

7th Science Pacing Guide (by quarter)

		Effective August 2009	7th Grade Science Curriculum Pacing Guide	
Date Completed	Pacing	SPI	State Performance Indicator	Standard Category
	All	SPI 0707.Inq.1	Design a simple experimental procedure with an identified control and appropriate variables.	Inquiry
	All	SPI 0707.Inq.2	Select tools and procedures needed to conduct a moderately complex experiment.	Inquiry
	All	SPI 0707.Inq.3	Interpret and translate data into a table, graph, or diagram.	Inquiry
	All	SPI 0707.Inq.4	Draw a conclusion that establishes a cause and effect relationship supported by evidence.	Inquiry
	All	SPI 0707.Inq.5	Identify a faulty interpretation of data that is to bias or experimental error. due	Inquiry
	All	SPI 0707.T/E.1	Identify the tools and procedures needed to test the design features of a prototype.	Inquiry
	All	SPI 0707.T/E.2	Evaluate a protocol to determine if the engineering design process was successfully applied.	Inquiry
	All	SPI 0707.T/E.3	Distinguish between the intended benefits and the unintended consequences of a new technology.	Inquiry
	All	SPI 0707.T/E.4	Differentiate between adaptive and assistive engineered products (e.g., food, biofuels,	Inquiry

			medicines, integrated pest management).	
	6 th grade/1A	SPI 0707.7.1	Use a table of physical properties to classify minerals.	Earth and Space
	6 th grade/1A	SPI 0707.7.2	Label a diagram that depicts the three different rock types.	Earth and Space
	6 th grade/1A	SPI 0707.7.3	Identify the major processes that drive the rock cycle.	Earth and Space
	6 th grade/1A	SPI 0707.7.4	Differentiate among the characteristics of the earth's three layers.	Earth and Space
	1B	SPI 0707.7.5	Recognize that lithospheric plates on the scale of continents and oceans continually move at rates of centimeters per year.	Earth and Space
	1B	SPI 0707.7.6	Describe the relationship between plate movements and earthquakes, mountain building, volcanoes, and sea floor spreading.	Earth and Space
	1B	SPI 0707.7.7	Analyze and evaluate the impact of man's use of earth's land, water, and atmospheric resources.	Earth and Space
	1B	SPI 0707.11.5	Compare and contrast the different parts of a wave.	Earth and Space
	1B	SPI 0707.11.6	Differentiate between transverse and longitudinal waves in terms of how they are produced and transmitted.	Earth and Space
	2A	SPI 0707.11.3	Apply proper equations to solve basic problems pertaining to distance, time, speed, and velocity.	Physical Science
	2A	SPI 0707.11.4	Identify and explain how Newton's laws of	Physical Science

			motion relate to the movement of objects.	
	2A	SPI 0707.11.1	Differentiate between the six simple machines	Physical Science
	2A	SPI 0707.11.2	Determine the amount of force needed to do work using different simple machines.	Physical Science
	2B	SPI 0707.1.1	Identify and describe the function of the major plant and animal cell organelles.	Life Science
	2B	SPI 0707.1.2	Interpret a chart to explain the integrated relationships that exists among cells, tissues, organs, and organ systems.	Life Science
	2B	SPI 0707.1.3	Explain the basic functions of a major organ system.	Life Science
	3A	SPI 0707.1.4	Sequence a series of diagrams that depict chromosome movement during plant cell division.	Life Science
	3A	SPI 0707.1.5	Explain how materials move through simple diffusion.	Life Science
	3A	SPI 0707.3.1	Compare the chemical compounds that make up the reactants and products of photosynthesis and respiration.	Life Science
	3A	SPI 0707.3.2	Interpret a diagram to explain how oxygen and carbon dioxide are exchanged between living things and the environment.	Life Science
	3B	SPI 0707.4.1	Classify methods of reproduction as sexual or asexual.	Life Science
	3B	SPI 0707.4.2	Match flower parts with their reproductive functions.	Life Science

	3B	SPI 0707.4.3	Describe the relationship among genes, chromosomes, and inherited traits.	Life Science
	3B	SPI 0707.4.4	Interpret a Punnett square to predict possible genetic combinations passed from parents to offspring during sexual reproduction.	Life Science
	4 8 th Grade	SPI 0807.9.1	Recognize that all matter consists of atoms.	Physical Science
	4 8 th Grade	SPI 0807.9.2	Identify the common outcome of all chemical changes.	Physical Science
	4 8 th Grade	SPI 0807.9.3	Classify common substances as elements or compounds based on their symbols or formulas.	Physical Science
	4 8 th Grade	SPI 0807.9.4	Differentiate between a mixture and a compound.	Physical Science
	4 8 th Grade	SPI 0807.9.6	Compare the particle arrangement and type of particle motion associated with different states of matter.	Physical Science