

# Centerville-Abington Elementary Curriculum Mapping

## Science – Grade 3

1<sup>st</sup> Nine Weeks

Teresa Downs

Unit chapter lesson	Indiana Standards	Key Questions	Resources/Activities	Vocabulary	Assessments
Unit 5	3.4.1 3.4.2	How can you use measurements and tools to solve problems?			
Lesson 1	3.4.1	Measure materials using tools that record stand units. Understand the concepts of length, mass, and temperature.	text-206-207 Explore materials: meter sticks or rulers Quick Lab materials: toy car, golf ball, marble, pan balance, tape measure Flipchart activities	measure SI units length width estimate mass	Lesson Review
3.4.1 Choose and use the appropriate tools to estimate and measure length, mass and temperature in SI units.					
Lesson 2	3.4.2	Identify and describe simple machines and apply their uses to real-world tasks. Describe the different parts of simple machines and how they make work easier.	text-220-221 Explore materials: clay, thick marker, ruler, small plastic cups, large blocks, 1-gram cubes Quick Lab materials: 25 marbles, spring scale, books, board Leveled Readers	force work simple machines lever pulley inclined plane screw wedge	Lesson Review Unit review Test Prep foldables
3.4.2 Define the uses and types of simple machines and utilize simple machines in the solution to a real world problem.					

**Additional Support/Resources:**

<http://nsdl.org/refreshers/science>

[www.macmillanmh.com](http://www.macmillanmh.com)

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 2<sup>nd</sup> Nine Weeks

Unit chapter lesson	Indiana Standards	Key Questions	Resources/Activities	Vocabulary	Assessments
Unit 2	3.2.2 3.2.3 3.2.1	How can you compare rocks and minerals?			
Lesson 1	3.2.2 3.2.3	Classify minerals by their physical properties; classify rocks by how they are formed. Identify rocks as being composed of different minerals.	text p78-79 Explore materials: minerals (calcite, hematite, magnetite, pyrite) and white tile Quick Lab materials: hand lens, rocks, igneous rocks	mineral rock sedimentary rock	Lesson Review
3.2.2 Observe the detailed characteristics of rocks and minerals. Identify rocks as being composed of different combinations of minerals.					
3.2.3 Classify and identify minerals by their physical properties of hardness, color, luster and streak.					
Lesson 2	3.2.1	Describe the physical properties of rocks. Sort rocks into categories based on size using simple tools such as sieves.	text p94-95 Explore materials: rock mixture, 4 sieves of different sizes, ruler, paper towels, hand lens Quick Lab materials: measuring cup, jar, sand, soil, pebbles, water, paper, pencils Leveled Readers	property boulders pebbles glacier silt	Lesson Review Unit review Test Prep foldables
3.2.1 Examine the physical properties of rock samples and sort them into categories based on size using simple tools such as sieves.					

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Unit chapter lesson	Indiana Standards	Key Questions	Resources/Activities	Vocabulary	Assessments
Unit 3	3.2.4 3.2.5 3.2.6	How do we use Earth’s materials?			
Lesson 1	3.2.4 3.2.6	Describe how fossils provide evidence about the plants and animals that lived long ago. List examples of fossil fuels and other sources of energy.	text p116-117 Explore materials: models of teeth(T. rex, Edmontosaurus, shark, horse) Quick Lab materials: modeling clay	fossil fuel fossil fuel resource renewable resource nonrenewable resource	Lesson Review
<p>3.2.4 Identify fossils and describe how they provide evidence about the plants and animals that lived long ago and the nature of their environment at that time.</p> <p>3.2.6 Describe how the properties of earth materials make them useful to humans in different ways. Describe ways that humans have altered these resources to meet their needs for survival.</p>					
Lesson 2	3.2.5 3.2.6	Describe how air and water are used as resources. Give examples of how natural materials sustain the lives of plants and animals.	text p130-131 Explore materials: small, clear plastic cup of water, funnel, large, clear plastic cup, soil and crushed leaves, spoon and gravel, coarse sand Quick Lab materials: pencil, paper, facts about water usage for everyday activities Flipchart activities Leveled readers	natural environment groundwater reservoir pollution conserve	Lesson Review Unit review Test Prep foldables
<p>3.2.5 Describe natural materials and give examples of how they sustain the lives of plants and animals</p> <p>3.2.6 Describe how the properties of earth materials make them useful to humans in different ways. Describe ways that humans have altered these resources to meet their needs for survival.</p>					

<b>Unit 1</b>	<b>3.1.1 3.1.2 3.1.3 3.1.4 3.1.5 3.1.6</b>	<b>What is energy and how does it travel?</b>			
<b>Lesson 1</b>	<b>3.1.1 3.1.2</b>	<b>Generate sounds using different materials. Investigate ways to change the loudness and pitch of a sound.</b>	<b>text p 20-21 Explore materials: goggles, paper, plastic ruler, rubber band, cardboard box Quick Lab materials: straws, scissors Flip Chart activities</b>	<b>vibrate energy volume pitch frequency wavelength amplitude</b>	<b>Lesson Review</b>

3.1.1 Generate sounds using different materials, objects and techniques. Record the sounds and then discuss and share the results.

3.1.2 Investigate how the loudness and pitch of sound changes when the rate of vibrations changes.

<b>Lesson 2</b>	<b>3.1.3 3.1.6</b>	<b>Recognize that sound moves through solids, liquids, and gases. Investigate the idea that light and sound are forms of energy.</b>	<b>text p 36-37 Explore materials: deep container of water, ping pong ball, small rock Quick Lab materials: two paper cups, 10 m of string</b>	<b>light visible spectrum</b>	<b>Lesson Review</b>
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3.1.3 Investigate and recognize that sound moves through solids, liquids and gases (e.g., air).

3.1.6 Describe evidence to support the idea that light and sound are forms of energy.

<b>Lesson 3</b>	<b>3.1.4 3.1.5</b>	<b>Investigate how light travels. Describe the characteristics of light and how it interacts with objects.</b>	<b>text p 52-53 Explore materials: mirror, flashlight Quick Lab materials: mirror, tape, piece of paper Leveled Readers</b>	<b>rays refraction reflects absorb shadow</b>	<b>Lesson Review Unit review Test Prep foldables</b>
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3.1.4 Investigate how light travels through the air and tends to maintain its direction until it interacts with some other object or material. 3.1.5 Observe and describe how light is absorbed, changes its direction, is reflected back and passes through objects. Observe and describe that a shadow results when light cannot pass through an object.

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**Curriculum Mapping  
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4<sup>th</sup> Nine Weeks**

<b>Unit chapter lesson</b>	<b>Indiana Standards</b>	<b>Key Questions</b>	<b>Resources/Activities</b>	<b>Vocabulary</b>	<b>Assessments</b>
<b>Unit 4</b>	<b>3.3.1 3.3.2</b>	<b>How do plants get what they need?</b>			
<b>Lesson 1</b>	<b>3.3.1</b>	<b>Relate plant structures to their functions. Describe how plants are classified.</b>	<b>text 158-159 Explore materials: hand lens, 3 plants Quick Lab materials: celery stalk with leaves, food coloring, water, plastic jar</b>	<b>structure root nutrient stem leaf leaf vein flower</b>	<b>Lesson Review</b>
3.3.1 Identify the common structures of a plant including its roots, stems, leaves, flowers, fruits and seeds. Describe their functions.					
<b>Lesson 2</b>	<b>3.3.1 3.3.2</b>	<b>Describe the conditions plants need in order to grow and thrive. Explain the life cycles of flowering and conifer plants.</b>	<b>text 176-177 Explore materials: flowers from 2 different plants, hand lens, tweezers, 2 different fruit halves Quick Lab materials: fruit from three different plants Flipchart activities Leveled Readers</b>	<b>thrive seed fruit pollination life cycle cone</b>	<b>Lesson Review Unit review Test Prep foldables</b>
3.3.1 Identify the common structures of a plant including its roots, stems, leaves, flowers, fruits and seeds. Describe their functions.					
3.3.2 Investigate plant growths over time, take measurements in SI units, record the data and display the data in graphs. Examine factors that might influence plant growth.					

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