

**RIDGECROFT SCHOOL
GRADE 4 SCIENCE**

PACING GUIDE

TOPICS/CONCEPTS	TIME	CURRICULUM OBJECTIVES	RESOURCE(S)
FIRST GRADING PERIOD			
WEATHER AND CLIMATE	30	1.01, 1.02, 1.03, 1.04, 1.05, 1.06	AIMS Module: Weather Sense – Moisture AIMS Module: Weather Sense – Temp, Air, Wind TEXTBOOK: Chapter 6 Oceans of Water
SECOND GRADING PERIOD			
COMPOSITION AND USES OF ROCKS AND MINERALS	30	2.01, 2.02, 2.03, 2.04, 2.05, 2.06, 2.07	STC Module: Rocks and Minerals TEXTBOOK: Chapter 4 Minerals, Rocks, and Fossils
THIRD GRADING PERIOD			
COMPOSITION AND USES OF ROCKS AND MINERALS	30	2.01, 2.02, 2.03, 2.04, 2.05, 2.06, 2.07	STC Module: Rocks and Minerals TEXTBOOK: Chapter 4 Minerals, Rocks, and Fossils
FOURTH GRADING PERIOD			
LANDFORMS	30	3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07	TEXTBOOK
FIFTH GRADING PERIOD			
MAGNETISM AND ELECTRICITY	30	4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08	AIMS Module: Electrical Connections + Kit AIMS Module: Mostly Magnets TEXTBOOK: Chapter 8 Electricity and Magnets STC Kit: Magnets and Motors (Purchase 2 nd year)
SIXTH GRADING PERIOD			
MAGNETISM AND ELECTRICITY LIGHT	30	4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08	AIMS Module: Electrical Connections + Kit AIMS Module: Mostly Magnets AIMS Module: Rays Reflections + Kit STC Kit: Magnets and Motors (Purchase 2 nd year)

8/1/06

GOALS AND OBJECTIVES

NOTE: The goals and objectives for Grades K-5 science are based on a recluster of the NC Standard Course of Study.

<p>GOAL 1: The learner will conduct investigations and use appropriate technology to build an understanding of weather and climate.</p> <p>1.01 Investigate the water cycle including the processes of: (evaporation, condensation, precipitation, run-off)</p> <p>1.02 Discuss and determine how the following are affected by predictable patterns of weather: (temperature, wind direction and speed, precipitation, cloud cover, air pressure)</p> <p>1.03 Describe and analyze the formation of various types of clouds and discuss their relation to weather systems.</p> <p>1.04 Explain how global atmospheric movement patterns affect local weather.</p> <p>1.05 Compile and use weather data to establish a climate record and reveal any trends.</p> <p>1.06 Discuss and determine the influence of geography on weather and climate: (mountains, sea breezes, water bodies)</p>	<p>GOAL 2: The learner will conduct investigations and use appropriate technology to build an understanding of the composition and uses of rocks and minerals.</p> <p>2.01 Describe and evaluate the properties of several minerals.</p> <p>2.02 Recognize that minerals have a definite chemical composition and structure, resulting in specific physical properties including: (hardness, streak color, luster, magnetism)</p> <p>2.03 Explain how rocks are composed of minerals.</p> <p>2.04 Show that different rocks have different properties.</p> <p>2.05 Discuss and communicate the uses of rocks and minerals.</p> <p>2.06 Classify rocks and rock-forming minerals using student-made rules.</p> <p>2.07 Identify and discuss different rocks and minerals in North Carolina including their role in geologic formations and distinguishing geologic regions.</p>	<p>GOAL 3: The learner will make observations and conduct investigations to build an understanding of landforms.</p> <p>3.01 Identify and analyze forces that cause change in landforms over time including: (water and ice, wind, gravity)</p> <p>3.02 Investigate and discuss the role of the water cycle and how movement of water over and through the landscape helps shape land forms.</p> <p>3.03 Discuss and consider the wearing away and movement of rock and soil in erosion and its importance in forming: (canyons, valleys, meanders, tributaries)</p> <p>3.04 Describe the deposition of eroded material and its importance in establishing landforms including: (deltas, flood plains)</p> <p>3.05 Discuss how the flow of water and the slope of the land affect erosion.</p> <p>3.06 Identify and use models, maps, and aerial photographs as ways of representing landforms.</p> <p>3.07 Discuss and analyze how humans influence erosion and deposition in local communities, including school grounds, as a result of: (clearing land, planting vegetation, building dams)</p>	<p>GOAL 4: The learner will make observations and conduct investigations to build an understanding of magnetism and electricity.</p> <p>4.01 Observe and investigate the pull of magnets on all materials made of iron and the pushes or pulls on other magnets.</p> <p>4.02 Describe and demonstrate how magnetism can be used to generate electricity.</p> <p>4.03 Design and test an electric circuit as a closed pathway including an energy source, energy conductor, and an energy receiver.</p> <p>4.04 Explain how magnetism is related to electricity.</p> <p>4.05 Describe and explain the parts of a light bulb.</p> <p>4.06 Describe and identify materials that are conductors and nonconductors of electricity.</p> <p>4.07 Observe and investigate that parallel and series circuits have different characteristics.</p> <p>4.08 Observe and investigate the ability of electric circuits to produce light, heat, sound, and magnetic effects.</p> <p>4.09 Recognize lightning as an electrical discharge and show proper safety behavior when lightning occurs.</p>
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