

Curriculum at a Glance

Science

6th Grade

Elementary and middle school science curricula are based upon an inquiry model. Throughout each unit of study, students will continuously build on the following skills:

- Identify testable questions, those that can be answered through scientific investigation.
- Design and conduct appropriate types of scientific investigations to answer different questions.
- Use appropriate tools and techniques to make observations and gather data.
- Use mathematical operations to analyze and interpret data.
- Identify and present relationships between variables in appropriate graphs.
- Draw conclusions and identify sources of error.
- Provide explanations to investigated problems or questions.
- Read, interpret and examine the credibility of scientific claims in different sources of information.
- Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.

Unit Name/Description	Content and/or Skills
Chemistry Properties of Matter	<ul style="list-style-type: none">● Common elements & simple compounds - how physical and chemical properties are used to identify them● Structure and components of an atom● Atoms can rearrange to form different molecules of new compounds in a chemical reaction● Mixtures vs. solutions● How to separate mixtures● Patterns in the Periodic Table
Human Body	<ul style="list-style-type: none">● Structure and functions of single celled vs. multicellular organism (cell parts & organization)● Structure and function of the human skeletal system - joints & how muscles, tendons, ligaments, and bones allow movement● Major structures of the human digestive, respiratory, and circulatory systems and how they function to

	bring oxygen and nutrients to the cells and expel waste materials
Bacteria	<ul style="list-style-type: none">● Compare bacterial cell to animal cell● Different types of microbes and the environmental conditions necessary for their survival● Bacteria in food production vs. food spoilage● Methods of food preservation
Heredity	<ul style="list-style-type: none">● Structure, location, and function of chromosomes, genes, and DNA and how they relate to each other in the living cell● Cell division in somatic and germ cells (mitosis and meiosis)● Relationship of corresponding genes on pairs of chromosomes to traits inherited by offspring - sex determination in humans