

Fifth Grade Science
(Updated for 2020-2021 School Year)

Science Course Description

Fifth grade Science is a program written specifically to the Missouri Learning Standards. Focus on key elements such as scientific inquiry, space systems (Earth's Place in Space); earth systems (Earth's Systems and Human Interactions), ecology (Interactions, Energy, and Dynamics), matter (Properties and Interactions), reading, interpreting and creating graphs, and use of technology will be essential to the learning process. The science practices involved in this course provide real world application of concepts and skills to ensure mastery of content.

Science Big Ideas

- Scientific inquiry is vital to formulate testable questions, for conducting experiments, and evaluating the results of the experiment.
- Weather is the daily change in temperature and atmospheric condition, climate is the average weather of an area over a given period of time. The water cycle is how water is moved throughout the hydrosphere, geosphere, and atmosphere.
- The Earth, and other spatial bodies, are a part of a galaxy named the Milky Way, which is in motion in the universe.
- The interaction of living and nonliving elements of nature constitutes an ecosystem, and each one of the interactions is important to maintaining the balance of the ecosystem.
- Earth scientists use repeatable observations and testable ideas to understand and explain our planet.
- Graphing is an important form of communication among scientists.

Fifth Grade Science			
ELO #	Essential Learner Outcome Description	Concepts	Standards
1	Analyzing and Interpreting Data: I will collect, interpret, and analyze data and create graphs.	-Bar Graph Interpreting, Analyzing, and Creating -Line Graph Interpreting, Analyzing, and Creating -Pictographs -Circle Graph -Charts and Tables -Data Collection	DS.A.1; DS.A.2

2	<p>Engineer Design: I will use scientific inquiry to perform and evaluate experiments.</p>	<p>I will use Math and Science to solve complex problems. I will go through the design process to design solutions to problems. I will use models to describe phenomena.</p>	<p>ETS1.A.1; ETS1.B.1; ETS1.C.1</p>
3	<p>Matter and Its Interactions: I will identify the characteristics of matter and explain their interactions.</p>	<p>Modeling Matter Properties of Matter: Conductivity Solubility Physical and Chemical Changes Signs of a Chemical Reaction Conservation of Matter</p>	<p>PS1.A.1; PS1.A.2; PS1.B.1; PS1.B.2</p>
4	<p>Ecosystems—Interactions, Energy, and Dynamics: I will identify the characteristics and explain the interactions of living organisms.</p>	<p>Carbon cycle nitrogen cycle Matter (not food, energy pyramid) Food chains, food webs Differences between plants and animals regarding energy usage and transfer Vertebrate Classes</p>	<p>LS1.A.1; LS1.C.1; LS2.B.1</p>
5	<p>Space Systems-- Earth's Place in Space: I will describe the composition and structure of the universe and the motion of the objects within it.</p>	<p>Intro to Size Star Brightness Shape of Earth Gravity Rotation and Revolution Day Length Shadow Length and Direction Seasons Movement and Patterns in the Sky</p>	<p>ESS1.A.1; ESS1.B.1; ESS1.B.2</p>
6	<p>Earth Systems—Earth's Systems and Human Interactions: I will show my knowledge of the processes and interactions of Earth's systems.</p>	<p>Atmosphere Water Cycle Weather Tools Landforms--how are they made and how do they affect weather (mountains, plains, plateaus, oceans, rivers, lakes) Characteristics of the Earth Continents (hemispheres), oceans, geosphere, biosphere, hydrosphere Human Impact on Earth</p>	<p>ESS2.A.1; ESS2.C.1; ESS3.C.1</p>