson 6: How are some desert plants adapted?</li> <li>Lesson 7: How are some marsh plants adapted?</li> </ul>	3.1.2.A3 Identify similarities and differences in the life cycles of plants and animals.  3.1.2.A5 Explain how different parts of a plant work together to make the organism function.  3.1.2.A9 • Distinguish between scientific fact and opinion. • Ask questions about objects, organisms, and events. • Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. • Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. • Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. • Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge. • Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.  3.1.2.C2 Explain that living things can only	Lesson 1: <ul style="list-style-type: none"> <li>The student knows the basic needs of all living things.</li> <li>The student knows the main parts of a plant.</li> </ul> Lesson 2: <ul style="list-style-type: none"> <li>The student understands that structures of living things are adapted to their function in specific environments.</li> </ul> Lesson 3: <ul style="list-style-type: none"> <li>The student knows that the structural characteristics of plant and animals are used to group them.</li> </ul> Lesson 4: <ul style="list-style-type: none"> <li>The student understands that structures of living things are adapted to their function in specific environments.</li> <li>The student understands that living organisms need to be adapted to their environment to survive.</li> </ul> Lesson 5: <ul style="list-style-type: none"> <li>The student understands that the amount of food, water,</li> </ul>	Lesson 1: <ul style="list-style-type: none"> <li>Science Content Transparency 1 Workbook, p. 1</li> <li>Graphic Organizer Transparency 1 Vocabulary Cards Activity book, pp. 31-32 Workbook, p. 4</li> <li>Quick Study, pp. 2-3 Every Student Learns, p. 2</li> </ul> Lesson 2 <ul style="list-style-type: none"> <li>Workbook, p. 5</li> <li>Quick Study, pp. 4-5 Every Student Learns, p.3</li> </ul> Lesson 3 <ul style="list-style-type: none"> <li>Workbook, p. 6</li> <li>Quick Study, pp. 6-7 Every Student Learns, p. 4</li> </ul> Lesson 4 <ul style="list-style-type: none"> <li>Workbook, p. 7</li> <li>Quick Study, pp. 8-9 Every Student Learns, p. 5</li> </ul> Lesson 5 <ul style="list-style-type: none"> <li>Workbook, p. 8</li> </ul>	Lesson 1: <ul style="list-style-type: none"> <li>Scaffold Questions, TE, pp. 7, 9</li> <li>Checkpoint Questions, SE, pp. 9</li> <li>Chapter Review, SE, pp. 30-31</li> <li>Vocabulary Boxes Science Journal Entry Plant Flip Book</li> </ul> Lesson 2: <ul style="list-style-type: none"> <li>Scaffold Questions, TE, p. 11</li> <li>Checkpoint Questions, SE, p. 10</li> <li>Predict, SE, p. 10</li> <li>Vocabulary Boxes Science Journal Entry</li> </ul> Lesson 3: <ul style="list-style-type: none"> <li>Scaffold Questions, TE, pp. 13, 15</li> <li>Checkpoint Questions, SE, pp. 13, 14</li> <li>Vocabulary Boxes Science Journal Entry</li> </ul> Lesson 4: <ul style="list-style-type: none"> <li>Scaffold Questions, TE, pp. 17, 19</li> <li>Checkpoint Questions, SE, pp.</li> </ul>

		<p>Lesson 7</p> <p>a. Marsh environment</p> <p>b. Plants that trap animals</p>		<p>survive if their needs are being met.</p> <p>S.K-2.A.1.1.1 Identify a scientific fact as something that can be observed using the five senses.</p> <p>S.K-2.A.1.1.2 Identify examples of technology.</p> <p>S.K-2.A.1.1.3 Describe how technology can help people (e.g., home appliances, phones, computers, transportation).</p> <p>S.K-2.A.2.1.1 Understand that making a change to an investigation may change the outcome(s) of the investigation.</p> <p>S.K-2.A.2.1.2 Describe outcomes of an investigation.</p> <p>S.K-2.A.2.2.1 Identify simple tools that can be used in an investigation (e.g., measuring cup, hand lens, ruler, balance scale, thermometer).</p> <p>S.K-2.A.3.1.1 Describe a system as being made of multiple parts that work together.</p> <p>S.K-2.B.1.1.1 Describe basic external structures of animals and plants.</p> <p>S.K-2.B.1.1.2 Identify a plant or animal based on a given life cycle stage (e.g., butterfly, frog, seed-producing plant).</p>	<p>space, and shelter needed is dependent on the size and kind of living things.</p> <p>Lesson 6:</p> <ul style="list-style-type: none"> <li>The student knows that animals and plants can be associated with their environment by an examination of their physical characteristics.</li> </ul> <p>Lesson 7:</p> <ul style="list-style-type: none"> <li>The student understands that structures of living things are adapted to their function in specific environments.</li> <li>The student knows that plants and animals are adapted to different ranges of temperature and moisture.</li> </ul>	<p>Quick Study, pp. 10-11 Every Student Learns, p. 6</p> <p>Lesson 6 Workbook, p. 9 Quick Study, pp. 12-13 Every Student Learns, p. 7</p> <p>Lesson 7 Workbook, p. 10 Quick Study, pp. 14-15 Every Student Learns, p. 8</p> <p>Assessment Book, pp. 1-4</p>	<p>17, 18 Chapter Review, SE, pp. 30-31 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 5: Scaffold Questions, TE, p. 7, 9 Checkpoint Questions, SE, p. 9 Chapter Review, SE, pp. 30-31 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 6: Scaffold Questions, TE, p. 23 Checkpoint Questions, SE, p. 22 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 7: Scaffold Questions, TE, p. 25 Checkpoint Questions, SE, p. 24 Predict, SE, p. 24 Vocabulary Boxes Science Journal Entry Chapter Review, SE, pp. 30-31</p> <p>Chapter 1</p>
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							Assessment
<p>Chpt. 2 (Weeks 3-4)</p>	<p>Chapter 2: All About Animals</p> <ul style="list-style-type: none"> <li>• Lesson 1: Animals with Backbones</li> <li>• Lesson 2: Adaptation of Mammals</li> <li>• Lesson 3: Adaptation of Birds</li> <li>• Lesson 4: Adaptation of Fish</li> <li>• Lesson 5: Adaptation of Reptiles</li> <li>• Lesson 6: Adaptation of Amphibians</li> <li>• Lesson 7: Animals without Backbones.</li> </ul>	<p>Lesson 1</p> <ol style="list-style-type: none"> <li>a. Main Group of Animals</li> <li>b. Similarity of deer and skunks</li> <li>c. Similarities of birds, fish, reptiles, amphibians, and mammals</li> <li>d. Location of animals with backbones</li> </ol> <p>Lesson 2</p> <ol style="list-style-type: none"> <li>a. Naming of mammals</li> <li>b. Helpfulness of camouflage</li> <li>c. Chipmunk planning for winter</li> </ol> <p>Lesson 3</p> <ol style="list-style-type: none"> <li>a. What a hummingbird eats</li> <li>b. Penguin wings</li> </ol> <p>Lesson 4</p> <ol style="list-style-type: none"> <li>a. Porcupine fish protecting itself</li> <li>b. Spikes as an adaptation</li> <li>c. Catfish and their use of feelers</li> </ol> <p>Lesson 5</p> <ol style="list-style-type: none"> <li>a. Naming reptiles</li> <li>b. Use of chameleon's tongue to catch food</li> <li>c. Color of desert animals</li> </ol> <p>Lesson 6</p> <ol style="list-style-type: none"> <li>a. Adaptation of a frog to live in a moist environment</li> <li>b. What toads do when it is</li> </ol>	<p>Chapter 2: How are animals different from each other?</p> <ul style="list-style-type: none"> <li>• Lesson 1: What are some animals with backbones?</li> <li>• Lesson 2: What are some ways mammals are adapted?</li> <li>• Lesson 3: What are some ways birds are adapted?</li> <li>• Lesson 4: What are some ways fish are adapted?</li> <li>• Lesson 5: What are some ways reptiles are adapted?</li> <li>• Lesson 6: What are some ways amphibians are adapted?</li> <li>• Lesson 7: What are some animals without backbones?</li> </ul>	<p>3.1.2.A3 Identify similarities and differences in the life cycles of plants and animals.</p> <p>3.1.2.B6 • Distinguish between scientific fact and opinion. • Ask questions about objects, organisms, and events. • Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. • Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. • Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. • Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge. • Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p> <p>3.1.2.C2 Explain that living things can only survive if their needs are being met.</p> <p>4.1.2.A Describe how a plant or an animal is dependent on living and nonliving things in an aquatic habitat.</p>	<p>Lesson 1:</p> <ul style="list-style-type: none"> <li>• The student knows selected resources used by people for water, food, and shelter are limited and necessary for their survival.</li> </ul> <p>Lesson 2:</p> <ul style="list-style-type: none"> <li>• The student extends and refines knowledge that the surface of Earth is composed of different types of solid materials that come on all sizes.</li> </ul> <p>Lesson 3:</p> <ul style="list-style-type: none"> <li>• The student knows selected resources used by people for water, food, and shelter are limited and necessary for their survival.</li> </ul> <p>Lesson 4:</p> <ul style="list-style-type: none"> <li>• The student understands the process of weathering and erosion.</li> </ul> <p>Lesson 5:</p> <ul style="list-style-type: none"> <li>• The student knows that human beings cause changes in their environment, and these changes can be positive or negative.</li> <li>• The student knows ways that human activity affects the</li> </ul>	<p>Lesson 1 Science Content Transparency 2 Workbook, p. 15 Graphic Organizer Transparency 2 Vocabulary Cards Activity Book, pp. 39-40 Web Game Work Book, p. 18 Quick Study, pp. 16-17 Every Student Learns, p. 11</p> <p>Lesson 2 Workbook, p. 19 Quick Study, pp. 18-19 Every Student Learns, p. 12</p> <p>Lesson 3 Workbook, p. 20 Quick Study, pp. 20-21 Every Student Learns, p. 13</p> <p>Lesson 4 Workbook, p. 21 Quick Study, pp. 22-23 Every Student Learns, p. 14</p> <p>Lesson 5 Workbook, p. 22 Quick Study, pp. 24-25 Every Student</p>	<p>Lesson 1: Scaffold Questions, TE, pp. 39, 41 Checkpoint Questions, SE, p. 41 Chapter Review, SE, pp. 60-61 Alike and Different, SE, p. 41 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 2: Scaffold Questions, TE, p. 43 Checkpoint Questions, SE, p. 43 Chapter Review, SE, pp. 60-61 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 3: Scaffold Questions, TE, p. 45 Checkpoint Questions, SE, p. 45 Alike and Different, SE, p. 45 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 4: Scaffold Questions, TE, p. 47 Checkpoint Questions, SE, p. 47</p>

		<p>hot</p> <p>Lesson 7</p> <p>a. Use of insects antennae</p> <p>b. Environment of a walking-stick</p> <p>c. Octopus and the use of its suction cups</p> <p>d. Spiders trapping flies and other insects</p>	<p>4.1.2.D Identify differences in living things (color, shape, size, etc.) and describe how adaptations are important for survival.</p> <p>4.1.2.E Identify how living things survive changes in their environment.</p> <p>S.K-2.A.1.1.1 Identify a scientific fact as something that can be observed using the five senses.</p> <p>S.K-2.A.1.1.2 Identify examples of technology.</p> <p>S.K-2.A.1.1.3 Describe how technology can help people (e.g., home appliances, phones, computers, transportation).</p> <p>S.K-2.A.2.1.1 Understand that making a change to an investigation may change the outcome(s) of the investigation.</p> <p>S.K-2.A.2.1.2 Describe outcomes of an investigation.</p> <p>S.K-2.A.2.2.1 Identify simple tools that can be used in an investigation (e.g., measuring cup, hand lens, ruler, balance scale, thermometer).</p> <p>S.K-2.A.3.1.1 Describe a system as being made of multiple parts that work together.</p> <p>S.K-2.B.1.1.1 Describe basic external structures of animals and plants.</p> <p>S.K-2.B.1.1.2 Identify a plant or animal based on a given life cycle stage (e.g.,</p>	<p>environment</p>	<p>Learns, p. 15</p> <p>Lesson 6 Workbook, p. 23 Quick Study, pp. 26-27 Every Student Learns, p. 16</p> <p>Lesson 7 Workbook, p. 24 Quick Study, pp. 28-29 Every Student Learns, p. 17 Assessment Book, pp. 5-8</p>	<p>Chapter Review, SE, pp. 60-61 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 5: Scaffold Questions, TE, p. 49 Checkpoint Questions, SE, p. 49 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 6: Scaffold Questions, TE, p. 51 Checkpoint Questions, SE, p. 51 Chapter Review, SE, pp. 60-61 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 7: Scaffold Questions, TE, pp. 53, 55 Checkpoint Questions, SE, pp. 53, 55 Chapter Review, SE, pp. 60-61 Vocabulary Boxes Science Journal Entry</p> <p>Chapter 2 Assessment</p>
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				<p>butterfly, frog, seed-producing plant).</p> <p>S.K-2.B.3.2.1 Identify natural events (e.g., fire, flood, extreme weather) and human actions (e.g., road construction, pollution, urban development, dam building) that can impact an ecosystem.</p>			
<p>Chpt. 3 (Weeks 5-6)</p>	<p>Chapter 3: Earth's Land, Air, and Water</p> <ul style="list-style-type: none"> <li>Lesson 1: Natural Resources</li> <li>Lesson 2: Comparing Rocks and Soil</li> <li>Lesson 3: Use of Plants</li> <li>Lesson 4: The Changing of Earth</li> <li>Lesson 5: Protecting the Earth</li> </ul>	<p>Lesson 1</p> <ol style="list-style-type: none"> <li>Natural Resources</li> <li>Name natural resources</li> <li>Uses of Water</li> <li>Importance of Air</li> </ol> <p>Lesson 2</p> <ol style="list-style-type: none"> <li>Rock</li> <li>Comparing and Contrasting rocks and sand</li> <li>Importance of rocks</li> <li>Make up of soil</li> <li>Differences of sandy soil and humus</li> </ol> <p>Lesson 3</p> <ol style="list-style-type: none"> <li>Importance of plants</li> <li>Cotton plant</li> </ol> <p>Lesson 4</p> <ol style="list-style-type: none"> <li>Weathering</li> <li>Plants preventing erosion</li> </ol> <p>Lesson 5</p> <ol style="list-style-type: none"> <li>Pollution</li> <li>Reducing pollution</li> <li>Recycle</li> <li>Things to be recycled</li> <li>Effects of cutting down trees</li> </ol>	<p>Chapter 3: What are Earth's natural resources?</p> <ul style="list-style-type: none"> <li>Lesson 1: What are natural resources?</li> <li>Lesson 2: What are rocks and soil like?</li> <li>Lesson 3: How do people use plants?</li> <li>Lesson 4: How does Earth change?</li> <li>Lesson 5: How can people help protect Earth?</li> </ul>	<p>3.3.A Earth Structure, Processes and Cycles</p> <p>4.3.2.B Identify products and by-products derived from renewable resources.</p> <p>4.4.2.A Identify agriculture as a living system and that food and fiber originate from plants and animals.</p> <p>4.4.2.B Explain how agriculture supports jobs in Pennsylvania.</p> <p>4.5.2.A Identify the natural resources used to make various products.</p> <p>4.5.2.C Identify how people can reduce pollution.</p> <p>4.5.2.D Describe how people can help the environment by reducing, reusing, recycling and composting.</p> <p>S.K-2.B.3.2.1 Identify natural events (e.g., fire, flood, extreme weather) and human actions (e.g., road construction, pollution, urban development, dam building) that can impact an ecosystem.</p> <p>S.K-2.B.3.3.1 Identify methods of recycling and reusing resources.</p>	<p>Lesson 1:</p> <ul style="list-style-type: none"> <li>The student knows selected resources used by people for water, food, and shelter are limited and necessary for their survival.</li> </ul> <p>Lesson 2:</p> <ul style="list-style-type: none"> <li>The student extends and refines knowledge that the surface of Earth is composed of different types of solid materials that come on all sizes.</li> </ul> <p>Lesson 3:</p> <ul style="list-style-type: none"> <li>The student knows selected resources used by people for water, food, and shelter are limited and necessary for their survival.</li> </ul> <p>Lesson 4:</p> <ul style="list-style-type: none"> <li>The student understands the process of weathering and erosion.</li> </ul> <p>Lesson 5:</p> <ul style="list-style-type: none"> <li>The student knows that human beings cause changes in</li> </ul>	<p>Lesson 1 Science Content Transparency 5 Workbook, p. 55 Graphic Organizer Transparency 1 Vocabulary Cards Activity Book, pp. 65-66 Web Game Work Book, p. 58 Quick Study, pp. 54-55 Every Student Learns, p. 32</p> <p>Lesson 2 Workbook, p. 59 Quick Study, pp. 56-57 Every Student Learns, p. 33</p> <p>Lesson 3 Workbook, p. 60 Quick Study, pp. 58-59 Every Student Learns, p. 34</p> <p>Lesson 4 Workbook, p. 61 Quick Study, pp. 60-61</p>	<p>Lesson 1: Scaffold Questions, TE, pp. 143,145 Checkpoint Questions, SE, p. 144 Chapter Review, SE, pp. 164-165 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 2: Scaffold Questions, TE, pp. 147,149 Checkpoint Questions, SE, pp. 147, 149 Chapter Review, SE, pp. 164-165 Picture Clues SE, p. 149 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 3: Scaffold Questions, TE, p. 151 Checkpoint Questions, SE, p. 151 Chapter Review, SE, pp. 164-165 Picture Clues SE, p. 151 Vocabulary</p>

					<p>their environment, and these changes can be positive or negative.</p> <ul style="list-style-type: none"> <li>The student knows ways that human activity affects the environment</li> </ul>	<p>Every Student Learns, p. 35</p> <p>Lesson 5 Workbook, p. 62</p> <p>Quick Study, pp. 62-63</p> <p>Every Student Learns, p. 36</p> <p>Assessment Book, pp. 31-34</p>	<p>Boxes</p> <p>Science Journal Entry</p> <p>Lesson 4: Scaffold Questions, TE, p. 153</p> <p>Checkpoint Questions, SE, p. 153</p> <p>Chapter Review, SE, pp. 164-165</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 5: Scaffold Questions, TE, pp. 155, 157</p> <p>Checkpoint Questions, SE, pp. 155, 157</p> <p>Chapter Review, SE, pp. 164-165</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Chapter 3 Assessment</p>
Chpt. 4 (Weeks 7-8)	<p>Chapter 4: Earth's Weather and Seasons</p> <ul style="list-style-type: none"> <li>Lesson 1: Types of Weather</li> <li>Lesson 2: Water Cycle</li> <li>Lesson 3: Spring</li> <li>Lesson 4: Summer</li> <li>Lesson 5: Fall</li> <li>Lesson 6: Winter</li> <li>Lesson 7: Types of Bad Weather</li> </ul>	<p>Lesson 1</p> <ol style="list-style-type: none"> <li>Weather</li> <li>Comparing weather</li> <li>Effects of the weather</li> <li>Different types of weather</li> </ol> <p>Lesson 2</p> <ol style="list-style-type: none"> <li>Water Cycle</li> <li>Water Cycle and the effect on the amount of water</li> <li>Lesson 3</li> <li>Plants growing in Spring</li> </ol> <p>Lesson 4</p>	<p>Chapter 4: How does weather change?</p> <ul style="list-style-type: none"> <li>Lesson 1: What are some kinds of weather?</li> <li>Lesson 2: What is the water cycle?</li> <li>Lesson 3: What is spring?</li> <li>Lesson 4: What is summer?</li> <li>Lesson 5: What is fall?</li> </ul>	<p>3.1.2.C4</p> <ul style="list-style-type: none"> <li>Distinguish between scientific fact and opinion.</li> <li>Ask questions about objects, organisms, and events.</li> <li>Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.</li> <li>Plan and conduct a simple investigation and understand that different kinds of questions require different kinds of investigations.</li> <li>Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on</li> </ul>	<p>Lesson 1:</p> <ul style="list-style-type: none"> <li>The student knows that weather conditions occur in patterns over time.</li> </ul> <p>Lesson 2:</p> <ul style="list-style-type: none"> <li>The student knows that most natural events occur in patterns.</li> </ul> <p>Lesson 3:</p> <ul style="list-style-type: none"> <li>The student knows that weather conditions occur</li> </ul>	<p>Lesson 1</p> <p>Science Content Transparency 6 Workbook, p. 67</p> <p>Graphic Organizer Transparency 7 Vocabulary Cards Activity Book, pp. 73-74</p> <p>Web Game Work Book, p. 70</p> <p>Quick Study, pp. 64-65</p>	<p>Lesson 1: Scaffold Questions, TE, pp. 177, 175</p> <p>Checkpoint Questions, SE, p. 177</p> <p>Chapter Review, SE, pp. 198-199</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 2: Scaffold Questions, TE, p. 179</p>

		<p>a. Summer weather</p> <p>b. Activities in summer</p> <p>Lesson 5</p> <p>a. Comparing fall weather to summer weather</p> <p>b. Bird migration</p> <p>Lesson 6</p> <p>a. Weather in winter</p> <p>b. Comparing winter weather to summer weather</p> <p>Lesson 7</p> <p>a. Thunderstorm</p> <p>b. Effects of a thunderstorm</p>	<ul style="list-style-type: none"> <li>• Lesson 6: What is winter?</li> <li>• Lesson 7: What are some kinds of bad weather?</li> </ul>	<p>their senses to gather information.</p> <ul style="list-style-type: none"> <li>• Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.</li> <li>• Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</li> </ul> <p>3.2.2.B2 Explore and describe how different forms of energy cause changes. (e.g., sunlight, heat, wind)</p> <p>S.K-2.A.1.1.1 Identify a scientific fact as something that can be observed using the five senses.</p> <p>S.K-2.A.1.1.2 Identify examples of technology.</p> <p>S.K-2.A.1.1.3 Describe how technology can help people (e.g., home appliances, phones, computers, transportation).</p> <p>S.K-2.A.2.1.1 Understand that making a change to an investigation may change the outcome(s) of the investigation.</p> <p>S.K-2.A.2.1.2 Describe outcomes of an investigation.</p> <p>S.K-2.A.2.2.1 Identify simple tools that can be used in an investigation (e.g., measuring cup, hand lens, ruler, balance scale, thermometer).</p>	<p>in patterns over time.</p> <p>Lesson 4:</p> <ul style="list-style-type: none"> <li>• The student knows that weather conditions occur in patterns over time.</li> </ul> <p>Lesson 5:</p> <ul style="list-style-type: none"> <li>• The student knows that weather conditions occur in patterns over time.</li> </ul> <p>Lesson 6:</p> <ul style="list-style-type: none"> <li>• The student knows that weather conditions occur in patterns over time.</li> </ul> <p>Lesson 7:</p> <ul style="list-style-type: none"> <li>• The student recognizes patterns in weather.</li> </ul>	<p>Every Student Learns, p. 38</p> <p>Lesson 2 Workbook, p. 71 Quick Study, pp. 66-67 Every Student Learns, p. 39</p> <p>Lesson 3 Workbook, p. 72 Quick Study, pp. 68-69 Every Student Learns, p. 40</p> <p>Lesson 4 Workbook, p. 73 Quick Study, pp. 70-71 Every Student Learns, p. 41</p> <p>Lesson 5 Workbook, p. 74 Quick Study, pp. 72-73 Every Student Learns, p. 42</p> <p>Lesson 6 Workbook, p. 75 Quick Study, pp. 74-75 Every Student Learns, p. 43</p> <p>Lesson 7 Workbook, p. 76 Quick Study, pp. 76-77 Every Student Learns, p. 44 Assessment Book, pp. 35-3</p>	<p>Checkpoint Questions, SE, p. 179</p> <p>Chapter Review, SE, pp. 198-199</p> <p>Draw Conclusions, SE, p. 179</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 3: Scaffold Questions, TE, p. 181</p> <p>Checkpoint Questions, SE, p. 180</p> <p>Chapter Review, SE, pp. 198-199</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 4: Scaffold Questions, TE, p. 183</p> <p>Checkpoint Questions, SE, p. 182</p> <p>Chapter Review, SE, pp. 198-199</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 5: Scaffold Questions, TE, p. 185</p> <p>Checkpoint Questions, SE, p. 184</p> <p>Draw Conclusions, SE, p. 184</p> <p>Chapter Review,</p>
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				S.K-2.A.3.1.1 Describe a system as being made of multiple parts that work together.			SE, pp. 198-199 Vocabulary Boxes Science Journal Entry  Lesson 6: Scaffold Questions, TE, p. 187 Checkpoint Questions, SE, p. 186 Chapter Review, SE, pp. 198-199 Vocabulary Boxes Science Journal Entry  Lesson 7: Scaffold Questions, TE, pp. 189, 191, 193 Checkpoint Questions, SE, p. 188, 190, 192 Draw Conclusions, SE, p. 192 Chapter Review, SE, pp. 198-199 Vocabulary Boxes Science Journal Entry  Water Filter Rubric  Chapter 4 Assessment
Chpt. 5 (Week 9-10)	Chapter 5: Fossils and Dinosaurs • Lesson 1: Learning about the Past • Lesson 2: Learning about Fossils	Lesson 1 a. Fossils b. Types of fossils c. Fossil make up Lesson 2 a. Extinct plants and animals b. Comparing Archaeopteryx	Chapter 5: How can people learn about the Earth long ago? • Lesson 1: How can we learn about the past? • Lesson 2:	3.1.2.C2 Explain that living things can only survive if their needs are being met.  3.1.2.C3 CONSTANCY AND CHANGE Describe some plants and animals that once lived on Earth, (e.g.,	Lesson 1: • The student describes how fossils are formed. Lesson 2: • The student explains how	Lesson 1 Science Content Transparency 7 Workbook, p. 81 Graphic Organizer Transparency 3	Explain Your Results, SE, p. 204  Activity Rubric  Lesson 1: Scaffold Questions, TE, pp. 207, 209

<ul style="list-style-type: none"> <li>Lesson 3: Dinosaurs</li> <li>Lesson 4: New Discoveries</li> </ul>	<p>to a bird today</p> <p>c. Importance of fossils</p> <p>Lesson 3</p> <p>a. Dinosaurs</p> <p>b. Animals today</p> <p>c. Description of a Stegosaurus</p> <p>Lesson 4</p> <p>a. Oviraptor eggs</p>	<p>What can we learn from fossils?</p> <ul style="list-style-type: none"> <li>Lesson 3: What were dinosaurs like?</li> <li>Lesson 4: What are some new discoveries?</li> </ul>	<p>dinosaurs) but cannot be found anymore. Compare them to now living things that resemble them in some way (e.g. lizards and birds).</p> <p>3.2.2.B6 ENERGY Recognize that light from the sun is an important source of energy for living and nonliving systems and some source of energy is needed for all organisms to stay alive and grow.</p> <p>3.2.2.B7</p> <ul style="list-style-type: none"> <li>Distinguish between scientific fact and opinion.</li> <li>Ask questions about objects, organisms, and events.</li> <li>Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.</li> <li>Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.</li> <li>Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information.</li> <li>Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.</li> <li>Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</li> </ul> <p>4.1.2.D Identify differences in living things (color, shape, size, etc.) and describe how adaptations are</p>	<p>fossils give information about plants and animals that lived on Earth long ago.</p> <p>Lesson 3:</p> <ul style="list-style-type: none"> <li>The student describes different dinosaurs that lived on Earth long ago.</li> </ul> <p>Lesson 4:</p> <ul style="list-style-type: none"> <li>The student explains are new discoveries are made by paleontologists</li> </ul>	<p>Vocabulary Cards Activity Book, pp. 75-76 Work Book, p. 84 Quick Study, pp. 78-79 Every Student Learns, p. 46</p> <p>Lesson 2 Workbook, p. 85 Quick Study, pp. 80-81 Every Student Learns, p. 47</p> <p>Lesson 3 Workbook, p. 86 Quick Study, pp. 82-83 Every Student Learns, p. 48</p> <p>Lesson 4 Workbook, p. 87 Quick Study, pp. 84-85 Every Student Learns, p. 49 Assessment Book, pp. 39-42</p>	<p>Checkpoint Questions, SE, p. 209 Chapter Review, SE, pp. 222-223 Retell, SE, p. 209 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 2: Scaffold Questions, TE, p. 211 Checkpoint Questions, SE, p. 211 Chapter Review, SE, pp. 222-223 Retell, SE, p. 211 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 3: Scaffold Questions, TE, pp. 213, 215 Checkpoint Questions, SE, pp. 213, 215 Chapter Review, SE, pp. 222-223 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 4: Scaffold Questions, TE, p. 217 Checkpoint Questions, SE, p. 217 Chapter Review, SE, pp. 222-223 Vocabulary</p>
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				<p>important for survival.</p> <p>4.1.2.E Identify how living things survive changes in their environment.</p> <p>S.K-2.A.1.1.1 Identify a scientific fact as something that can be observed using the five senses.</p> <p>S.K-2.A.1.1.2 Identify examples of technology.</p> <p>S.K-2.A.1.1.3 Describe how technology can help people (e.g., home appliances, phones, computers, transportation).</p> <p>S.K-2.A.2.1.1 Understand that making a change to an investigation may change the outcome(s) of the investigation.</p> <p>S.K-2.A.2.1.2 Describe outcomes of an investigation.</p> <p>S.K-2.A.2.2.1 Identify simple tools that can be used in an investigation (e.g., measuring cup, hand lens, ruler, balance scale, thermometer).</p> <p>S.K-2.A.3.1.1 Describe a system as being made of multiple parts that work together.</p> <p>S.K-2.B.3.2.1 Identify natural events (e.g., fire, flood, extreme weather) and human actions (e.g., road construction, pollution, urban development, dam building) that can impact an ecosystem.</p>			<p>Boxes Science Journal Entry</p> <p>Chapter 5 Assessment</p>
Chpt. 6 (Week 11-12)	Chapter 6: Properties of Matter • Lesson 1: Matter	Lesson 1 a. Matter b. Similarities of paper, water,	Chapter 6: What are some properties of matter?	3.2.2.A3 Demonstrate how heating and cooling may cause changes in the properties of materials.	Lesson 1: • The student knows that	Lesson 1 Science Content Transparency	Lesson 1: Scaffold Questions, TE, pp. 239, 241

<ul style="list-style-type: none"> <li>• Lesson 2: States of Matter</li> <li>• Lesson 3: Changing of Matter</li> <li>• Lesson 4: Effects of Cooling and Heating Matter</li> </ul>	<p>air</p> <p>c. Property Lesson 2</p> <p>a. Solid Matter</p> <p>b. States of Matter</p> <p>c. Liquid Lesson 3</p> <p>d. Gas Lesson 3</p> <p>a. Changes of matter Lesson 4</p> <p>b. Mixtures Lesson 4</p> <p>a. Water Vapor</p> <p>b. Effect of heat on a solid</p>	<ul style="list-style-type: none"> <li>• Lesson 1: What is matter?</li> <li>• Lesson 2: What are the states of matter?</li> <li>• Lesson 3: How can matter be changed?</li> <li>• Lesson 4: How can cooling and heating change matter?</li> </ul>	<p>3.2.2.A4 Experiment and explain what happens when two or more substances are combined (e.g. mixing, dissolving, and separated (e.g. filtering, evaporation)).</p> <p>3.2.2.A5 CONSTANCY AND CHANGE Recognize that everything is made of matter.</p> <p>3.2.2.A6 • Distinguish between scientific fact and opinion. • Ask questions about objects, organisms, and events. • Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. • Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. • Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. • Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge. • Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p> <p>3.2.2.B2 Explore and describe how different forms of energy cause changes. (e.g., sunlight, heat,</p>	<p>common objects are composed of parts that are too small to be seen without magnification.</p> <ul style="list-style-type: none"> <li>• The student knows ways objects can be grouped according to similarities or differences of their physical characteristics.</li> </ul> <p>Lesson 2:</p> <ul style="list-style-type: none"> <li>• The student knows examples of solids, liquids, and gases.</li> <li>• The student knows the observable properties of solids, liquids, and gases.</li> </ul> <p>Lesson 3:</p> <ul style="list-style-type: none"> <li>• The student verifies that things can be done to materials to change some of their physical properties, but now all materials respond the same way.</li> </ul> <p>Lesson 4:</p> <ul style="list-style-type: none"> <li>• The student knows that now all objects or materials respond to change in the same ways.</li> <li>• The student understands ways energy and matter interact.</li> </ul>	<p>Workbook, p. 91</p> <p>Graphic Organizer Transparency 2</p> <p>Vocabulary Cards</p> <p>Activity Book, pp. 91-92</p> <p>Work Book, p. 94</p> <p>Quick Study, pp. 86-87</p> <p>Every Student Learns, p. 51</p> <p>Lesson 2</p> <p>Workbook, p. 95</p> <p>Quick Study, pp. 88-89</p> <p>Every Student Learns, p. 52</p> <p>Lesson 3</p> <p>Workbook, p. 96</p> <p>Quick Study, pp. 90-91</p> <p>Every Student Learns, p. 53</p> <p>Lesson 4</p> <p>Workbook, p. 97</p> <p>Quick Study, pp. 92-93</p> <p>Every Student Learns, p. 54</p> <p>Assessment Book, pp. 57-60</p>	<p>Checkpoint Questions, SE, p. 241</p> <p>Chapter Review, SE, pp. 260-261</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 2:</p> <p>Scaffold Questions, TE, pp. 243, 245, 274</p> <p>Checkpoint Questions, SE, pp. 243, 245, 247</p> <p>Chapter Review, SE, pp. 260-261</p> <p>Draw</p> <p>Conclusions, SE, p. 247</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 3:</p> <p>Scaffold Questions, TE, pp. 249, 251</p> <p>Checkpoint Questions, SE, pp. 249, 251</p> <p>Chapter Review, SE, pp. 260-261</p> <p>Draw</p> <p>Conclusions, SE, p. 249</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Explain Your Results, SE, p. 236</p> <p>Activity Rubric</p> <p>Draw</p> <p>Conclusions, SE, p. 237</p> <p>Lesson 4:</p> <p>Scaffold</p>
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			<p>wind)</p> <p>4.2.2.D</p> <ul style="list-style-type: none"> <li>• Distinguish between scientific fact and opinion.</li> <li>• Ask questions about objects, organisms and events.</li> <li>• Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.</li> <li>• Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.</li> <li>• Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information.</li> <li>• Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.</li> </ul> <p>Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced and review and ask questions about the work of other scientists.</p> <p>S.K-2.A.1.1.1 Identify a scientific fact as something that can be observed using the five senses.</p> <p>S.K-2.A.1.1.2 Identify examples of technology.</p> <p>S.K-2.A.1.1.3 Describe how technology can help people (e.g., home appliances, phones, computers, transportation).</p> <p>S.K-2.A.2.1.1</p>			<p>Questions, TE, pp. 253, 255</p> <p>Checkpoint Questions, SE, p. 253, 255</p> <p>Chapter Review, SE, pp. 260-261</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Chapter 6 Assessment</p>
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				<p>Understand that making a change to an investigation may change the outcome(s) of the investigation.</p> <p>S.K-2.A.2.1.2 Describe outcomes of an investigation.</p> <p>S.K-2.A.2.2.1 Identify simple tools that can be used in an investigation (e.g., measuring cup, hand lens, ruler, balance scale, thermometer).</p> <p>S.K-2.A.3.1.1 Describe a system as being made of multiple parts that work together.</p> <p>S.K-2.C.1.1.1 Describe basic changes to properties of matter (e.g., formation of mixtures and solutions, baking and cooking, freezing, heating, evaporating, melting).</p>			
Chpt. 7 (Week 13-14)	<p>Chapter 7: Energy</p> <ul style="list-style-type: none"> <li>Lesson 1: Energy</li> <li>Lesson 2: Living Things Using Energy</li> <li>Lesson 3: Sources of Heat</li> <li>Lesson 4: Movement of Light</li> <li>Lesson 5: Types of Energy</li> </ul>	<p>Lesson 1</p> <ol style="list-style-type: none"> <li>Energy</li> <li>Use of energy</li> <li>Solar Energy</li> </ol> <p>Lesson 2</p> <ol style="list-style-type: none"> <li>Energy and plants</li> <li>Energy and humans</li> <li>Energy and animals</li> <li>Energy from food</li> </ol> <p>Lesson 3</p> <ol style="list-style-type: none"> <li>Examples of Fuel</li> <li>Burning fuels</li> <li>Source of heat</li> <li>How heat moves</li> </ol> <p>Lesson 4</p> <ol style="list-style-type: none"> <li>Reflection</li> <li>Shadows</li> </ol> <p>Lesson 5</p> <ol style="list-style-type: none"> <li>Sound energy</li> </ol>	<p>Chapter 7: What are some kinds of energy?</p> <ul style="list-style-type: none"> <li>Lesson 1: What is energy?</li> <li>Lesson 2: How do living things use energy?</li> <li>Lesson 3: What are some sources of heat?</li> <li>Lesson 4: How does light move?</li> <li>Lesson 5: What are other kinds of energy?</li> </ul>	<p>3.2.2.A3 Demonstrate how heating and cooling may cause changes in the properties of materials.</p> <p>3.2.2.A4 Experiment and explain what happens when two or more substances are combined (e.g. mixing, dissolving, and separated (e.g. filtering, evaporation)).</p> <p>3.2.2.A5 CONSTANCY AND CHANGE Recognize that everything is made of matter.</p> <p>3.2.2.A6 • Distinguish between scientific fact and opinion. • Ask questions about objects, organisms, and events. • Understand that all scientific investigations involve asking and answering questions and comparing the answer with</p>	<p>Lesson 1:</p> <ul style="list-style-type: none"> <li>The student knows that common objects are composed of parts that are too small to be seen without magnification.</li> <li>The student knows ways objects can be grouped according to similarities or differences of their physical characteristics.</li> </ul> <p>Lesson 2:</p> <ul style="list-style-type: none"> <li>The student knows examples of solids, liquids, and gases.</li> <li>The student</li> </ul>	<p>Lesson 1 Science Content Transparency Workbook, p. 91 Graphic Organizer Transparency 2 Vocabulary Cards Activity Book, pp. 91-92 Work Book, p. 94 Quick Study, pp. 86-87 Every Student Learns, p. 51</p> <p>Lesson 2 Workbook, p. 95 Quick Study, pp. 88-89</p>	<p>Lesson 1: Scaffold Questions, TE, pp. 271, 273 Checkpoint Questions, SE, p. 272 Chapter Review, SE, pp. 294-295 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 2: Scaffold Questions, TE, pp. 275, 277 Checkpoint Questions, SE, pp. 274, 276 Chapter Review, SE, pp. 294-295 Infer, SE, p. 274 Vocabulary</p>

		<p>b. Energy of Motion  c. Wind Energy  d. Electricity</p>		<p>what is already known. • Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. • Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. • Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge. • Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p> <p>3.2.2.B2  Explore and describe how different forms of energy cause changes. (e.g., sunlight, heat, wind)</p> <p>4.2.2.D  • Distinguish between scientific fact and opinion. • Ask questions about objects, organisms and events. • Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. • Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. • Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information.</p>	<p>knows the observable properties of solids, liquids, and gases.</p> <p>Lesson 3:  • The student verifies that things can be done to materials to change some of their physical properties, but now all materials respond the same way.</p> <p>Lesson 4:  • The student knows that now all objects or materials respond to change in the same ways.  • The student understands ways energy and matter interact.</p>	<p>Every Student Learns, p. 52</p> <p>Lesson 3  Workbook, p. 96  Quick Study, pp. 90-91  Every Student Learns, p. 53</p> <p>Lesson 4  Workbook, p. 97  Quick Study, pp. 92-93  Every Student Learns, p. 54  Assessment Book, pp. 57-60</p>	<p>Boxes  Science Journal Entry</p> <p>Lesson 3:  Scaffold  Questions, TE, pp. 279, 281  Checkpoint  Questions, SE, pp. 279, 281  Chapter Review, SE, pp. 294-295  Vocabulary  Boxes  Science Journal Entry</p> <p>Lesson 4:  Scaffold  Questions, TE, pp. 283, 285  Checkpoint  Questions, SE, pp. 283, 285  Chapter Review, SE, pp. 294-295  Vocabulary  Boxes  Science Journal Entry</p> <p>Lesson 5:  Scaffold  Questions, TE, pp. 287, 289  Checkpoint  Questions, SE, pp. 286, 289  Chapter Review, SE, pp. 294-295  Infer, SE, p. 289  Vocabulary  Boxes  Science Journal Entry</p> <p>Chapter 7  Assessment</p>
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			<ul style="list-style-type: none"> <li>• Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.</li> <li>• Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced and review and ask questions about the work of other scientists.</li> </ul> <p>S.K-2.A.1.1.1 Identify a scientific fact as something that can be observed using the five senses.</p> <p>S.K-2.A.1.1.2 Identify examples of technology.</p> <p>S.K-2.A.1.1.3 Describe how technology can help people (e.g., home appliances, phones, computers, transportation).</p> <p>S.K-2.A.2.1.1 Understand that making a change to an investigation may change the outcome(s) of the investigation.</p> <p>S.K-2.A.2.1.2 Describe outcomes of an investigation.</p> <p>S.K-2.A.2.2.1 Identify simple tools that can be used in an investigation (e.g., measuring cup, hand lens, ruler, balance scale, thermometer).</p> <p>S.K-2.A.3.1.1 Describe a system as being made of multiple parts that work together.</p> <p>S.K-2.C.1.1.1</p>			
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				Describe basic changes to properties of matter (e.g., formation of mixtures and solutions, baking and cooking, freezing, heating, evaporating, melting).			
Chpt. 8 (Weeks 15-16)	Chapter 8: Forces and Motion <ul style="list-style-type: none"> <li>Lesson 1: Movement of Objects</li> <li>Lesson 2: Work</li> <li>Lesson 3: Changing of Movement</li> <li>Lesson 4: Helping of Simple Machines</li> <li>Lesson 5: Magnets</li> </ul>	Lesson 1 <ul style="list-style-type: none"> <li>a. Motion</li> <li>b. Force</li> <li>c. Gravity</li> </ul> Lesson 2 <ul style="list-style-type: none"> <li>a. Amount of work</li> </ul> Lesson 3 <ul style="list-style-type: none"> <li>a. Amount of force</li> <li>b. Friction</li> </ul> Lesson 4 <ul style="list-style-type: none"> <li>a. Simple machines</li> <li>b. Helpfulness of Machines</li> <li>c. Animal body parts</li> </ul> Lesson 5 <ul style="list-style-type: none"> <li>a. Magnets</li> <li>b. Attraction of Magnets</li> <li>c. Repel</li> </ul>	Chapter 8: How do forces cause objects to move? <ul style="list-style-type: none"> <li>Lesson 1: How do objects move?</li> <li>Lesson 2: What is work?</li> <li>Lesson 3: How can you change the way things move?</li> <li>Lesson 4: How can simple machines work?</li> <li>Lesson 5: What are magnets?</li> </ul>	3.2.2.A5 CONSTANCY AND CHANGE Recognize that everything is made of matter.  3.2.2.B2 Explore and describe how different forms of energy cause changes. (e.g., sunlight, heat, wind)  3.3.2.A7 • Distinguish between scientific fact and opinion. • Ask questions about objects, organisms, and events. • Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. • Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. • Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. • Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge. • Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.	Lesson 1: <ul style="list-style-type: none"> <li>The student knows objects exhibit different kinds of motion.</li> <li>The student knows that the amount and direction of the force exerted on an object determines how much the object will move.</li> </ul> Lesson 2: <ul style="list-style-type: none"> <li>The student knows the relationship between force and motion,</li> </ul> Lesson 3: <ul style="list-style-type: none"> <li>The student knows different heat sources.</li> <li>The student knows that the amount and direction of the force exerted on an object determines how much the object will move.</li> </ul> Lesson 4: <ul style="list-style-type: none"> <li>The student knows examples of simple machines and understands how they change effort.</li> <li>The student is able to explain ways that simple machines make</li> </ul>	Lesson 1 Science Content Transparency 10 Workbook, p. 113 Graphic Organizer Transparency 3 Vocabulary Cards Activity Book, pp. 107-108 Work Book, p. 116 Quick Study, pp. 104-105 Every Student Learns, p. 62  Lesson 2 Workbook, p. 117 Quick Study, pp. 106-107 Every Student Learns, p. 63  Lesson 3 Workbook, p. 118 Quick Study, pp. 108-109 Every Student Learns, p. 64  Lesson 4 Workbook, p. 119 Quick Study, pp. 110-111 Every Student Learns, p. 65  Lesson 5 Workbook, p.	Lesson 1: Scaffold Questions, TE, pp. 303, 305, 307 Checkpoint Questions, SE, pp. 305, 307 Chapter Review, SE, pp. 326-327 Put Things In Order, SE, p. 307 Vocabulary Boxes Science Journal Entry  Lesson 2: Scaffold Questions, TE, p. 309 Checkpoint Questions, SE, p. 309 Chapter Review, SE, pp. 326-327 Vocabulary Boxes Science Journal Entry  Lesson 3: Scaffold Questions, TE, pp. 311, 313 Checkpoint Questions, SE, pp. 311, 312 Chapter Review, SE, pp. 326-327 Put Things In Order, SE, p. 312 Vocabulary Boxes Science Journal Entry

				<p>S.K-2.A.1.1.1 Identify a scientific fact as something that can be observed using the five senses.</p> <p>S.K-2.A.1.1.2 Identify examples of technology.</p> <p>S.K-2.A.1.1.3 Describe how technology can help people (e.g., home appliances, phones, computers, transportation).</p> <p>S.K-2.A.2.1.1 Understand that making a change to an investigation may change the outcome(s) of the investigation.</p> <p>S.K-2.A.2.1.2 Describe outcomes of an investigation.</p> <p>S.K-2.A.2.2.1 Identify simple tools that can be used in an investigation (e.g., measuring cup, hand lens, ruler, balance scale, thermometer).</p> <p>S.K-2.A.3.1.1 Describe a system as being made of multiple parts that work together.</p>	<p>work easier.</p> <p>Lesson 5:</p> <ul style="list-style-type: none"> <li>The student knows that objects may be moved by being pushed and pulled with magnets</li> </ul>	<p>120 Quick Study, pp. 112-113 Every Student Learns, p. 66 Assessment Book, pp. 65-68</p>	<p>Lesson 4: Scaffold Questions, TE, p. 315, 317 Checkpoint Questions, SE, p. 315, 317 Chapter Review, SE, pp. 326-327 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 5: Scaffold Questions, TE, p. 319, 321 Checkpoint Questions, SE, p. 319, 321 Chapter Review, SE, pp. 326-327 Vocabulary Boxes Science Journal Entry</p> <p>Simple Machine Rubric</p> <p>Chapter 8 Assessment</p>
<p>Chpt. 9 (Weeks 17-18)</p>	<p>Chapter 9: Sound</p> <ul style="list-style-type: none"> <li>Lesson 1: Sound</li> <li>Lesson 2: Pitch</li> <li>Lesson 3: Traveling of Sound</li> <li>Lesson 4: Animals Making Sound</li> <li>Lesson 5: Sounds Around You</li> </ul>	<p>Lesson 1 a. Vibration b. Loudness Lesson 2 a. Pitch to describe sound Lesson 3 a. Traveling of sound Lesson 4 a. Comparing sounds of animals to instruments Lesson 5 a. heard in neighborhoods and schools</p>	<p>Chapter 9: How is sound made?</p> <ul style="list-style-type: none"> <li>Lesson 1: What is sound?</li> <li>Lesson 2: What is pitch?</li> <li>Lesson 3: How does sound travel?</li> <li>Lesson 4: How do some animals make sound?</li> <li>Lesson 5: What are some sounds around you?</li> </ul>	<p>3.2.2.B6 ENERGY Recognize that light from the sun is an important source of energy for living and nonliving systems and some source of energy is needed for all organisms to stay alive and grow.</p> <p>3.3.2.B1 Observe and record • location of the Sun and the Moon in the sky over a day. • changes in the appearance of the Moon over a month. Observe, describe, and predict seasonal patterns of sunrise and sunset.</p> <p>3.3.2.B3 • Distinguish between scientific</p>	<p>Lesson 1:</p> <ul style="list-style-type: none"> <li>The student knows that the Sun supplies heat and light energy to Earth.</li> </ul> <p>Lesson 2:</p> <ul style="list-style-type: none"> <li>The student knows that each time the Earth completes one rotation, one day had passed and that this takes 24 hours.</li> <li>The student knows that the appearance of</li> </ul>	<p>Lesson 1 Science Content Transparency 12 Workbook, p. 137 Graphic Organizer Transparency 3 Vocabulary Cards Activity Book, pp. 125-126 Discovery Channel School DVD, The Moon Work Book, p. 140 Quick Study,</p>	<p>Lesson 1: Scaffold Questions, TE, pp. 367, 369 Checkpoint Questions, SE, p. 369 Chapter Review, SE, pp. 388-389 Alike and Different, SE, p. 369 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 2:</p>

			<p>fact and opinion. • Ask questions about objects, organisms, and events. • Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. • Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. • Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. • Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge. • Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p> <p>S.K-2.A.1.1.1 Identify a scientific fact as something that can be observed using the five senses.</p> <p>S.K-2.A.1.1.2 Identify examples of technology.</p> <p>S.K-2.A.1.1.3 Describe how technology can help people (e.g., home appliances, phones, computers, transportation).</p> <p>S.K-2.A.2.1.1 Understand that making a change to an investigation may change the outcome(s) of the investigation.</p>	<p>sunrise and sunset is due to the rotation of Earth every 24 hours.</p> <p>Lesson 3: • The student knows that the Moon moves around the Earth, the Earth moves around the Sun, and the Moon is visible when it reflects the light from the sun.</p> <p>Lesson 4: • The student knows the stars and the planets are always in the sky.</p> <p>Lesson 5: • The student knows that the Moon moves around the Earth, the Earth moves around the Sun, and the Moon is visible when it reflects the light from the sun.</p> <p>Lesson 6: • The student knows the stars and the planets are always in the sky.</p>	<p>pp. 124-125 Every Student Learns, p. 74</p> <p>Lesson 2 Workbook, p. 141 Quick Study, pp. 126-127 Every Student Learns, p. 75</p> <p>Lesson 3 Workbook, p. 142 Quick Study, pp. 128-129 Every Student Learns, p. 76</p> <p>Lesson 4 Workbook, p. 143 Quick Study, pp. 130-131 Every Student Learns, p. 77</p> <p>Lesson 5 Workbook, p. 144 Quick Study, pp. 132-133 Every Student Learns, p. 78</p> <p>Lesson 6 Workbook, p. 145 Quick Study, pp. 134-135 Every Student Learns, p. 79 Assessment Book, pp. 87-90</p>	<p>Scaffold Questions, TE, pp. 371, 373 Checkpoint Questions, SE, pp. 371, 373 Chapter Review, SE, pp. 388-389 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 3: Scaffold Questions, TE, p. 375 Checkpoint Questions, SE, p. 374 Chapter Review, SE, pp. 388-389 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 4: Scaffold Questions, TE, pp. 377, 379 Checkpoint Questions, SE, pp. 376, 379 Chapter Review, SE, pp. 388-389 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 5: Scaffold Questions, TE, p. 381 Checkpoint Questions, SE, p. 381 Chapter</p>
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				<p>S.K-2.A.2.1.2 Describe outcomes of an investigation.</p> <p>S.K-2.A.2.2.1 Identify simple tools that can be used in an investigation (e.g., measuring cup, hand lens, ruler, balance scale, thermometer).</p> <p>S.K-2.A.3.1.1 Describe a system as being made of multiple parts that work together.</p> <p>S.K-2.D.3.1.1 Identify objects that can be observed in the day or night sky (i.e., the Moon, planets, the Sun and other stars).</p> <p>S.K-2.D.3.1.2 Describe and identify the four seasons in Pennsylvania.</p>			<p>Review, SE, pp. 388-389 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 6: Scaffold Questions, TE, p. 383 Checkpoint Questions, SE, p. 383 Chapter Review, SE, pp. 388-389 Alike and Different, SE, p. 383 Vocabulary Boxes Science Journal Entry Explain your Results, SE, p. 385 Activity Rubric</p> <p>Chapter 10 Assessment</p>
Chpt. 10 (Weeks 19-20)	<p>Chapter 10: Earth and Space</p> <ul style="list-style-type: none"> <li>Lesson 1: Sun</li> <li>Lesson 2: Causes of Day and Night</li> <li>Lesson 3: Changes of Seasons</li> <li>Lesson 4: Night Sky</li> <li>Lesson 5: Changing of the Moon</li> <li>Lesson 6: Solar System</li> </ul>	<p>Lesson 1</p> <ol style="list-style-type: none"> <li>Sun as a star</li> <li>Brightness of the sun</li> <li>Importance of the sun</li> </ol> <p>Lesson 2</p> <ol style="list-style-type: none"> <li>Axis</li> <li>Rotation</li> <li>Movement of the sun</li> </ol> <p>Lesson 3</p> <ol style="list-style-type: none"> <li>Orbit</li> </ol> <p>Lesson 4</p> <ol style="list-style-type: none"> <li>Constellations</li> <li>Moon</li> <li>Crater</li> </ol> <p>Lesson 5</p> <ol style="list-style-type: none"> <li>Phases of the moon</li> </ol> <p>Lesson 6</p>	<p>Chapter 10: What are some ways the Earth moves?</p> <ul style="list-style-type: none"> <li>Lesson 1: What is the sun?</li> <li>Lesson 2: What causes the night?</li> <li>Lesson 3: What causes the seasons to change?</li> <li>Lesson 4: What can you see in the night sky?</li> <li>Lesson 5: Why does the moon</li> </ul>	<p>3.4 Technology and Engineering Education</p> <p>3.4.A The Scope of Technology</p> <p>3.4.B Technology and Society</p> <p>3.4.C Technology and Engineering Design</p>	<p>Lesson 1:</p> <ul style="list-style-type: none"> <li>The student knows understands that people influence the quality of life of those around them.</li> </ul> <p>Lesson 2:</p> <ul style="list-style-type: none"> <li>The student knows understands that people influence the quality of life of those around them.</li> </ul> <p>Lesson 3:</p> <ul style="list-style-type: none"> <li>The student will identify ways that changes in</li> </ul>	<p>Lesson 1 Science Content Transparency 13 Workbook, p. 149 Graphic Organizer Transparency 3 Vocabulary Cards Activity Book, pp. 125-128 Work Book, p. 152 Quick Study, pp. 136-137 Every Student Learns, p.81</p> <p>Lesson 2</p>	<p>Lesson 1: Scaffold Questions, TE, pp. 399, 401 Checkpoint Questions, SE, p. 401 Chapter Review, SE, pp. 414-415 Vocabulary Boxes Science Journal Entry</p> <p>Lesson 2: Scaffold Questions, TE, p. 403 Checkpoint Questions, SE, p. 403</p>

		a. Solar System	<p>seem to change?</p> <ul style="list-style-type: none"> <li>Lesson 6: What is the solar system?</li> </ul>		<p>technology have helped improve various means of communication.</p> <p>Lesson 4:</p> <ul style="list-style-type: none"> <li>The student identifies ways that technology affects people's everyday lives.</li> </ul> <p>Lesson 5:</p> <ul style="list-style-type: none"> <li>The student identifies and describes examples of natural and human-made materials.</li> </ul>	<p>Workbook, p. 153</p> <p>Quick Study, pp. 138-139</p> <p>Every Student Learns, p. 82</p> <p>Lesson 3</p> <p>Workbook, p. 154</p> <p>Quick Study, pp. 140-141</p> <p>Every Student Learns, p. 83</p> <p>Lesson 4</p> <p>Workbook, p. 155</p> <p>Quick Study, pp. 142-143</p> <p>Every Student Learns, p. 84</p> <p>Lesson 5</p> <p>Workbook, p. 156</p> <p>Quick Study, pp. 144-145</p> <p>Every Student Learns, p. 85</p> <p>Assessment Book, pp. 91-94</p>	<p>Chapter Review, SE, pp. 414-415</p> <p>Retell, SE, p. 403</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 3:</p> <p>Scaffold Questions, TE, p. 405</p> <p>Checkpoint Questions, SE, p. 405</p> <p>Chapter Review, SE, pp. 414-415</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 4:</p> <p>Scaffold Questions, TE, p. 407</p> <p>Checkpoint Questions, SE, p. 407</p> <p>Chapter Review, SE, pp. 414-415</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p> <p>Lesson 5:</p> <p>Scaffold Questions, TE, p. 409</p> <p>Checkpoint Questions, SE, p. 409</p> <p>Chapter Review, SE, pp. 414-415</p> <p>Retell, SE, p. 409</p> <p>Vocabulary Boxes</p> <p>Science Journal Entry</p>
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Chpt. 11 (Weeks 21-22)	Chapter 11: Technology in Our World <ul style="list-style-type: none"> <li>Lesson 1: Technology</li> <li>Lesson 2: Helpfulness of Technology</li> <li>Lesson 3: Using Technology to Communicate</li> <li>Lesson 4: Uses of Technology</li> <li>Lesson 5: People Making Things</li> </ul>	Lesson 1 <ul style="list-style-type: none"> <li>a. Inventions</li> <li>b. Changes in Transportation</li> <li>c. Engines</li> </ul> Lesson 2 <ul style="list-style-type: none"> <li>d. Vaccines</li> </ul> Lesson 3 <ul style="list-style-type: none"> <li>a. Ways to communicate with others</li> </ul> Lesson 4 <ul style="list-style-type: none"> <li>a. Meteorologist</li> <li>b. Satellites</li> </ul> Lesson 5 <ul style="list-style-type: none"> <li>a. Manufacturing things</li> </ul>	Chapter 11: What are some ways technology helps us? <ul style="list-style-type: none"> <li>Lesson 1: What is technology?</li> <li>Lesson 2: How does technology help us?</li> <li>Lesson 3: How do we use technology to communicate?</li> <li>Lesson 4: What are some other ways to use technology?</li> <li>Lesson 5: How do people make things?</li> </ul>	3.4 Technology and Engineering Education <ul style="list-style-type: none"> <li>3.4.A The Scope of Technology</li> <li>3.4.B Technology and Society</li> <li>3.4.C Technology and Engineering Design</li> </ul>	Lesson 1: <ul style="list-style-type: none"> <li>The student knows understands that people influence the quality of life of those around them.</li> </ul> Lesson 2: <ul style="list-style-type: none"> <li>The student knows understands that people influence the quality of life of those around them.</li> </ul> Lesson 3: <ul style="list-style-type: none"> <li>The student will identify ways that changes in technology have helped improve various means of communication.</li> </ul> Lesson 4: <ul style="list-style-type: none"> <li>The student identifies ways that technology affects people's everyday lives.</li> </ul> Lesson 5: <ul style="list-style-type: none"> <li>The student identifies and describes examples of natural and human-made materials.</li> </ul>	Lesson 1 Science Content Transparency 13 Workbook, p. 149 Graphic Organizer Transparency 3 Vocabulary Cards Activity Book, pp. 125-128 Work Book, p. 152 Quick Study, pp. 136-137 Every Student Learns, p.81  Lesson 2 Workbook, p. 153 Quick Study, pp. 138-139 Every Student Learns, p. 82  Lesson 3 Workbook, p. 154 Quick Study, pp. 140-141 Every Student Learns, p. 83  Lesson 4 Workbook, p. 155 Quick Study, pp. 142-143 Every Student Learns, p. 84  Lesson 5 Workbook, p. 156 Quick Study,	Lesson 1: Scaffold Questions, TE, pp. 399, 401 Checkpoint Questions, SE, p. 401 Chapter Review, SE, pp. 414-415 Vocabulary Boxes Science Journal Entry  Lesson 2: Scaffold Questions, TE, p. 403 Checkpoint Questions, SE, p. 403 Chapter Review, SE, pp. 414-415 Retell, SE, p. 403 Vocabulary Boxes Science Journal Entry  Lesson 3: Scaffold Questions, TE, p. 405 Checkpoint Questions, SE, p. 405 Chapter Review, SE, pp. 414-415 Vocabulary Boxes Science Journal Entry  Lesson 4: Scaffold Questions, TE, p. 407

						pp. 144-145 Every Student Learns, p. 85 Assessment Book, pp. 91-94	Checkpoint Questions, SE, p. 407 Chapter Review, SE, pp. 414-415 Vocabulary Boxes Science Journal Entry  Lesson 5: Scaffold Questions, TE, p. 409 Checkpoint Questions, SE, p. 409 Chapter Review, SE, pp. 414-415 Retell, SE, p. 409 Vocabulary Boxes Science Journal Entry  Chapter 11 Assessment
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