

Washington State Science Standards Correlation

Component	Standard Topic	GLE	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
1.1 Properties: Understand how properties are used to identify, describe, and categorize substances, materials, and objects and how characteristics are used to categorize living things	Physical Systems	1.1.3 Wave Behavior	Understand sound waves, water waves, and light waves using wave properties, including amplitude, wavelength, and speed. Understand wave behaviors, including reflection, refraction, transmission, and absorption.																		
		1.1.4 Forms of Energy	Understand that energy is a property of matter, objects, and systems and comes in many forms.																		
1.2 Structures: Understand how components, structures, organizations, and interconnections describe systems	Earth and Space Systems	1.3.4 Processes and Interactions in the Earth System	Understand the processes that continually change the surface of the Earth.																		
2.1 Investigating Systems: Develop the knowledge and skills necessary to do scientific inquiry	Investigating Systems	2.1.1 Questioning	Understand how to ask a question about objects, organisms, and events in the environment.																		
		2.1.2 Planning and Conducting Safe Investigations	Understand how to plan and conduct simple investigations following all safety rules.																		
		2.1.3 Explaining	Apply understanding of how to construct a scientific explanation using evidence and inferential logic.																		
		2.1.4 Modeling	Analyze how models are used to investigate objects, events, systems, and processes.																		
		2.1.5 Communicating	Apply understanding of how to report investigations and explanations of objects, events, systems, and processes.																		
2.2 Nature of Science: Understand the nature of scientific inquiry	Nature of Science	2.2.1 Intellectual Honesty	Apply curiosity, honesty, skepticism, and openness when considering explanations and conducting investigations.																		
		2.2.2 Limitations of Science and Technology	Understand that scientific theories explain facts using inferential logic.																		
		2.2.3 Evaluating Inconsistent Results	Analyze inconsistent results from scientific investigations to determine how the results can be explained.																		
		2.2.4 Evaluating Methods of Investigation	Understand how to make the results of scientific investigations reliable and how to make the methods of investigation valid.																		
		2.2.5 Evolution of Scientific Ideas	Understand that increased comprehension of systems leads to new inquiry.																		
3.1 Designing Solutions: Apply knowledge and skills of science and technology to design solutions to human problems or meet challenges	Designing Solutions	3.1.1 Identifying Problems	Analyze common problems or challenges in which scientific design can be or has been used to design solutions.																		
		3.1.2 Designing and Testing Solutions	Apply the scientific design process to develop and implement solutions to problems or challenges.																		
		3.1.3 Evaluating Potential Solutions	Analyze multiple solutions to a problem or challenge.																		
3.2 Science, Technology, and Society: Analyze how science and technology are human endeavors, interrelated to each other, society, the workplace, and the environment	Science, Technology, and Society	3.2.1 All Peoples Contribute to Science and Technology	Analyze how science and technology have been developed, used, and affected by many diverse individuals, cultures, and societies throughout human history.																		
		3.2.3 Careers and Occupations Using Science, Mathematics, and Technology	Analyze the use of science, mathematics, and technology within occupational/career areas of interest.																		

**Washington State Science Standards Correlation**

Standard Topic	Strand	Standard Number	Concept(s)	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	The inclined plane	
1.1 Properties: Understand how properties are used to identify, describe, and categorize substances, materials, and objects and how characteristics are used to categorize living things.	Physical Systems	1.1.2 Motion of Objects	Understand the positions, relative speeds, and changes in speed of objects.																				
		1.1.3 Wave Behavior	Understand sound waves, water waves, and light waves using wave properties, including amplitude, wavelength, and speed. Understand wave behaviors, including reflection, refraction, transmission, and absorption.																				
1.2 Structures: Understand how components, structures, organizations, and interconnections describe systems	System Structure	1.2.1 Structure of Physical Earth/Space and Living Systems	Analyze how the parts of a system interconnect and influence each other.																				
	Physical Systems	1.2.2 Energy Transfer and Transformation	Understand how various factors affect energy transfers and that energy can be transformed from one form of energy to another.																				
1.3 Changes: Understand how interactions within and among systems can cause changes in matter and energy	Physical Systems	1.3.1 Nature of Force	Understand factors that affect the strength and direction of forces.																				
		1.3.2 Forces to Explain Motion	Understand how balanced and unbalanced forces can change the motion of objects.																				
2.1 Investigating Systems: Develop the knowledge and skills necessary to do scientific inquiry	Investigating Systems	2.1.1 Questioning	Understand how to ask a question about objects, organisms, and events in the environment.																				
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