6th Grade Science Pacing Guide 4th 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 10: Energy	Week 1	**SPI 0607.12.2** Identify materials that can conduct electricity. **SPI 0607.Inq.1** Design a simple experimental procedure with an identified control and appropriate variables. **SPI 0607.Inq.2** Select tools and procedures needed to conduct a moderately complex experiment. **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. **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 Writing 6.9**	Chapter 14 Section 1	Identify how simple circuits are associated with the transfer of electrical energy when heat, light, sound, and chemical changes are produced.	**Formative Assessment:** Focused Listing **Activity:** Classroom Energy Poster Puzzle (see website listed on example) **Informational Text:** When is Carbon an Electrical Conductor **Informational Text:** Electric Current **Informational Text:** Static Electricity	**NGSS:** Energy & Matter **HOP:** 1, 7
	Week 2	**SPI 0607.12.1** Identify how simple circuits are associated with the transfer of electrical energy when heat, light, sound, and chemical changes are produced. **SPI 0607.Inq.1** Design a simple experimental procedure with an identified control and appropriate variables. **SPI 0607.Inq.2** Select tools and procedures needed to conduct a moderately complex experiment. **SPI 0607.Inq.3** Interpret and translate data in a table, graph, or diagram.	Chapter 14 Sections 1, 4	Various forms of energy are constantly being transformed into other types without any net loss of energy from the system.	**Assessment Probe:** Batteries, Bulbs, Wires **BSP Lab:** Electrical Circuits **Lab:** Basic Circuits **Lab:** Series & Parallel Circuits **Lab:** Professor Gig-A-Watt Circuits (Contact EPB for	**NGSS:** Energy & Matter **HOP:** 2, 4

		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 6-8.3** **CCSS Reading 6-8.7** **CCSS Writing 6.1**			details) **Activity**: Circuit Drawing Quiz **Activity**: Circuit Web quest **Formative Assessment:** Muddiest Point	
	Week 3-5	**TCAP ENRICHMENT**				
	Week 6	**TCAP WEEK**			**Activity:** The Most Peeptacular Project!	
	Week 7	**SPI 0707.7.1** Use a table of physical properties to classify minerals. **SPI 0707.7.2** Label a diagram that depicts the three different rock types.	7^{th} Grade Standards		**Activity**: Sedimentary Rock Formation Models Packet	
	Week 8-9	**SPI 0707.7.3** Identify the major processes that drive the rock cycle. Supplemental Instruction/ Testing (Quarter Exam)	7^{th} Grade Standard		**Activity**: This Cycle Rocks Packet	