## 7<sup>th</sup> Grade Science Pacing Guide 1st Quarter 2014-15

**HOP**: Habits of Practice

Practice 1: Asking Questions/Defining Problems Practice 4: Analyzing/Interpreting Data Practice 7: Engaging in Argument from Evidence

Practice 3: Planning/Carrying Out Investigations Practice 6: Constructing Explanations/Designing Solutions Practice 9: Thinking about my Thinking (Metacognition)

Standard	Weeks	SPI/CCSS	Chapter/Pages	Concept	Labs/Activities/Informational Text	NGSS Connections/ Habits of Practice
Standard 7: The Earth		All Inquiry and Technology/Engineering SPI's are embedded	Chapter 1, Sections 2, 4	Introduction to Science	Activity: Mineral Sort Classification Activity	NGSS: Systems/ System Models HOP: Practice 1
	Week 1	<b>SPI 0707.7.1</b> Use a table of physical properties to classify minerals.	Chapter 13, Sections 1, 2 CC Reading	The characteristics of the common types of minerals	Lab: Dichotomous Key for Minerals  Lab: Identifying Minerals	NGSS: Patterns HOP: Practice 3 & 4
		CCSS Reading 2  SPI 0707.Inq.2 Select tools and procedures needed to conduct a moderately complex experiment.			Activity: What are Minerals Web-quest Activity: Mineral Identification Web quest	
		SPI 0707.Inq.3 Interpret and translate data into a table, graph, or diagram.			Activity: Mineral Identification Web Activity Informational Text: Blood Diamonds	
					Information Text: Do we take minerals for granted?	

	Week 2-3	SPI 0707.7.2 Label a diagram that depicts the three different rock types. SPI 0707.7.3 Identify the major processes that drive the rock cycle. SPI 0707.Inq.4 Draw a conclusion that establishes a cause and effect relationships supported by evidence. CCSS Reading 2	Chapter 14, Sections 1, 2, 3, and 4	The three major rock types and how they are formed, explain the major kinds of activities that drive the rock cycle	Lab: Rock Cycle Simulation Lab (Crayon Lab)  Activity: Pre-Assessment Versions 1 and 2  Activity: Journey on the Rock Cycle  Activity: Rock Cycle Web quest  Informational Test: Rocks, Minerals, and Fossils  Informational Text: Pumice "Island" found in Pacific	NGSS: Cause & Effect NGSS: Energy & Matter: Flows, Cycles, Conservation HOP: Practice 2
	Week 4	SPI 0707.7.4 Differentiate among the characteristics of the earth's three layers.  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.	Chapter 15, Section 1	The characteristics of the three layers of the earth	Lab: Candy bar layers  Lab: Edible Tectonics  Activity: Foldable for Earth's Layers  Activity: Earth Model and Journey to the center of the Earth Writing	NGSS: Scale, Proportion, Quantity HOP: Practice 2
	Week 5	SPI 0707.7.5 Recognize that lithospheric plates on the scale of continents and oceans continually move at rates of centimeters per year.  SPI 0707.Inq.3 Interpret and translate data into a table, graph, or diagram.  SPI 0707.Inq.4 Draw a conclusion	Chapter 15, Sections 2, 3	The basic causes of tectonic plate movement and the rate of that movement	Lab: Graham Cracker Lab  Activity: Plate Tectonics Computer Simulation	NGSS: Cause & Effect NGSS: Systems/ System Models HOP: Practice 1 & 2

Week 6	that establishes a cause and effect relationships supported by evidence.  SPI 0707.7.6 Describe the relationship between plate movements and earthquakes, mountain building, volcanoes, and sea floor spreading.  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	Chapter 15, Sections 2-4; Chapter 16.1; Chapter 17.1	What events occur at divergent and convergent plate boundaries, the connection between different kinds of plate boundaries and major types of geological events	Lab: Oreo Cookie Lab  Lab: Plate Tectonics  Activity: Investigating the Earth's Crust  Informational Text: Disaster in Haiti  Informational Text: Southern Appalachians	NGSS: System/ System Models NGSS: Stability & Change HOP: Practice 2 & 4
	evidence.  SPI 0707.Inq.5 Identify a faulty interpretation of data that is due to bias or experimental error.  CCSS Reading 2, CCSS Reading 4			Informational Text: Deep Sea Volcano	
Week 7-8	SPI 0707.7.7 Analyze and evaluate the impact of man's use of earth's land, water, and atmospheric resources.  SPI 0707.Inq.1 Design a simple experimental procedure with an identified control and appropriate variables.	Chapter 18, Sections 1-3	Renewable and non- renewable resources, how human activities affect natural resources and sustainability	Lab: Oil Spill Cleanup Lab  Lab: Candy Commodities  Activity: Seminar on Coal Mining  Activity: Greenhouse Effect Computer Simulation	NGSS: Cause & Effect NGSS Patterns HOP: Practice 2. 4. & 7

	SPI 0707.Inq.2 Select tools and procedures needed to conduct a moderately complex experiment  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.  CCSS Reading 5 CCSS Reading 6 CCSS Reading 7 CCSS Reading 8			Informational Text: Polar Bears and Climate Change Informational Text: Climate Change Data Informational Text: Trash City Article	
Week 9	All Earth Science SPI's  CC Writing 1, 7, 9	E	Exam Week	Activity: PARCC Type Research Project Culminating Activity for Quarter 1 Informational Texts	NGSS: Cause & Effect NGSS: Stability & Change HOP: Practice 7 & 8