

7th Grade Science Pacing Guide 3rd Quarter 2014-15

HOP: Habits of Practice

Practice 1: Asking Questions/Defining Problems

Practice 2: Developing and Using Models

Practice 3: Planning/Carrying Out Investigations

Practice 4: Analyzing/Interpreting Data

Practice 5: Using Math & Computational Thinking

Practice 6: Constructing Explanations/Designing Solutions

Practice 7: Engaging in Argument from Evidence

Practice 8: Obtaining/Evaluating/Communicating Info

Practice 9: Thinking about my Thinking (Metacognition)

Standard	Weeks	SPI/CCSS	Chapter/Pages	Concept	Labs/Activities/ Informational Text	NGSS Connections/ Habits of Practice
Standard 1: Cells	Week 1-2	<p>SPI 0707.1.1 Identify and describe the function of the major plant and animal cell organelles.</p> <p>SPI 0707.Inq.3 Interpret and translate data into a table, graph, or diagram.</p> <p>SPI 0707.Inq.4 Draw a conclusion that establishes a cause and effect relationships supported by evidence.</p> <p>CCSS Reading 3 CCSS Writing 2</p>	Chapter 2, Section 3	Unique characteristics and functions of the major cell structures	<p>Lab: Using the Microscope</p> <p>Lab: Comparing Plant and Animal Cells</p> <p>Activity: Is it Made of Cells? Pre-Assessment</p> <p>Activity: Cell Alive Internet Activity</p> <p>Activity: The incredible, Edible Cell</p> <p>Activity: Cell Project</p> <p>Activity: City Cell</p> <p>Activity: I have- Who has for parts of a cell</p> <p>Informational Text: Parts of a Cell</p>	<p>NGSS: Structure and Function NGSS: Scale, Proportion, and Quantity</p> <p>HOP: Practice 2</p>

<p>Week 3-4</p>	<p>SPI 0707.1.2 Interpret a chart to explain the integrated relationships that exist among cells, tissues, organs, and organ systems. SPI 0707.1.3 Explain the basic functions of a major organ system. SPI 0707.Inq.3 Interpret and translate data into a table, graph, or diagram. SPI 0707.Inq.4 Draw a conclusion that establishes a cause and effect relationships supported by evidence. SPI 0707.Inq.5 Identify a faulty interpretation of data that is due to bias or experimental error</p> <p>CCSS Reading 3 CCCSS Reading 6 CCSS Writing 1 CCSS Writing 8 CCSS Writing 9</p>	<p>Chapter 8, Section 1; Chapters 8 to 11, Various Sections</p>	<p>Levels of organization of living things; Major roles of the major types of cells, tissues, organs, and organ systems; How do organ systems work together</p>	<p>Lab: Body Systems Rotation Lab Lab: Measuring Lung Capacity Activity: Human Body Pre-Assessment Activity: The Neuron Game Activity: Body Systems Foldable Activity: Body Systems Web quest Informational Text: Should Donors Be Able to Sell Organs? Informational Text: 3-inch Nail Removed from Man’s Brain Informational Text- Packet of Body System Articles with summative writing</p>	<p>NGSS: Systems and System Models NGSS: Structure and Function HOP: Practice 2 & 8</p>
<p>Week 5</p>	<p>SPI 0707.1.5 Explain how materials move through simple diffusion. SPI 0707.Inq.1 Design a simple experimental procedure with an identified control and</p>	<p>Chapter 3, Section 1</p>	<p>Concentration differences (gradients); how materials move through simple diffusion</p>	<p>Lab: The Egg Lab Lab: Permeability Inquiry Lab Lab: Diffusion Lab Informational Text: Why</p>	<p>NGSS: Cause and Effect HOP: Practice 1 & 3</p>

	<p>appropriate variables.</p> <p>SPI 0707.Inq.2 Select tools and procedures needed to conduct a moderately complex experiment</p> <p>SPI 0707.Inq.3 Interpret and translate data into a table, graph, or diagram.</p> <p>SPI 0707.Inq.4 Draw a conclusion that establishes a cause and effect relationships supported by evidence.</p> <p>SPI 0707.Inq.5 Identify a faulty interpretation of data that is due to bias or experimental error</p> <p>CCSS Reading 2 CCSS Reading 3 CCSS Reading 9 CCSS Writing 1 CCSS Writing 9</p>			<p>Can't We Drink Sea Water?</p> <p>Informational Text: Osmosis vs Diffusion</p>	
<p>Week 6</p>	<p>SPI 0707.1.4 Sequence a series of diagrams that depict chromosome movement during plant cell division.</p> <p>SPI 0707.Inq.3 Interpret and translate data into a table, graph, or diagram</p>	<p>Chapter 3, Section 3</p>	<p>The stages through which cells pass as they divide and what events occur at those stages</p>	<p>Lab: Mitosis in Plant Cells</p> <p>Activity: Mitosis Web Quest</p> <p>Activity: Building a Mitosis Model</p> <p>Activity: Cell Division Foldable</p> <p>Informational Text: Cancer Cell Articles for Argument</p>	<p>NGSS: Structure and Function</p> <p>HOP: Practice 2 & 9</p>

					Information Text: Mitosis-When Cells Split Apart	
Standard 3: Flow of Matter and Energy	Week 7-8	<p>SPI 0707.3.1 Compare the chemical compounds that make up the reactants and the products of photosynthesis and respiration.</p> <p>SPI 0707.3.2 Interpret a diagram to explain how oxygen and carbon dioxide are exchanged between living things and the environment.</p> <p>SPI 0707.Inq.3 Interpret and translate data into a table, graph, or diagram.</p> <p>SPI 0707.Inq.4 Draw a conclusion that establishes a cause and effect relationships supported by evidence.</p> <p>SPI 0707.Inq.5 Identify a faulty interpretation of data that is due to bias or experimental error</p> <p>CCSS Reading 3 CCSS Reading 9 CCSS Writing 2 CCSS Writing 9</p>	Chapter 3, Section 2; Chapter 7, Section1	What cell organelles are involved in photosynthesis and respiration; major events that occur during photosynthesis and cellular respiration	<p>Lab: Leaf Chromatography</p> <p>Lab: Respiration in Yeast</p> <p>Lab: Elodea & Photosynthesis Lab</p> <p>Lab: Where do Plants Get their Food?</p> <p>Activity: Photosynthesis/Respiration Notebook Poster</p> <p>Informational Text: Why Leaves Change</p> <p>Informational Text: Zooxanthellae...What's That?</p> <p>Informational Text: Article from Common Core Training on Photosynthesis</p>	<p>NGSS: Energy & Matter</p> <p>NGSS: System and System Models</p> <p>HOP: Practice 6 & 8</p>