

Dickenson County Public Schools

6th Grade

Science Curriculum Map/Pacing Guide

Time Frame	SOLs and Strand	Lessons/Skills	Suggested Resources	Assessment Methods	Curriculum Map (Documentation of Adjustments to the Written Curriculum)
1 st Six Weeks (Aug.-Sept.)	6.1 Scientific Investigation Reasoning and Logic (ongoing)	<p>6.1 In order to meet this standard, it is expected that students should be able to</p> <ul style="list-style-type: none"> ➤ Make observations that can be used to discriminate similar objects and organisms, paying attention to fine detail. ➤ Develop a classification key ;that uses numerous characteristics. ➤ Make precise and consistent measurements and estimations. ➤ Create approximate scale models to demonstrate an understanding of distance, volume, and quantity. ➤ Differentiate between independent (manipulated) and dependent (responding) variables in a hypothesis. ➤ Compare and contrast predictions and inferences. Analyze and judge the evidence, observations, scientific principles, and data used in making predictions and inferences. ➤ Design an experiment in which one variable is manipulated over many trials. ➤ Collect, record, analyze, and report 	<p>Textbook: Prentice Hall <i>Science Explorer Grade 6 (VA)</i> ISBN: 0-13-190231-8</p> <p>Introduction Pages xx-15</p> <p>Chapter 1 pp. 16-47</p> <p>Prentice Hall <i>Guided Reading and Study Workbook Grade 6</i> ISBN: 0-13-190251-2</p> <p>Joyce Baldwin's (Clintwood Elem.) <i>Passport on Matter</i></p> <p>McGraw-Hill Science <i>Reading in Science</i> Resources p. 279</p> <p>Poster of <i>The Periodic Table of Elements</i></p> <p>Windows on Science</p>	<p>Perform an investigation to answer a question. Present your investigation results to the class.</p> <p>Design and create a paper airplane. Measure the distance flown for three trials. Find the mean and range of the data and present to the class.</p> <p>Create a bridge map (Thinking Map) to show the chemical symbols and the elements they represent.</p> <p>Draw models of the first 10 elements.</p> <p>Identify some compounds around the home and write the chemical formula for those compounds. For each compound you found, tell the elements that make it up and how many atoms of each</p>	

		<ul style="list-style-type: none"> ➤ Analyze and explain the functioning of wetlands and appraise the value of wetlands to humans. ➤ Describe an example of a wetland. ➤ Explain what an estuary is and why it is important to people. ➤ Propose ways to maintain water quality within a watershed. ➤ Explain the factors that affect water quality in a watershed and how those factors can affect an ecosystem. ➤ Forecast potential water-related issues that may become important in the future. ➤ Locate and critique a media article or editorial (print or electronic) concerning water use or water quality. Analyze and evaluate the science concepts involved. ➤ Argue for and against commercially developing a parcel of land containing a large wetland area. Design and defend a land-use model that minimizes negative impact. ➤ Measure, record, and analyze a variety of water quality indicators and describe what they mean. ➤ <p>Scientific investigation, reasoning, and logic. See page 1.</p>			
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		<p>ideas of Ptolemy, Aristotle, Copernicus, and Galileo related to the solar system.</p> <p>➤ Create and interpret a timeline highlighting the advances in solar system exploration over the past half century. This should include information of the first missions to the moon, Mars robotic explores, and exploration of the outer planets.</p>	<p>DVDs-</p> <ul style="list-style-type: none">•<i>October Sky</i>•<i>Apollo 13</i>		
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		<ul style="list-style-type: none">➤ Compare and contrast potential and kinetic energy through common examples found in the natural environment.➤ Create and interpret a model or diagram of an energy transformation.➤ Analyze and describe the transformation of energy involved with the formation and burning of coal and other fossil fuels.➤ Compare and contrast renewable and nonrenewable energy sources.➤ Design an investigation that demonstrates light energy being transformed into other forms of energy.➤ Design an application of the use of solar and wind energy.➤ Chart and analyze the energy a person uses during a 24-hour period and determine the sources.➤ Compare and contrast energy sources in terms of their origins, how they are utilized, and their availability.➤ Analyze the advantages and disadvantages of using various energy sources.➤ Analyze and describe how the United States' energy use has changed over time.➤ Predict the impact of unanticipated energy shortages.			
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		<p>and relate cloud types to weather conditions.</p> <ul style="list-style-type: none">➤ Compare and contrast types of precipitation.➤ Compare and contrast weather-related phenomena, including thunderstorms, tornadoes, hurricanes, and drought.➤ Evaluate their own roles in protecting air quality.			
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May	Review all SOLs		Internet: http://education.jlab.org/index.html http://education.jlab.org/solquiz/index.html http://wwwiq.poquoson.org/indexs.html http://www.solpass.org/ http://pen.k12va.us/ http://edutest.com/ http://www.virginiasol.com/test.html http://funbrain.com/ http://unitedstreaming.com/ http://dlcenter.larc.nasa.gov/ http://www.solpass.org www.lphschool.com http://www.ttaonline.org.		
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