

8th Science Pacing Guide (by quarter)

		Effective August 2009	8th Grade Science Curriculum Pacing Guide	
Date Completed	Pacing	SPI	State Performance Indicator	Standard Category
	7th/ 1A	SPI 0807.9.1	Recognize that all matter consists of atoms.	Physical Science
	7th/ 1A	SPI 0807.9.2	Identify the common outcome of all chemical changes.	Physical Science
	7th/ 1A	SPI 0807.9.4	Differentiate between a mixture and a compound.	Physical Science
	7th/ 1A	SPI 0807.9.6	Compare the particle arrangement and type of particle motion associated with different states of matter.	Physical Science
	All	SPI 0807.Inq.1	Design a simple experimental procedure with an identified control and appropriate variables.	Inquiry
	All	SPI 0807.Inq.2	Select tools and procedures needed to conduct a moderately complex experiment.	Inquiry
	All	SPI 0807.Inq.3	Interpret and translate data into a table, graph, or diagram.	Inquiry
	All	SPI 0807.Inq.4	Draw a conclusion that establishes a	Inquiry

			cause and effect relationship supported by evidence.	
	All	SPI 0807.Inq.5	Identify a faulty interpretation of data that is due to bias or experimental error.	Inquiry
	All	SPI 0807.T/E.1	Identify the tools and procedures needed to test the design features of a prototype.	Technology & Engineering
	All	SPI 0807.T/E.2	Evaluate a protocol to determine if the engineering design process was successfully applied.	Technology & Engineering
	All	SPI 0807.T/E.3	Distinguish between the intended benefits and the unintended consequences of a new technology.	Technology & Engineering
	All	SPI 0807.T/E.4	Differentiate between adaptive and assistive engineered products (e.g., food, biofuels, medicines, integrated pest management).	Technology & Engineering
	1A	SPI 0807.5.1	Use a simple classification key to identify an unknown organism.	Life Science
	1A	SPI 0807.5.2	Analyze structural, behavioral, and physiological adaptations to predict which populations are likely to survive in a	Life Science

			particular environment.	
	1A	SPI 0807.5.3	Analyze data on levels of variation within a population to make predictions about survival under particular environmental conditions.	Life Science
	1B	SPI 0807.5.4	Identify several reasons for the importance of maintaining the earth's biodiversity.	Life Science
	1B	SPI 0807.5.5	Compare fossils found in sedimentary rock to determine their relative age.	Life Science
	2A	SPI 0807.9.3	Classify common substances as elements or compounds based on their symbols or formulas.	Physical Science
	2A	SPI 0807.9.7	Apply an equation to determine the density of an object based on its mass and volume.	Physical Science
	2A	SPI 0807.9.8	Interpret the results of an investigation to determine whether a physical or chemical change has occurred.	Physical Science
	2B	SPI 0807.9.5	Describe the chemical makeup of the atmosphere.	Physical Science

	2B	SPI 0807.9.9	Use the periodic table to determine the properties of an element.	Physical Science
	2B	SPI 0807.9.10	Identify the reactants and products of a chemical reaction.	Physical Science
	2B	SPI 0807.9.11	Recognize that in a chemical reaction the mass of the reactants is equal to the mass of the products (Law of Conservation of Mass).	Physical Science
	3A	SPI 0807.9.12	Identify the basic properties of acids and bases.	Physical Science
	3A	SPI 0807.12.1	Recognize that electricity can be produced using a magnet and wire coil.	Physical Science
	3A	SPI 0807.12.2	Describe the basic principles of an electromagnet.	Physical Science
	3B	SPI 0807.12.3	Distinguish among the Earth's magnetic field, a magnet, and the fields that surround a magnet and an electromagnet.	Physical Science
	3B	SPI 0807.12.4	Distinguish between mass and weight using appropriate measuring instruments and units.	Physical Science

	3B	SPI 0807.12.5	Determine the relationship among the mass of objects, the distance between these objects, and the amount of gravitational attraction.	Physical Science
	3B	SPI 0807.12.6	Illustrate how gravity controls the motion of objects in the solar system.	Physical Science