

# ELEMENTARY SCIENCE GRADE 3 CURRICULUM

## Course 50320

Third grade students will review some of the basic principles and practices of science. They will learn vocabulary and principles in a variety of topics from biology, physical science, Earth science, and ecology. Student will conduct simple investigations posing questions, making observations, using scientific tools, collecting data and posing conclusions. Students will use pictures, charts, diagrams, models, and maps to understand and represent scientific concepts.

### THIRD GRADE SCIENCE OUTLINE:

| Goals  | Skills   | Summative Assessments | Time Frame | Main Resources        |
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| <ul style="list-style-type: none"><li>• Learn about the adaptations that plants and animals have that enables them to survive in their environment.</li><li>• Understand that each part of a living organism has a specific function.</li><li>• Learn that fossils give us clues to past plants and animals.</li><li>• Explore the properties and characteristics associated with air.</li><li>• Explore the properties and characteristics of light.</li><li>• Learn some of the properties of electricity.</li></ul> | <ul style="list-style-type: none"><li>• Distinguish between a scientific fact and an opinion, providing clear explanations that connect observations and results</li><li>• Observe and record change by using time and measurement.</li><li>• Generate questions about objects, organisms, or events that can be answered through scientific investigations.</li><li>• Select appropriate tools for making observations.</li></ul> | Chapter Assessments   | 1-year     | Daily Science Grade 3 |

**THIRD GRADE SCIENCE MAP:**

| TIME FRAME        | BIG IDEAS   | CONCEPTS  | ESSENTIAL QUESTIONS   | STANDARDS  | OBJECTIVES  | DIFFERENTIATION   | ASSESSMENT   |
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| Unit 1(Weeks 1-5) | <ul style="list-style-type: none"> <li>Living things have adaptations that help them survive in their environment.</li> </ul> | <ol style="list-style-type: none"> <li>Adaptations help plants reproduce</li> <li>Some animals have adapted their body functions to survive</li> <li>Living things develop ways to protect themselves</li> <li>Adaptations of animal behavior help them to survive</li> </ol> | <ul style="list-style-type: none"> <li>Why do flowers have different colors and scents?</li> <li>How do dolphins sleep without drowning?</li> <li>Why does a cactus have needles?</li> <li>Why do birds migrate?</li> </ul> | <p>3.1.3.A1<br/>Describe characteristics of living things that help to identify and classify them.</p> <p>3.1.3.A2<br/>Describe the basic needs of living things and their dependence on light, food, air, water, and shelter.</p> <p>3.1.3.A3<br/>Illustrate how plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death.</p> <p>3.1.3.A5<br/>Identify the structures in plants that are responsible for food production, support, water transport, reproduction, growth, and protection.</p> <p>3.1.3.A9<br/>• 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</p> | <ul style="list-style-type: none"> <li>The student will identify adaptations of plants and animals.</li> <li>The student will sequence the steps of pollination.</li> <li>The student will create the life cycle of a plant.</li> <li>The student will understand how plants reproduce.</li> <li>The student will classify plants based on characteristics.</li> <li>The student will classify animals as mammal or not.</li> <li>The student will compare and contrast states of matter.</li> <li>The student will analysis the water cycle.</li> <li>The student will recognize and describe the functions of each part of a plant.</li> <li>The student will connect the steps in a process of distributing seeds.</li> <li>The student will predict and discover why birds migrate.</li> <li>The student will conduct an</li> </ul> | <p>Transparencies</p> <p>Workbook</p> <p>Graphic Organizers</p> <p>Vocabulary Cards</p> | <p>Chapter review</p> <p>Activity Rubric</p> <p>Scaffold questions</p> <p>Lesson Checkpoints</p> <p>Chapter Test</p> |

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|  |  |  | <p>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>3.1.3.B1<br/>Understand that plants and animals closely resemble their parents.</p> <p>3.1.3.B5<br/>PATTERNS Identify characteristics that appear in both parents and offspring.</p> <p>3.1.3.C2<br/>Describe animal characteristics that are necessary for survival.</p> <p>S3.A.2.1.1<br/>Generate questions about objects, organisms, or events that can be answered through scientific investigations.</p> <p>S3.A.2.1.2<br/>Make predictions based on observations.</p> <p>S3.A.2.1.3<br/>Identify the variables in a simple investigation.</p> <p>S3.A.2.2.1<br/>Identify appropriate tools or instruments for specific tasks, and describe the information they provide (i.e., measuring [length—ruler; mass— balance</p> | <p>experiment to demonstrate how celery holds water.</p> |  |  |
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|  |  |  | <p>scale] and making observations [hand lenses—very small objects]).</p> <p>S3.A.3.1.1<br/>Classify systems as either human-made or natural (e.g., human-made systems [balancing systems, tops, wheel and axle systems, pencil sharpeners from manual to electric]; natural systems [plants, animals, water cycle, stream]).</p> <p>S3.A.3.1.2<br/>Identify changes in natural or human made systems.</p> <p>S3.A.3.2.1<br/>Identify what models represent (e.g., simple maps showing mountains, valleys, lakes, and rivers; dioramas).</p> <p>S3.B.1.1.1<br/>Identify and describe the functions of basic structures of animals and plants (e.g., animals [skeleton, heart, lungs]; plants [roots, stem, leaves]).</p> <p>S3.B.1.1.2<br/>Classify living things based on their similarities and differences.</p> <p>S3.B.1.1.3<br/>Describe the basic needs of plants and animals and their dependence on light, food, air, water, and shelter.</p> <p>S3.B.1.1.4<br/>Describe how plants and animals go through life cycles.</p> <p>S3.B.2.1.1<br/>Identify adaptations of plants and animals that have helped them to survive.</p> |  |  |  |
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|  |  |  |  | <p>S3.B.2.1.2<br/>Identify and describe plant and animal characteristics that are necessary for survival.</p> <p>S3.B.2.1.3<br/>Identify characteristics for plant and animal survival in different environments (e.g., desert, forest, ocean).</p> <p>S3.B.2.2.1<br/>Identify physical characteristics (e.g., height, hair color, eye color) that could be passed on to offspring.</p> <p>S3.B.2.2.2<br/>Identify similar physical characteristics in parents and their offspring.</p> <p>S3.B.3.1.1<br/>Identify the living and nonliving components of an ecosystem (e.g., living [plants, animals]; nonliving [water, soil, air]).</p> <p>S3.B.3.1.2<br/>Describe the interactions between living and nonliving components of an ecosystem (e.g., plants [water, sunlight]; animals [air, shelter]).</p> <p>S3.B.3.2.1<br/>Describe what happens to an animal when its habitat is changed.</p> <p>S3.B.3.2.2<br/>Describe how changes in the environment (e.g., fire, flood) can affect an ecosystem.</p> <p>S3.B.3.2.3<br/>Describe how human interactions with the environment impact an ecosystem (e.g., road construction, pollution, urban</p> |  |  |  |
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| Unit 2<br>(Weeks<br>6-10) | <ul style="list-style-type: none"> <li>Plants have many parts. Each part does a special job.</li> </ul> | <ol style="list-style-type: none"> <li>The role of roots, stems, leaves, flowers, and fruits</li> <li>How water moves through a plant</li> <li>The way plants distribute seeds</li> <li>The life cycle of plants</li> </ol> | <ul style="list-style-type: none"> <li>What's the difference between a fruit and a vegetable?</li> <li>How do plants get water from roots to leaves?</li> <li>Why do dandelions turn white and fluffy?</li> <li>Why do leaves change color in the fall?</li> </ul> | <p>3.1.3.A2<br/>Describe the basic needs of living things and their dependence on light, food, air, water, and shelter.</p> <p>3.1.3.A3<br/>Illustrate how plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death.</p> <p>3.1.3.A5<br/>Identify the structures in plants that are responsible for food production, support, water transport, reproduction, growth, and protection.</p> <p>3.1.3.B6<br/>Distinguish between scientific fact and opinion.<br/>Ask questions about objects, organisms, and events.<br/>Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.<br/>Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.<br/>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.<br/>Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.</p> | <ul style="list-style-type: none"> <li>The student will recognize and describe the functions of each part of a plant.</li> <li>The student will compare and contrast fruits and vegetables.</li> <li>The student will connect the steps in a process of plants getting nutrients.</li> <li>Students will identify the steps in photosynthesis.</li> <li>The student determines the importance of the sun for plants to grow.</li> <li>The student will connect the steps in a process of distributing seeds.</li> <li>The student will investigate how water moves through a plant.</li> <li>The student will discover how plants quit making chlorophyll when winter comes and resume production in the spring.</li> </ul> | <p>Transparencies</p> <p>Workbook</p> <p>Graphic Organizers</p> <p>Vocabulary Cards</p> | <p>Chapter review</p> <p>Activity Rubric</p> <p>Scaffold questions</p> <p>Lesson Checkpoints</p> <p>Chapter Test</p> |

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|  |  |  |  | <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>3.1.3.C1<br/>Recognize that plants survive through adaptations, such as stem growth towards light and root growth downward in response to gravity.</p> <p>Recognize that many plants and animals can survive harsh environments because of seasonal behaviors (e.g. hibernation, migration, trees shedding leaves).</p> <p>3.2.3.B6<br/>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>S3.B.1.1.1<br/>Identify and describe the functions of basic structures of animals and plants (e.g., animals [skeleton, heart, lungs]; plants [roots, stem, leaves]).</p> <p>S3.B.1.1.2<br/>Classify living things based on their similarities and differences.</p> <p>S3.B.1.1.3<br/>Describe the basic needs of plants and animals and their dependence on light, food, air, water, and shelter.</p> |  |  |  |
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|                         |  |   |  | <p>S3.B.1.1.4<br/>Describe how plants and animals go through life cycles.</p> <p>S3.B.2.1.1<br/>Identify adaptations of plants and animals that have helped them to survive.</p> <p>S3.B.2.1.2<br/>Identify and describe plant and animal characteristics that are necessary for survival.</p> <p>S3.B.2.1.3<br/>Identify characteristics for plant and animal survival in different environments (e.g., desert, forest, ocean).</p> <p>S3.B.2.2.1<br/>Identify physical characteristics (e.g., height, hair color, eye color) that could be passed on to offspring.</p> <p>S3.B.2.2.2<br/>Identify similar physical characteristics in parents and their offspring.</p> <p>S3.B.3.1.1<br/>Identify the living and nonliving components of an ecosystem (e.g., living [plants, animals]; nonliving [water, soil, air]).</p> <p>S3.B.3.1.2<br/>Describe the interactions between living and nonliving components of an ecosystem (e.g., plants [water, sunlight]; animals [air, shelter]).</p> <p>S3.B.3.2.1<br/>Describe what happens to an animal when its habitat is changed.</p> |  |                            |                                   |
| Unit 3<br>(Weeks 11-15) | <ul style="list-style-type: none"> <li>Fossils tell us about the plants and</li> </ul> | 1. Fossils are formed in different ways | <ul style="list-style-type: none"> <li>How does something</li> </ul> | 3.1.3.C3<br>CONSTANCY AND CHANGE<br>Recognize that fossils provide  | <ul style="list-style-type: none"> <li>The student will discover what a</li> </ul> | Transparencies<br>Workbook | Chapter review<br>Activity Rubric |



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|        | animals that lived long ago. | <p>2. Many fossils can be found in sedimentary rocks</p> <p>3. Scientists can determine the age of fossils from the sedimentary layers in which they are found</p> <p>4. The movement of the Earth's layers sometimes cause ocean fossils to end up on mountains</p> | <p>become a fossil?</p> <ul style="list-style-type: none"> <li>• Where is the best place to look for fossils?</li> <li>• How do scientists know how old a fossil is?</li> <li>• Why are fossils of ocean animals found on mountains today?</li> </ul> | <p>us with information about living things that inhabited the Earth long ago</p> <p>3.1.3.C4<br/>Distinguish between scientific fact and opinion. Ask questions about objects, organisms, and events.<br/>Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.<br/>Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.<br/>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.<br/>Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.<br/>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>S3.D.1.1.1<br/>Recognize that rock is composed of different kinds of minerals.</p> | <p>fossil is and how it is formed</p> <ul style="list-style-type: none"> <li>• The student will compare and contrast the different types of fossils.</li> <li>• The student will explore the job of a paleontologist.</li> <li>• The student will examine the layers of rock.</li> <li>• The student will identify the three types of rock and how they are formed.</li> <li>• The student will discover that scientists use fossils to determine the Earth's age.</li> <li>• The student will learn about the Earth's movements causing faults.</li> <li>• The student will construct a fossil from clay.</li> <li>• The student will sequence the steps of how mold fossils are made.</li> <li>• The student differentiates between eroding and digging.</li> <li>• The student label the three layers of Earth.</li> <li>• The student will sequence the order of events telling how oceans were formed.</li> </ul> | <p>Graphic Organizers</p> <p>Vocabulary Cards</p> | <p>Scaffold questions</p> <p>Lesson Checkpoints</p> <p>Chapter Test</p> |
| Unit 4 | • Air is a gas that          | 1. What the  | • Why can't you   | 3.2.3.A2   | • The student will   | Transparencies                                    | Chapter review  |

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| (Weeks 16-20) | surrounds us, takes up space, and creates weather. | <p>atmosphere is made of and what it does</p> <ol style="list-style-type: none"> <li>2. What air pressure is</li> <li>3. How wind is created in the atmosphere</li> <li>4. How some properties of air affect flight</li> </ol> | <p>breathe in outer space?</p> <ul style="list-style-type: none"> <li>• Why does a can of soda sometimes explode when you open it?</li> <li>• Where does wind come from?</li> <li>• How do birds fly?</li> </ul> | <p>Recognize that all objects and materials in the world are made of matter.</p> <p>3.2.3.A3<br/>Demonstrate how heating and cooling may cause changes in the properties of materials including phase changes.</p> <p>3.2.3.A5<br/><b>CONSTANCY AND CHANGE</b><br/>Recognize that everything is made of matter.</p> <p>3.2.3.A6<br/>Distinguish between scientific fact and opinion.<br/>Ask questions about objects, organisms, and events.<br/>Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.<br/>Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.<br/>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.<br/>Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.<br/>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</p> | <p>compare and contrast states of matter.</p> <ul style="list-style-type: none"> <li>• The student will identify the three states of matter.</li> <li>• The student will understand what the atmosphere is made of and what it does.</li> <li>• The student will differentiate between high and low air pressure systems.</li> <li>• The student will investigate tools for measuring weather.</li> <li>• The student will explore the job of a meteorologist.</li> <li>• The student will create a mini-tornado in a bottle using water and circulation.</li> <li>• The student will identify bird adaptations.</li> <li>• The student will label parts of an airplane and show drag, thrust, and lift.</li> <li>• The student will identify what gases make up our atmosphere.</li> <li>• The student recognizes how gravity works and its importance.</li> <li>• The student will name common items that require air pressure to work.</li> </ul> | <p>Workbook</p> <p>Graphic Organizers</p> <p>Vocabulary Cards</p> | <p>Activity Rubric</p> <p>Scaffold questions</p> <p>Lesson Checkpoints</p> <p>Chapter Test</p> |
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|  |  |  |  | <p>of other scientists.</p> <p>3.2.3.B1<br/>Explain how movement can be described in many ways.</p> <p>3.2.3.B2<br/>Explore energy's ability to cause motion or create change.</p> <p>Explore how energy can be found in moving objects, light, sound, and heat.</p> <p>3.3.3.A4<br/>Connect the various forms of precipitation to the weather in a particular place and time.</p> <p>3.3.3.A5<br/>Explain how air temperature, moisture, wind speed and direction, and precipitation make up the weather in a particular place and time.</p> <p>S3.C.1.1.1<br/>Describe matter in terms of its observable properties (e.g., weight, mass, shape, size, color, texture, state).</p> <p>S3.C.1.1.2<br/>Classify matter using observable physical properties (e.g., weight, mass, shape, size, color, texture, state).</p> <p>S3.C.1.1.3<br/>Classify a substance as a solid, liquid, or gas.</p> <p>S3.C.1.1.4<br/>Recognize and identify how water goes through phase changes (i.e., evaporation, condensation, freezing, and melting).</p> <p>S3.C.1.1.5<br/>Describe how the properties of matter can be changed (e.g., heating, cooling, physical weathering).</p> <p>S3.C.2.1.1<br/>Identify basic forms and sources of energy (e.g., Sun, heat, light, sound).</p> |  |  |  |
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|  |  |  |  | <p>S3.C.2.1.2<br/>Identify simple transformations of energy (e.g., eating food to get energy, rubbing hands together to create heat).</p> <p>S3.C.2.1.3<br/>Identify characteristics of sound (i.e., pitch, and loudness).</p> <p>S3.C.3.1.1<br/>Identify and describe an object's motion (e.g., start/stop, up/down, left/right, faster/slower, spinning).</p> <p>S3.C.3.1.2<br/>Describe an object's position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below).</p> <p>S3.D.1.1.1<br/>Recognize that rock is composed of different kinds of minerals.</p> <p>S3.D.1.1.2<br/>Describe the composition of soil as weathered rock and decomposed organic material.</p> <p>S3.D.1.2.1<br/>Describe why certain resources are renewable and other resources are nonrenewable.</p> <p>S3.D.1.2.2<br/>Identify and describe examples of renewable and nonrenewable resources.</p> <p>S3.D.1.2.3<br/>Describe the ways living things benefit from the uses of water resources.</p> <p>S3.D.1.3.1<br/>Identify ways that cause Earth's surface to be constantly changing (e.g., wind and water erosion, contraction and expansion of surfaces).</p> <p>S3.D.1.3.2<br/>Distinguish between ways that tear down the surface of Earth and those that build up the</p> |  |  |  |
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|                                 |   |  |  | <p>surface (e.g., erosion, weathering, volcanic activity, earthquakes).</p> <p>S3.D.1.3.3<br/>Distinguish between slow and rapid changes to Earth's surface (i.e., rapid [earthquakes, volcanic activity]; slow [weathering, erosion]).</p> <p>S3.D.2.1.1<br/>Recognize that clouds have different characteristics that relate to different weather conditions.</p> <p>S3.D.2.1.2<br/>Describe how weather variables (i.e., temperature, wind speed, wind direction, and precipitation) are observed and measured.</p> <p>S3.D.2.1.3<br/>Identify appropriate instruments to study and measure weather elements (i.e., thermometer [temperature]; wind vane [wind direction]; anemometer [wind speed]; rain gauge [precipitation]).</p> |   |   |  |
| <p>Unit 5<br/>(Weeks 21-25)</p> | <ul style="list-style-type: none"> <li>Light travels in a straight line until it hits an object. Light can be absorbed, refracted, or reflected.</li> </ul> | <ol style="list-style-type: none"> <li>Light travels in a ray that passes through translucent objects and is absorbed by opaque objects</li> <li>Light can be absorbed, refracted, and reflected</li> <li>Light travels in a straight line</li> <li>Lenses bend light and magnify or project images</li> </ol> | <ul style="list-style-type: none"> <li>Why does it get hot in a car on a sunny day when it's cold outside?</li> <li>Why does a straw look bent in a glass of water?</li> <li>How does a movie projector work?</li> <li>How do mirrors work?</li> </ul> | <p>3.2.3.B2<br/>Explore energy's ability to cause motion or create change.</p> <p>Explore how energy can be found in moving objects, light, sound, and heat.</p> <p>3.2.3.B3<br/>Explore temperature changes that result from the addition or removal of heat.</p> <p>3.2.3.B5<br/>Recognize that light travels in a straight line until it strikes an object or travels from one material to another</p> <p>3.2.3.B6<br/>ENERGY Recognize that light</p>   | <ul style="list-style-type: none"> <li>The student will understand that light is a form of energy that can be absorbed.</li> <li>The student will learn that light travels in a straight line until it hits another object.</li> <li>The student will compare and contrast the terms absorbed, refracted, and reflected.</li> <li>The student will differentiate between translucent and</li> </ul> | <p>Transparencies</p> <p>Workbook</p> <p>Graphic Organizers</p> <p>Vocabulary Cards</p> | <p>Chapter review</p> <p>Activity Rubric</p> <p>Scaffold questions</p> <p>Lesson Checkpoints</p> <p>Chapter Test</p> |

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|  |  |  |  | <p>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>3.2.3.B7<br/>Distinguish between scientific fact and opinion.<br/>Ask questions about objects, organisms, and events.<br/>Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.<br/>Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.<br/>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.<br/>Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.<br/>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>S3.C.2.1.1<br/>Identify basic forms and sources of energy (e.g., Sun, heat, light, sound).</p> | <p>opaque objects.</p> <ul style="list-style-type: none"> <li>• The student will discover that lenses bend light and magnify images.</li> <li>• The student will use water to magnify images.</li> <li>• The student will recognize a microscope and telescope.</li> <li>• The student will explain what a microscope and telescope are used for.</li> <li>• The student will learn how a projector works to show a movie.</li> </ul> |  |  |
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|                         |   |   |   | S3.C.2.1.2<br>Identify simple transformations of energy (e.g., eating food to get energy, rubbing hands together to create heat).  |  |   |  |
| Unit 6<br>(Weeks 26-30) | <ul style="list-style-type: none"> <li>Electricity can exist as static electricity or travel as a current through a conductor.</li> </ul> | <ol style="list-style-type: none"> <li>Electricity is a form of energy that can be converted to other forms of energy</li> <li>Electricity can be observed as static electricity or as an electric current</li> <li>Batteries can create energy</li> <li>Electric circuits and switches help control the flow of electricity</li> </ol> | <ul style="list-style-type: none"> <li>Where does lightning come from?</li> <li>Why do electrical cords have metal plugs?</li> <li>How does flipping a switch light up a light bulb?</li> <li>How does a battery make electricity?</li> </ul> | <p>3.2.3.B4<br/>Identify and classify objects and materials that are conductors or insulators of electricity.</p> <p>Identify and classify objects and materials as magnetic or non-magnetic.</p> <p>S3.C.2.1.1<br/>Identify basic forms and sources of energy (e.g., Sun, heat, light, sound).</p> <p>S3.C.2.1.2<br/>Identify simple transformations of energy (e.g., eating food to get energy, rubbing hands together to create heat).</p> <p>3.2.3.B7<br/>Distinguish between scientific fact and opinion.<br/>Ask questions about objects, organisms, and events.<br/>Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.<br/>Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.<br/>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.<br/>Use data/evidence to construct explanations and</p> | <ul style="list-style-type: none"> <li>The student will understand that electricity is a type of energy.</li> <li>The student will list items that need electricity to work.</li> <li>The student will recognize that lightning is a form of electricity.</li> <li>The student will define and use the terms atom, proton, and electron.</li> <li>The student will determine when an atom has a positive or negative charge.</li> <li>The student will give examples of static electricity.</li> <li>The student will label a diagram of an atom.</li> <li>The student will examine how an electrical current works.</li> <li>The student will determine materials that are conductors of electricity.</li> <li>The student will determine materials that are insulators.</li> <li>The student will trace the path of electricity from a power plant to a</li> </ul> | <p>Transparencies</p> <p>Workbook</p> <p>Graphic Organizers</p> <p>Vocabulary Cards</p> | <p>Chapter review</p> <p>Activity Rubric</p> <p>Scaffold questions</p> <p>Lesson Checkpoints</p> <p>Chapter Test</p> |

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|  |  |  | <p>understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.</p> <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>home.</p> <ul style="list-style-type: none"><li>• The student will understand that electricity flows in a circuit.</li><li>• The student will know that all circuits require a source.</li><li>• The student will use static electricity to move metal cans.</li><li>• The student will label a circuit.</li></ul> |  |  |
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