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Amherst County Public Schools
Grade 2 Science Pacing Guide
Revised 2010

Nine Weeks 1	
2.6 Duration: 10 days	The student will investigate and understand basic types, changes, and patterns of weather. Key concepts include a) identification of common storms and other weather phenomena (temperature, wind, precipitation, drought, flood, and storms); b) the uses and importance of measuring, record, and interpreting weather data, and; c) the importance and uses of tracking weather data over time.
2.7 Duration: 10 days	The student will investigate and understand that weather and seasonal changes affect plants, animals, and their surroundings. Key concepts include a) effects of weather and seasonal changes on the growth and behavior of living things (migration, hibernation, camouflage, adaptation, dormancy), and b) weather and erosion of land surfaces.
Nine Weeks 2	
2.1 c, d Duration: Throughout the instruction of SOL 2.2 and 2.3	The student will demonstrate and understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which c) observations are repeated to ensure accuracy, and d) two or more characteristics or properties are used to classify items. ***Use content from SOL 2.2 and 2.3**
2.1 g Duration: Throughout the instruction of SOL 2.3 as appropriate	The student will demonstrate and understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which g) conditions that influence a change are identified and inferences are made. ***Use content from 2.3**
2.2 Duration: 5 days	The student will investigate and understand that natural and artificial magnets have certain characteristics and attract specific types of metals. Key concepts include a) magnetism, iron, magnetic/nonmagnetic, poles, attract/repel; and b) important applications of magnetism (including the magnetic compass).

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2.3 Duration: 7 days	The student will investigate and understand basic properties of solids, liquids, and gases. Key concepts include a) identification of distinguishing characteristics of solids, liquids, and gases; b) measurement of the mass and volume of solids and liquids; and c) changes in phases of matter with the addition or removal of energy (condensation, evaporation, melting, and freezing).

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Nine Weeks 3	
2.1 e, f Duration: Throughout the review of SOL 2.3 as appropriate	The student will demonstrate and understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which e) length, volume, mass and temperature are measured in metric units and standard English units using the proper tools, and; f) time is measured using the proper tools
2.1 g, h, i, k, l Duration: Throughout the instruction of SOL 2.5 as appropriate	The student will demonstrate and understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which g) conditions that influence a change are identified and inferences are made. h) data are collected and recorded, and bar graphs are constructed using numbered axes; i) data are analyzed, and unexpected or unusual quantitative data are recognized; k) observations and data are communicated, and l) simple physical models are designed and constructed to clarify explanations and show relationships. ***Use content from SOL 2.5**

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2.5 Duration: 10 days	The student will investigate and understand that living things are part of a system. Key concepts include a) living organisms are interdependent with their living and nonliving surroundings; b) an animal's habitat includes adequate food, water, shelter or cover, and space; c) habitats change over time due to many influences; and d) fossils provide information about living systems that were on Earth years ago.
Nine Weeks 4	
2.1 a, b, j, m Duration: Throughout the instruction of SOL 2.8 or 2.4 as appropriate	The student will demonstrate and understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which a) observations and predictions are made and questions are formed; b) observation is differentiated from personal interpretation; j) conclusions are drawn; m) current applications are used to reinforce science concepts. ***Use content from SOL 2.8 or 2.4**
2.8 Duration: 3 days	The student will investigate and understand that plants produce oxygen and food, are a source of useful products, and provide benefits in nature. Key concepts include a) important plant products are identified and classified (fiber, cotton, oil, spices, lumber, rubber, medicines, and paper) b) the availability of plant products affects the development of a geographic area; c) plants provide oxygen, homes and food for many animals; (prevent soil from washing away), and d) plants can help reduce erosion.
2.4 Duration; 10 days	The student will investigate and understand that plants and animals undergo a series of orderly changes as they mature and grow. Key concepts include a) animal life cycles (some animals (frogs and butterflies) undergo distinct stages during their lives, while others generally resemble their parents); and b) plant life cycles (flowering plants undergo many changes, from the formation of the flower to the development of the fruit).