

6th Grade Science Pacing Guide 2nd Quarter 2016-2017

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: Metacognition

Standard	Week	SPI/CCSS	Chapter/ Sections	Concept	Labs/Activities/ Informational Text	NGSS Connections/ Habits of Practice
Standard 8: The Atmosphere	Week 1	<p>SPI 0607.8.1 Analyze data to identify events associated with heat convection in the atmosphere.</p> <p>SPI 0607.Inq.2 Select tools and procedures needed to conduct a moderately complex experiment.</p> <p>SPI 0607.Inq.3 Interpret and translate data in a table, graph, or diagram.</p> <p>SPI 0607.Inq.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence.</p> <p>SPI 0607.T/E.1 Identify the tools and procedures needed to test the design features of a prototype.</p> <p>SPI 0607.T/E.2 Evaluate a protocol to determine if the engineering design process was successfully applied.</p> <p>SPI 0607.T/E.3 Distinguish between the intended benefits and the unintended consequences of a new technology.</p> <p>CCSS Reading 6-8.2</p>	Chapter 6 Section 2, 3	The earth is surrounded by an active atmosphere that is controlled by an energy system.	<p>BPS Lab: Floating and Sinking</p> <p>Lab: Mix Me a Drink</p> <p>Lab: Does a Can of Diet Soda Float</p> <p>Informational Text: What is Heat?</p> <p>Assessment Probe: Camping Trip</p> <p>Lab: Hot Air</p> <p>Assessment Probe: Iron Bar</p> <p>Assessment Probe: Hot and Cold Balloons</p> <p>Activity: Hot Air Mobile</p> <p>Lab: Hurricane Lamp</p> <p>Formative Assessment: Directed Paraphrasing</p>	<p>NGSS: Systems and System Models</p> <p>HOP: 4, 6</p>
	Week 2	<p>SPI 0607.8.2 Recognize the connection between the sun's energy and the wind.</p> <p>SPI 0607.Inq.3 Interpret and translate data in a table, graph, or diagram.</p> <p>SPI 0607.Inq.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence.</p> <p>CCSS Reading 6-8.2</p>	Chapter 6 Section 3	The earth is surrounded by an active atmosphere that is controlled by an energy system.	<p>Informational Text: Atmospheric Layers</p> <p>Assessment Probe: Global Warming</p> <p>Informational Text: Is The Earth Getting Warmer</p> <p>Informational Text: Convection Currents</p> <p>Activity: Wind Pattern Flipbook</p> <p>Activity: The World's Winds</p>	<p>HOP: 3, 8</p>

Standard 6: The Universe					Lab: The Power of the Sun (157 in textbook under Inclusion Strategies) Informational Text: Air Pressure and Wind	
	Week 3-4	SPI 0607.8.3 Describe how temperature differences in the ocean account for currents. SPI 0607.Inq.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence. SPI 0607.Inq.5 Identify a faulty interpretation of data that is due to bias or experimental error. SPI 0607.T/E.1 Identify the tools and procedures needed to test the design features of a prototype. SPI 0607.T/E.2 Evaluate a protocol to determine if the engineering design process was successfully applied. SPI 0607.T/E.3 Distinguish between the intended benefits and the unintended consequences of a new technology. CCSS Reading 6-8.2 CCSS Reading 6-8.3	Chapter 5 Section 1, 2	The earth is surrounded by an active atmosphere that is controlled by an energy system.	Informational Text: Ocean Water on the Move Lab: Make Convection Currents Informational Text: A Drops Journey Lab: Do Hot Liquids Rise? Assessment Probe: Where Would It Fall BPS Lab: Convection Lab: Convection Current Informational Text: Science from Bath Toys Activity: Duck, Duck, Data Informational Text: Currents and Climate	NGSS: Cause& Effect, Energy & Matter HOP: Practices 1, 2
	Week 5-6	SPI 0607.8.4 Interpret meteorological data to make predictions about the weather. SPI 0607.Inq.3 Interpret and translate data in a table, graph, or diagram. SPI 0607.Inq.5 Identify a faulty interpretation of data that is due to bias or experimental error. CCSS Reading 6-8.1 CCSS Reading 6-8.2 CCSS Reading 6-8.3 CCSS Reading 6-8.4 CCSS Reading 6-8.4 CCSS Reading 6-8.8 CCSS Writing 6.1 CCSS Writing 6.2 CCSS Writing 6.4	Chapter 7 Section 1, 2, 3, 4	The earth is surrounded by an active atmosphere that is controlled by an energy system.	Informational Text: Weather Fronts Informational Text: Weather: Air Patterns Activity Packet: The Best of Science of Weather Informational Text: Forget The Rain Activity: Weather Symbol Characters Assessment Probe: Thermometer Activity: Interpreting Weather Maps	NGSS: Cause& Effect, System/System Models HOP: Practices 4, 8

		CCSS Writing 6.6			Activity: EdHeads Activity: Weather Scenarios Helpers Informational Text: What's the Forecast Activity: Newspaper Weather Inquiry Informational Text: Meteorologists Informational Text: Extreme Weather	
	Week 7	SPI 0607.6.1 Use data to draw conclusions about the major components of the universe. SPI 0607.Inq.3 Interpret and translate data in a table, graph, or diagram. SPI 0607.Inq.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence. CCSS Reading 6-8.1 CCSS Reading 6-8.2 CCSS Reading 6-8.7 CCSS Reading 6-8.9 CCSS Writing 6.6 CCSS Writing 6.8	Chapter 8 Sections 1, 2, 3, 4 Chapter 9 Section 5	The cosmos is vast and explored well enough to know its basic structure and operational principles.	Activity: Space Rocks! A Meteorite Game Formative Assessment: First Word Last Word Activity: Solar System Science Informational Text: Beyond the Solar System Lab: Cook Up a Comet Informational Text: Comet Vs. Asteroid	
	Week 8-9	SPI 0607.6.2 Explain how the relative distance of objects from the earth affects how they appear. SPI 0607.Inq.3 Interpret and translate data in a table, graph, or diagram. SPI 0607.Inq.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence. SPI 0607.Inq.5 Identify a faulty interpretation of data that is due to bias or experimental error. CCSS Reading 6-8.5 CCSS Reading 6-8.7 CCSS Reading 6-8.9 CCSS Writing 6.4 CCSS Writing 6.6 Supplemental Instruction and Review (Quarter Testing)	Chapter 9 Section 1, 2, 3, 4	The cosmos is vast and explored well enough to know its basic structure and operational principles.	Activity: Solar System Model Activity: Mission Prep 101 Activity: Toilet Paper Solar System	HOP: 2, 5

