

6th Grade Science Pacing Guide

Grading Period: 1st-9 Wks

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Chapter / Unit	Lesson Topic	Objective Number	Approximate Days Needed	Suggested Teaching Strategies
Chapter 1 Inquiry	What Is Science	1. Conduct a scientific investigation utilizing appropriate process skills. 1a-1e 1f-1h	Weeks 1, 2 & 3	<u>Team Science</u> (Student groups incorporating the scientific method while creating science projects (DOK4) Use activities that teach the Metric system. (DOK3)
Chapter 18/ Unit 6	Introduction to Matter	2. Analyze chemical and physical changes and interactions involving energy and forces that affect motion of objects. a. Recognize that atoms of a given element are all alike but atoms of other elements have	Week 4	-Students will study the Periodic Table to observe the atomic make-up of elements. -Students will identify the atomic number, symbol, and atomic mass of specific elements on worksheets. (DOK 2) -Students will use gumdrops and toothpicks to make models that show how particles in solids, liquids, and gases are arranged and how they can move.

Chapter 18/ Unit 6	Solids, Liquids, and Gases	different atomic structures. b. distinguish between physical properties of matter as it relates to changes in states.	Week 5	(DOK 4)
Chapter 19/ Unit 6	Motion and Momentum	2c. Investigate and describe the effects of forces acting on objects.	Weeks 6 & 7	Measure and graph how far a cylinder-shaped car will travel on various surfaces. (DOK 3)
Chapter 20/ Unit 6	Energy Transformation	2d. Investigate the mechanical and chemical forms of energy and demonstrate the transformation from one form to another.	Weeks 8 & 9	Create drawings to illustrate the transfer of energy from potential to kinetic. (DOK3)
2nd 9 Weeks Life Science Chapter 2/	Cells	3b. Compare and contrast structure and function in living things to include cells and whole organisms.	Week 1 & 2	Make a model of a plant and animal cell to compare and contrast plant and animal

<p>Unit 1</p> <p>Chapter 5/ Unit 2</p>	<p>Plants</p>	<p>3d. Describe and summarize how an egg and sperm unite in the reproduction of angiosperm and gymnosperms.</p>	<p>Week 3 & 4</p>	<p>cell parts. (DOK 4)</p> <p>Investigate examples of monocots, dicots, angiosperms, and gymnosperms. (DOK3)</p>
<p>Chapters 6 & 7 Unit 2</p>	<p>Invertebrates & Vertebrates</p>	<p>3b. Compare and contrast structure and functions in living things to include cells and whole organisms.</p> <p>3c. Distinguish between the organization and development of humans to include the effects of disease.</p>	<p>Week 5 & 6</p>	<p>(DOK 3) <u>Invertebrates</u> Students will dissect earthworms to identify specific body systems. (DOK 3) <u>Vertebrates</u> Students will identify characteristics of reptiles, amphibians, and mammals.</p>

<p>Chapter 9/Unit5</p>	<p>Resources</p>	<p>4d. Summarize the causes and effects of pollution on people and the environment . 4g. Research and cite evidence of current resources in Earth's systems.</p>	<p>Weeks 3 & 4</p>	<p>Students will design a car powered by an alternative energy source. (DOK 4)</p>
<p>Chapter 14/Unit5</p>	<p>Earthquakes</p>	<p>4a. compare and contrast the relative positions and components of the Earth's crust .</p> <p>4b. Draw conclusions about historical processes that contribute to the shaping of planet Earth.</p>	<p>Weeks 5 & 6</p>	<p>Construct clay models of the Earth identifying the 3 main layers. (DOK 3)</p>
	<p>Weathering and Erosion</p>		<p>Weeks 7, 8,</p>	<p>Students will create a</p>

Chapter 16/ Unit 5			& 9	timeline to identify the geological changes over time. (DOK3)
4 th 9 Weeks Chapter 10 / Unit 4	Atmosphere	4d. summarize the causes and effects of pollution on people and the environment.	Week 1 & 2	Construct a graph showing the percentages of gases that make up the Earth's atmosphere. (DOK3)
Chapter 11/ Unit 4	Weather	4c. Analyze climate data to draw conclusions and make predictions.	Weeks 3 & 4	Students will maintain a Weather log to record the weather for a period of 2 weeks. (DOK 2)
Chapter 17/ Unit 5	Space	4e. Explain the daily and annual changes in the Earth's rotation and revolution. 4f. Differentiate between objects in the	Weeks 5 & 6	Students will design a booklet

Chapter 17Unit5	Space	universe (e.g, stars, moons)	Weeks 7,8, & 9	illustrating the 8 phases of the moon. (DOK3) Make a scale model of the solar system. (DOK 4)
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