

CORRELATIONS BETWEEN

State of Hawaii Science Education Standards  
For Grade 4

and

*Seeds of Science/Roots of Reading*<sup>®</sup>

Units for Grades 2 through 5:

Soil Habitats  
Shoreline Science  
Designing Mixtures  
Gravity & Magnetism  
Light Energy  
Weather & Water  
Variation and Adaptation  
Digestion and Body Systems  
Planets & Moons  
Aquatic Ecosystems  
Models of Matter  
Chemical Changes

Hawaii Science Standards – 4th Grade

Hawaii Science Standards – 4th Grade	2 <sup>nd</sup> - 3 <sup>rd</sup> Grade				3 <sup>rd</sup> - 4 <sup>th</sup> Grade				4 <sup>th</sup> - 5 <sup>th</sup> Grade			
	Soil Habitats	Shoreline Science	Designing Mixtures	Gravity & Magnetism	Light Energy	Weather & Water	Variation and Adaptation	Digestion & Body Systems	Planets & Moons	Aquatic Ecosystems	Models of Matter	Chemical Changes
<b>The Scientific Process</b> Standard 1: The Scientific Process: SCIENTIFIC INVESTIGATION: Discover, invent, and investigate using the skills necessary to engage in the scientific process												
<b>Scientific Inquiry</b>												
SC.4.1.1 Describe a testable hypothesis and an experimental procedure					.	.			.	...	.	...
<b>Scientific Knowledge</b>												
SC.4.1.2 Differentiate between an observation and an inference	...	...	.	.	.	.	...	.	.	...	...	.
<b>The Scientific Process</b> Standard 2: The Scientific Process: NATURE OF SCIENCE: Understand that science, technology, and society are interrelated												
<b>Science, Technology, and Society</b>												
SC.4.2.1 Describe how the use of technology has influenced the economy, demography, and environment of Hawaii												
<b>The Scientific Process</b> Standard 3: Life and Environmental Sciences: ORGANISMS AND THE ENVIRONMENT: Understand the unity, diversity, and interrelationships of organisms, including their relationship to cycles of matter and energy in the environment												

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<b>Cycles of Matter and Energy</b>												
SC.4.3.1 Explain how simple food chains and food webs can be traced back to plants										•••		
<b>Interdependence</b>												
SC.4.3.2 Describe how an organism's behavior is determined by its environment	•	•					•			••		
<b>Life and Environmental Sciences</b>												
Standard 4: Life and Environmental Sciences: STRUCTURE AND FUNCTION IN ORGANISMS: Understand the structures and functions of living organisms and how organisms can be compared scientifically												
<b>Cells, Tissues, Organs, and Organ Systems</b>												
SC.4.4.1 Identify the basic differences between plant cells and animal cells												
<b>Life and Environmental Sciences</b>												
Standard 5: Life and Environmental Sciences: DIVERSITY, GENETICS, AND EVOLUTION: Understand genetics and biological evolution and their impact on the unity and diversity of organisms												
<b>Biological Evolution</b>												
SC.4.5.1 Compare fossils and living things							•••					
<b>Unity and Diversity</b>												
SC.4.5.2 Describe the roles of various organisms in the same environment	••	••								•••		

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SC.4.5.3 Describe how different organisms need specific environmental conditions to survive	••	••								•••		
<b>Physical, Earth, and Space Sciences</b> Standard 6: Physical, Earth, and Space Sciences: NATURE OF MATTER AND ENERGY: Understand the nature of matter and energy, forms of energy (including waves) and energy transformations, and their significance in understanding the structure of the universe												
<b>Nature of Matter</b>												
SC.4.6.1 Describe how some materials may be combined to form new substances												•••
<b>Energy and its Transformation</b>												
SC.4.6.2 Explain what is needed for electricity to flow in a circuit to create light and sound												
<b>Physical, Earth, and Space Sciences</b> Standard 7: Physical, Earth, and Space Sciences: FORCE AND MOTION: Understand the relationship between force, mass, and motion of objects; and know the major natural forces: gravitational, electric, and magnetic												
<b>Forces of the Universe</b>												
SC.4.7.1 Describe that the mass of the Earth exerts a gravitational force on all objects				•••					•••			

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<b>Physical, Earth, and Space Sciences</b> Standard 8: Physical, Earth, and Space Sciences: EARTH AND SPACE SCIENCE: Understand the Earth and its processes, the solar system, and the universe and its contents												
<b>Forces that Shape the Earth</b>												
SC.4.8.1 Describe how slow processes sometimes shape and reshape the surface of the Earth		•										
SC.4.8.2 Describe how fast processes (e.g., volcanoes, earthquakes) sometimes shape and reshape the surface of the Earth		•										
<b>Earth in the Solar System</b>												
SC.4.8.3 Describe the relationship between the sun and the Earth's daily rotation and annual revolution								•••				

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