

## Pennsylvania State Science Standards Correlation

Standard Topic		Concept(s)		Inquiry Investigations™ Physical Science Series I - 1013060																			
				UNIT 1 THE WORLD OF PHYSICAL SCIENCE							UNIT 2 HEAT AND ENERGY					UNIT 3 LIGHT AND OPTICS					UNIT 4 ELECTRICITY		
				Exploring the Scientific Method LAB 1013080	Exploring the Science of Measurement LAB 1013082						Exploring Heat and Energy LAB 1013084					Exploring Light and Optics LAB 1013086					Exploring Electricity LAB 1013088		
Effect of temperature on the emergence of sponge creatures	Effect of pH on the emergence of sponge creatures	The metric system (SI)	Measuring density	Measuring temperature	Measuring pH	Measuring low concentrations of water pollutants	Heat of fusion of ice	Thermal conductivity of different metals	Thermal expansion	Demonstrating radiant heat and energy	Calibration of a thermometer	Visible light spectrum	What is color?	Reflection of light	Polarized light	The laser	The electroscope	Electrolytes	Resistors in series and parallel				
3.1 Unifying Themes	Explain the parts of a simple system and their relationship to each other.																						
	Describe the use of models as an application of scientific or technological concepts.																						
3.2 Inquiry and Design	Explain and apply scientific and technological knowledge.																						
	Apply process knowledge to make and interpret observations.																						
	Identify and use the elements of scientific inquiry to solve problems.																						
3.4 Physical Science, Chemistry, and Physics	Relate energy sources and transfers to heat and temperature.																						
3.8 Science, Technology, Human Factors	Explain how human ingenuity and technological resources satisfy specific human needs and improve the quality of life.																						

## Pennsylvania State Science Standards Correlation

Standard Topic		Inquiry Investigations™ Physical Science Series II - 1013061																	
		UNIT 1 GRAVITY				UNIT 2 MAGNETISM				UNIT 3 PROPERTIES OF SOUND				UNIT 4 FORCES, MOTION, AND SIMPLE MACHINES					
		Exploring Gravity LAB 1013090				Exploring Magnetism LAB 1013092				Exploring Sound Waves LAB 1013094				Exploring Force and Motion LAB 1013096			Exploring Simple Machines LAB 1013098		
		Determination of the density of a solid	Learning about gravitation	Archimedes principle	Teacher demonstration - pressure	Investigating the behavior of the magnetic compass	The magnetic field of a bar magnet	Constructing an electromagnet	Electromagnetic induction	Investigating properties of sound	Interaction of sound waves	Doppler effect	Observing the properties of a wave	Investigating Newton's laws of motion	Friction	Rotational inertia	Collisions	The lever	The pulley
3.1 Unifying Themes	Explain the parts of a simple system and their relationship to each other.																		
	Describe the use of models as an application of scientific or technological concepts.																		
3.2 Inquiry and Design	Explain and apply scientific and technological knowledge.																		
	Apply process knowledge to make and interpret observations.																		
	Identify and use the elements of scientific inquiry to solve problems.																		
3.4 Physical Science, Chemistry, and Physics	Identify and explain the principles of force and motion																		
3.8 Science, Technology, and Human Endorsement	Explain how human ingenuity and technological resources satisfy specific human needs and improve the quality of life.																		