

Science Curriculum Map Overview

Topic	Skills	Approximate Weeks of Study
Scientific Inquiry	<ul style="list-style-type: none"> *Know and use current technologies, current safe laboratory procedures, tools and techniques *Know the steps of the scientific method *Understand the relationship between formulating hypothesis, recording accurate data, and drawing conclusions in lab situations *Formulate, refine and clarify questions in order to investigate scientifically *Understand that science is based on theories that change with continuing data collection and expanding on the knowledge base of the world around us *Understand measurement using Metric System and its units to solve problems *Analyze and synthesize data, including graphing 	6weeks
Properties of Matter	<ul style="list-style-type: none"> *Understand how matter is measured and described *Determine density and understand its concept *Differentiate between elements, compounds and mixtures *Use physical and chemical properties to describe matter and tie in measurement in science *Relate and explain what chemical and physical change is 	6weeks
Energy	<ul style="list-style-type: none"> *Describe the various forms of energy: radiant, thermal, mechanical, nuclear and chemical *Differentiate between potential and kinetic energy *Know and explain heat, light and sound energy *Explain the sources of energy (renewable and nonrenewable) *Describe and map energy transformations 	7weeks

Force and Motion	<ul style="list-style-type: none"> *Use the Frame of Reference to determine direction of motion *Determine the rates of motion of an object by making observations and applying appropriate mathematical formulas *Name and identify the characteristics of universal forces *Examine and explain motion using Newton's Law of Motion *Identify simple machines and explain how they use forces 	6weeks
The Solar System and The Earth	<ul style="list-style-type: none"> *Describe the solar system and identify the force that holds it *Recognize differences between the planets in the solar system *Understand measurements of time and latitude and longitude *Describe the phases of the moon *Identify other phenomena based on the earth-moon relationship *Recognize the different layers of Earth *Understand how rocks were formed and fossils reveal information about past conditions of Earth *Explain the Theory of Plate Tectonics *Understand the structure, composition and movement of the atmosphere *Understand the origins and changes of weather, including erosion 	11weeks