

**Science Curriculum Guide
Grade 7**

State Standards and Benchmarks	St. Louis Park Outcomes	District-Wide, Common Assessments	Materials and Resources
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(Teachers would like to leave the benchmarks as part of the document, as it gives direction.)

<p>I. HISTORY & NATURE OF SCIENCE A. Scientific World View <u>Standard:</u> The student will understand that science is a way of knowing about the world that is characterized by empirical criteria, logical argument and skeptical review.</p>	No isolated, critical outcome	Included in many assessments: Geology Physical Science Ecology – plant propagation Environmental Labs	Supported by FAST curriculum and supplemental reading Evolution of theories and theoretical concepts covered in geology
<p>I. HISTORY & NATURE OF SCIENCE B. Scientific Inquiry <u>Standard:</u> The student will design and conduct scientific investigations.</p>	Design and conduct a controlled experiment to test a hypothesis Apply the scientific method by conducting hands-on investigations	Plant propagation Lab portfolio/composition books Lab portfolio/composition books	FAST textbooks Life Science textbooks
<p>I. HISTORY & NATURE OF SCIENCE D. Historic Perspectives <u>Standard:</u> The student will understand how scientific discovery, culture, societal norms and technology have influenced one another in different time periods.</p>	No isolated, specific outcome.	Embedded in lab reports Modeled by students sharing class data	Technology time-line
<p>II. PHYSICALSCIENCE A. Structure of Matter <u>Standard:</u> The student will understand that matter is made of small particles and this explains the properties of matter.</p>	Describe and analyze physical changes and phase changes of matter	P-11 Lab Report for benchmark number 5 Metric Skills Tests 1, 2 & 3 Phases of matter test for benchmark numbers 3, 4, and 6	6th grade FOSS kit: to introduce Mixtures and Solutions: three phases of matter FAST – Buoyancy unit, Labs P1-12 FAST – Phases of matter, Labs P18-22
<p>III. EARTH & SPACE SCIENCE A. Earth Structure and Processes <u>Standard:</u> The student will identify Earth’s composition, structure and processes.</p>	Identify rocks and minerals, explain Plate Tectonics, diagram the rock cycle and identify and describe different geologic eras	Geology test Mineral identification quiz Geologic time essay	Earth Science Texts Minerals and rock samples Testing equipment Sequence of events blocks
<p>III. EARTH & SPACE SCIENCE B. The Water Cycle, Weather and Climate</p>	Investigate, analyze and explain weather system changes	Meteorology test	Earth Science textbook – Prentice-Hall

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<p>Standard: The student will investigate how the atmosphere interacts with the Earth system.</p>			
<p>IV. LIFE SCIENCE E. Biological Populations Change Over Time Standard: The student will understand how biological evolution provides a scientific explanation for the fossil record of ancient life forms, as well as for the striking similarities observed among the diverse species of living organisms.</p>	<p>Identify rocks and minerals, explain Plate Tectonics, diagram the rock cycle and identify and describe different geologic eras</p>	<p>Geologic Time essay</p>	<p>Earth Science texts Sequence of events blocks</p>
<p>No state standard</p>	<p>Interpret quantitative lab data through graphing</p>	<p>Direct Observation (electronic version in “Essential Documents” folder)</p>	