

# Centerville-Abington Elementary Curriculum Mapping

## Science – 3<sup>rd</sup> Grade

1<sup>st</sup> Nine Weeks

Tiffany Leger

Unit Chapter Lesson	Indiana Standard(s)	Key Concepts	Resources/Activities	Vocabulary	Assessments
Chapter 6, Lesson 1	3.ESS.1 (background knowledge)	How does weather change over time? What is the water cycle?	What is the water cycle? Video (Pearson Realize)  Inquiry Lab- T248—How does water temperature affect evaporation?  Student text-p.254-257  The Water Cycle Summary (Pearson Realize)	evaporation temperature	Lab sheet Answers to student questions in text Lesson Quiz (online) Lesson Check (T257b)
Chapter 6, Lesson 2	3.ESS.1	What is daily temperature? What are weather and climate?	Explore It! Lab—What is Daily Temperature?- p. 258  What are weather and climate? 60 second video (Pearson Realize)  What is weather? What is daily temperature? Interactive activities (Pearson Realize)  Student text—p. 259- 264	temperature weather climate	Lab sheet Answers to student questions in text Lesson Quiz (online) Lesson Check (T265b)

Chapter 6, Lesson 3	3.ESS.1 (background knowledge)	What tools are used to measure weather?	What tools are used to measure weather? 60 second video (Pearson Realize)  Weather tools virtual lab (Pearson Realize)  Student text p. 267-269	barometer rain gauge humidity atmosphere thermometer	Lesson Quiz (online) Lesson Check (T269b) Answers to student questions in text
Chapter 6, Lesson 4	3.ESS.2	How can you stay safe in severe weather?	Inquiry Lab—T270—What do tornadoes look like?  Student text-p. 270-275	tornado severe weather hurricane thunderstorm	Severe weather project (T288) Lab sheet—p. 270 Answers in student text Lesson quiz (online) Lesson check (T275b)
Chapter 6, Review	3.ESS.1 3.ESS.2	How does weather change over time? What is the water cycle? What is daily temperature? What are weather and climate? What tools are used to measure weather? How can you stay safe in severe weather?	Vocabulary Smart Cards-p. 279  Chapter 6 Study Guide-p. 281  Chapter 6 Review—p. 282-283  Chapter 6 Test—T283a and b  Benchmark Practice p. 284	Review of above	Chapter 6 Test  Benchmark Practice answers

**Curriculum Mapping**  
**Science – 3<sup>rd</sup> Grade**  
 2<sup>nd</sup> Nine Weeks

Unit Chapter Lesson	Indiana Standard(s)	Key Concepts	Resources/Activities	Vocabulary	Assessments
Chapter 1, Lesson 1	3.PS.1	Is the world in motion or are you? What forces cause motion? What is motion?	Try It! Lab—p. 2—What can magnetic force move?  Student text p. 8-13  Watermelon Hurling—Untamed Science Video (Pearson Realize)  Position, Motion, and Speed—Interactive Activity (Pearson Realize)  What is motion? 60 second video (Pearson Realize)	force magnetic position motion speed	Lesson Quiz (online) Lesson Check (T13b) Answers in student book

Chapter 1, Lesson 2	3.PS.1	How does mass effect motion? How does force effect motion?	How does mass effect motion?—Explore it lab (p. 14)  Student text p. 15-21  Forces and motion—Interactive activity (Pearson Realize)  Investigate it! Lab—p. 26-27—How can you describe motion?	friction mass force	Lesson Quiz (online) Lesson Check (21b) Answers in student book
Review Chapter 1, Lesson 1 and 2	3.PS.1	Is the world in motion or are you? What forces cause motion? What is motion? How does mass effect motion? How does force effect motion?	Vocabulary Smart Cards  Chapter 1 Study Guide (Lesson 1 and 2 Only)  Chapter 1 Review (Lesson 1 and 2 Only)		Chapter 1 Test (Lesson 1 and 2 only)  Answers to Chapter 1 Review (Lesson 1 and 2 only)

Chapter 2, Lesson 1, 2, and 5	3.PS.3, 3.PS.4 (background knowledge)	What are some forms of energy? How does sound travel? How can we describe sound?	Student book p. 47, 49, 56, 57, and 70-75  Explore it! Lab (p. 70) What can affect the sound made by a rubber band?  What form of energy is this? 60 second video (Pearson Realize)  What is sound? Interactive activity  Teachers Pay Teachers Unit—Sound travels through solids, liquids, and gases	energy (NCA) sound volume amplitude pitch (NCA)	Lab sheet  Sound Test—Teachers Pay Teachers  Lesson 5 Lesson Quiz (online)  Lesson 6 Lesson Check (T75b)
Part 2, Lesson 2	3.PS.2	How can a simple machine solve a problem? What is a machine?	Student book p. 350-355  What is a machine? 60 second video (Pearson Realize)  What is a machine? Editable presentation and graphic organizer (Pearson Realize)	work inclined plane wheel and axle pulley wedge screw lever	Lesson check p. T355 B Lesson quiz (online) Answers in student book

Part 2, Lesson 3	3.E.1 3.E.2 3.E.3	What is the design process?	Student book p. 357-361  Explore it activity—Which design transfers sound the best? P. 356  Investigate it!—What makes a bridge strong? P. 362-363	design process prototype research	Lesson Check p. 361b Lesson quiz (online) Answers in student book Lab sheets
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# Curriculum Mapping

## Science – 3<sup>rd</sup> Grade

3<sup>rd</sup> Nine Weeks

Unit Chapter Lesson	Indiana Standard(s)	Key Concepts	Resources/Activities	Vocabulary	Assessments
4 <sup>th</sup> grade, Chapter 6, Lesson 1	3.ESS.3	How are minerals classified?	Try It! Lab—p. 232  Student book p. 238-243  How are minerals classified? 60 second video (Pearson Realize)  Mineral Properties—Interactive Activity (Pearson Realize)  Mineral Identification Virtual Lab (Pearson Realize)	minerals rocks classified property luster hardness cleavage streak	Lab Sheet Lesson Check p. 243b Lesson Quiz (online) Answers in student book
4 <sup>th</sup> grade, Chapter 6, Lesson 2	3.ESS.3	How are rocks classified?	Explore It! Lab—What can you learn from rock layers?  Student book p. 244-253  How are rocks classified? 60 second video (Pearson Realize)  Categories of rocks—Interactive activity (Pearson Realize)	igneous metamorphic sedimentary rock cycle	Lab sheet Lesson check (T253b) Lesson Quiz (online) Answers in student book

Review Lesson 1 and 2	3.ESS.3	How are rocks and minerals classified?	<p>Vocabulary Smart Cards p. 281 (4<sup>th</sup> grade)</p> <p>Study Guide—Lessons 1 and 2 only</p> <p>Chapter 6 Review—Lesson 1 and 2 only</p>		Rocks and Minerals test Chapter 6 Review answers
3 <sup>rd</sup> Grade, Chapter 5, Lesson 4	3.ESS.4	What can we learn from fossils?	<p>What can fossils tell us? 60 second video (Pearson Realize)</p> <p>Daily Science (Evan Moor) Fossil Lessons</p> <p>Explore It! Lab—What can a fossil tell you?</p> <p>Chapter 4 Study Guide (Lesson 4 only)</p>	extinct fossils	Answers in student book Lab Sheet Daily Science answers Lesson Check T227b Lesson Quiz (online)



**Curriculum Mapping**  
**Science – 3<sup>rd</sup> Grade**  
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Unit Chapter Lesson	Indiana Standard(s)	Key Concepts	Resources/Activities	Vocabulary	Assessments
Chapter 3, Lesson 1	3.LS.3	How do plants grow and change? How can you classify plants?	Try It! Lab—How do plants change (p. 102)  Student book p. 108-115  Untamed Science Video—What plant part is the most important? (Pearson Realize)  How can you classify plants? 60 second video (Pearson Realize)  Tree Classification Virtual Lab (Pearson Realize)	flowering plants spores coniferous	Lesson Check p. T115b Lesson quiz (online) Answers in student book Lab sheet

Chapter 3, Lesson 2	3.LS.2 3.LS.3	How do plants grow and change? How does sunlight affect plant survival?	Explore It! Lab—How does sunlight affect plant survival?—p. 116  Student book p. 117-121  How does sunlight affect plants?—Interactive activity (Pearson Realize)  Plants use leaves to make food (60 second video)  Photosynthesis interactive activity (Pearson realize)	photosynthesis carbon dioxide oxygen	Lesson Check p. T121b Lesson quiz (online) Answers in student book Lab sheet
Chapter 3, Lesson 3	3.LS.2 3.LS.3	How do plants grow and change?	Explore it! Lab—Which way will roots grow? (p. 122)  Student book p. 123-127  How do plants use roots and stems to grow? 60 second video (Pearson Realize)  Roots and Stems Editable Presentation (Pearson Realize)  Cactus roots, stems, and leaves	nutrient roots stems tap root fibrous root structures (NCA)	Lesson check (p. T127b) Lesson quiz (online) Answers in student book Lab sheet Graphic organizer (Compare/contrast 2 types of roots)

Chapter 3, Lesson 4	3.LS.1 3.LS.2 3.LS.3	How do plants use flowers or cones to reproduce?	Explore it! Lab—What is inside a seed? P. 128  Student book p. 129-133	reproduce pollinate germinate cones	Lesson Check p. T133b Lesson quiz (online) Lab sheet Answers in student book
Chapter 3, Lesson 5	3.LS.3	What are the life cycles of some plants?	Student book p. 134-139  Plant life cycles 60 second video (Interactive Activity)  What are the life cycles of some plants? Worksheet	life cycle flowering plant conifer plant	Lesson Check p. T139b Lesson quiz (online) Answers in student book  What are the life cycles of some plants? worksheet

Chapter 3 Review	3.LS.1 3.LS.2 3.LS.3	How do plants grow and change? How can you classify plants? How do plants grow and change? How does sunlight affect plant survival? How do plants grow and change? How do plants use flowers or cones to reproduce? What are the life cycles of some plants?	Investigate it! Lab—How does water move through celery? P. 140-141  Vocabulary Smart Cards p. 137 and 139  Chapter 3 Study Guide p. 147  Chapter 3 Review p. 148-149		Lab sheet Answers for chapter review  Chapter 3 assessment
Chapter 4, Lesson 1	3.LS.1 (background knowledge)	How can you classify animals?	Student book p. 161-167  Untamed Science-Dog DNA (Pearson Realize)  How can you classify animals? 60 second video (Pearson Realize)  Classifying Animals Virtual Lab (Pearson Realize)  Classifying animals interactive activity (Pearson Realize)	trait vertebrate invertebrate arthropods	Lesson check p. T167b Lesson quiz (online) Answers in student book

Chapter 4, Lesson 2	3.LS.1 3.LS.4	How are offspring like their parents?	<p>My Planet Diary p. 168 and blackline master</p> <p>Student book p. 169-175</p> <p>How are offspring like their parents? 60 second video (Pearson Realize)</p> <p>How are offspring like their parents? Editable presentation and graphic organizer (Pearson Realize)</p> <p>Adaptations and Survival—Pearson Flipped Video (Pearson Realize)</p> <p>Characteristics and behaviors interactive activity (Pearson Realize)</p>	inherit instinct	Lesson check p. T175b Lesson quiz (online) Answers in student book How are offspring like their parents? Graphic organizer
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Chapter 4, Lesson 3	3.LS.1 (background knowledge)	What are the life cycles of some animals?	<p>Explore It! Lab—What is the life cycle of a grain beetle? P. 176</p> <p>Student book p. 177-183</p> <p>Life cycle of a grain beetle interactive activity (Pearson Realize)</p> <p>Animal Life Cycles (60 second video)</p> <p>Animal Life Cycles interactive activity (Pearson Realize)</p> <p>Comparing Life Cycles—Pearson Flipped Video (Pearson Realize)</p>	larva pupa metamorphosis	Lesson check p. T183b Lesson quiz (online) Answers in student book Lab sheet
Chapter 4 Review	3.LS.1 3.LS.2 3.LS.3	How can you classify animals? How are offspring like their parents? What are the life cycles of some animals?	<p>Vocabulary Smart Cards p. 187 and 189</p> <p>Study Guide p. 191</p> <p>Chapter Review p. 192-193</p>		Chapter Review Answers  Chapter 4 Assessment

Additional Resources	3.LS.4 3.LS.1	<p>Why do animals live in groups?</p> <p>How are babies like their mothers?</p>	<p>Students will complete and discuss an interactive notebook activity about why animals live in groups. They will use this information to help create and argument for why their animal lives in a group.</p> <p>Teachers will also use this instruction to discuss similarities among baby animals and their parents.</p>		<p>Students will complete the project about a particular group of animals that lives in a group.</p>
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### 3<sup>rd</sup> Grade Science Standards and Descriptions

<i>Physical Science (PS)</i>
<i>3.PS.1 Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.</i>
<i>3.PS.2 Identify types of simple machines and their uses. Investigate and build simple machines to understand how they are used.</i>
<i>3.PS.3 Generate sound energy using a variety of materials and techniques, and recognize that it passes through solids, liquids, and gases (i.e. air).</i>
<i>3.PS.4 Investigate and recognize properties of sound that include pitch, loudness (amplitude), and vibration as determined by the physical properties of the object making the sound.</i>

<i>Earth and Space Science (ESS)</i>
<i>3.ESS.1 Obtain and combine information to determine seasonal weather patterns across the different regions of the United States.</i>
<i>3.ESS.2 Develop solutions that could be implemented to reduce the impact of weather related hazards.</i>
<i>3.ESS.3 Observe the detailed characteristics of rocks and minerals. Identify and classify rocks as being composed of different combinations of minerals.</i>
<i>3.ESS.4 Determine how fossils are formed, discovered, layered over time, and used to provide evidence of the organisms and the environments in which they lived long ago.</i>

<i>Life Science (LS)</i>
<i>3.LS.1 Analyze evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.</i>
<i>3.LS.2 Plan and conduct an investigation to determine the basic needs of plants to grow, develop, and reproduce.</i>



**3.LS.3** *Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.*

**3.LS.4** *Construct an argument that some animals form groups that help members survive.*

**Engineering (E)**

**3-5.E.1** *Identify a simple problem with the design of an object that reflects a need or a want. Include criteria for success and constraints on materials, time, or cost.*

**3-5.E.2** *Construct and compare multiple plausible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.*

**3-5.E.3** *Construct and perform fair investigations in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.*