

# Elementary Science Priority Standards



Systems, Inquiry, Application			
	EALR 1 Systems	EALR 2 Inquiry	EALR 3 Application
The Big Ideas of Science	... is a way of thinking that makes it possible to analyze and understand complex phenomena.	...is a process of asking and answering questions about the world that forms the bedrock of science.	...is about the interaction between science and technology, and how both can help solve real-world problems.
	<p style="text-align: center;"><b>Complex Systems</b></p> <p>Analyze a system in terms of subsystems and larger, more inclusive systems.</p>	<p style="text-align: center;"><b>Planning Investigations</b></p> <p>Plan different kinds of investigations, including field studies, systematic observations, models, and controlled experiments.</p>	<p style="text-align: center;"><b>Different Technologies</b></p> <p>Work individually and collaboratively to design and produce a product to solve a problem.</p>
	<p style="text-align: center;"><b>Role of Each Part in a System</b></p> <p>See how parts of objects, plants, and animals are connected and work together.</p>	<p style="text-align: center;"><b>Conducting Investigations</b></p> <p>Carry out investigations by using instruments, observing, recording, and drawing conclusions.</p>	<p style="text-align: center;"><b>Solving Problems</b></p> <p>Develop a solution to a problem by using a simplified version of the technological design process.</p>
	<p style="text-align: center;"><b>Part-Whole Relationships</b></p> <p>Identify parts of living and non-living systems.</p>	<p style="text-align: center;"><b>Making Observations</b></p> <p>Answer questions by making observations or trying things out.</p>	<p style="text-align: center;"><b>Tools &amp; Materials</b></p> <p>Use simple tools and materials to solve problems in creative ways.</p>
	4-5	2-3	K-1

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Physical Science			Earth & Space Science			Life Science			
Force & Motion (PS1)	Matter: Properties & Change (PS2)	Energy: Transfer, Transformation, and Conservation (PS3)	Earth in Space (ES1)	Earth Systems, Structures & Processes (ES2)	Earth History (ES3)	Structure & Function of Living Systems (LS1)	Ecosystems (LS2)	Biological Evolution (LS3)	
<b>The Big Ideas of Science</b>	...concerns the forces and motions that occur in our physical universe. At the highest level, students apply Newton's Laws of Motion and Gravity to explain phenomena such as the fall of a leaf and the motions of planet Earth in space.	...concerns the fundamental nature of matter, including the atomic-molecular theory that explains macroscopic properties of materials and make it possible to predict the outcomes of chemical and nuclear reactions.	...involves the conversion of energy from one form to another, transfer from one place to another, and the idea that energy is never created or destroyed. These concepts are useful in explaining phenomena in all science disciplines.	...is the longest and most comprehensive story that can be told, beginning with the birth of the universe and our home solar system, to the dynamic Earth-Sun-Moon system that set the stage for the wide diversity of life.	...includes the big picture of Earth as an interacting and dynamic system, including weather and climate and the long-term movement of crustal plates that build up mountains, and cause earthquakes, tsunami, and volcanoes.	...has been uncovered by observing processes that take place today, and projecting those processes back in time. These remnants, especially fossils, provide essential clues to understanding the evolution of our planet.	...concerns the way living things are organized and carry on life processes from the components of a single cell, to complete multicellular organisms such as humans	...are defined as all of the plan and animal populations and nonliving resources in a given area. The relationships between plants and animals within an ecosystem, depicted by a food web, make it possible to predict the consequences of environmental change and provide insights into the sustainable use of natural resources.	...is the essential framework for understanding how organisms change over time, from the first single-celled bacteria on the young Earth to the amazing diversity of species that populate our planet today. Evidence and reasoning are essential to recognize the patterns and scale of past changes.
	<b>Measurement of Force &amp; Motion</b> Forces and motions can be measured	<b>States of Matter</b> A single kind of matter can exist as a solid, liquid, or gas. Matter is not lost during changes of state.	<b>Heat, Light, Sound, &amp; Electricity</b> Heat, light, sound, and electrical energy can be transferred from place to place.	<b>Earth in Space</b> Earth is spherical in shape. It spins on its axis and orbits the Sun	<b>Formation of Earth Materials</b> Earth materials are formed by various natural processes and can be used in different ways.	<b>Focus on Fossils</b> Fossils provide evidence that environments of the past were quite different from what we observe today.	<b>Structures &amp; Behaviors</b> Plants and animals have different structures that work together to respond to their environment	<b>Food Webs</b> Changes in ecosystems affect the populations that they can support.	<b>Heredity &amp; Adaptation</b> Differences in inherited characteristics help offspring to survive.
	<b>Force Makes Things Move</b> Pushes and pulls make things move	<b>Properties of Materials</b> The properties of an object depend on its shape and on the material it is made from.	<b>Forms of Energy</b> Energy comes in different forms.	<b>The Sun's Daily Motion</b> The Sun and Moon appear to have regular cycles of movement.	<b>Water &amp; Weather</b> It is possible to see weather patterns change by observing and recording.		<b>Life Cycles</b> Plants and animals have life cycles.	<b>Changes in Ecosystems</b> Ecosystems include the living populations and non-living elements of a defined area.	<b>Variation of Inherited Characteristics</b> Plants and animals inherit characteristics from their parents.
	<b>Push-Pull &amp; Position</b> Forces are pushes and pulls. Motion is a change in position.	<b>Liquids &amp; Solids</b> Different kinds of materials display different properties.		<b>Observing the Sun &amp; Moon</b> The Sun is visible during the day, and the Moon can be seen during the day or night.	<b>Properties &amp; Change</b> Earth materials have various properties. Weather changes from day to day.		<b>Plant &amp; Animal Parts</b> Plants and animals meet their needs in different ways.	<b>Habitats</b> Habitats are places that meet the daily needs of plants and animals.	<b>Classifying Plants &amp; Animals</b> There are many different kinds of plants and animals.