

8TH GRADE SCIENCE LONG RANGE PLANS 2006-2007

1st Six Weeks	Curriculum Standards	Resources
Weeks 1, 2, & 3	<ul style="list-style-type: none"> ❖ Introduction ❖ Identify impact of disease on society 	Chapter 9 Immunity and Disease
Week 4	<ul style="list-style-type: none"> ❖ Label cross section of the earth ❖ Identify the major plates of the earth. 	Chapter 14 plate tectonics (7 th grade text)
Week 5	<ul style="list-style-type: none"> ❖ Recognize the relationship between continental drift and plate tectonics. ❖ Deduce plate movements as the major cause of geological events. ❖ Recognize the relationship between continental drift and plate tectonics. 	Chapter 14 Plate Tectonics (7 th grade text) Windows on Science
Week 6	<ul style="list-style-type: none"> ❖ Deduce plate movements as the major cause of geological events. 	Chapter 15 Earthquakes & Volcanoes (7 th grade text)

2nd Six Weeks	Curriculum Standards	Resources
Week 1	<ul style="list-style-type: none"> ❖ Distinguish among sedimentary, igneous, & metamorphic rocks. ❖ Interpret rock cycle diagram 	Chapter 13 Rocks & Minerals (6 th grade text) Windows on Science * Grow crystals lab
Week 2	<ul style="list-style-type: none"> ❖ Identify rocks & minerals given a table of properties. 	Chapter 13 Rocks & Minerals (6 th grade text) Windows on Science
Week 3	<ul style="list-style-type: none"> ❖ Identify factors that cause rocks to break down. 	Chapter 14 Weathering and Erosion (6 th grade text) Windows on science
Week 4	<ul style="list-style-type: none"> ❖ Identify Earth's major biomes. ❖ Distinguish among commensalisms, parasitism, & mutualism. ❖ Identify biotic and abiotic factors in a biome. 	Prentice Hall Ecology series.
Week 5	<ul style="list-style-type: none"> ❖ Infer that human activities may be helpful or harmful to the environment. ❖ Distinguish among commensalisms, parasitism, & mutualism. ❖ Identify biotic and abiotic factors in a biome. 	Chapter 13 Conserving Life (8 th Grade text book)
Week 6	<ul style="list-style-type: none"> ❖ Distinguish between renewable and nonrenewable resources. ❖ Identify various energy sources 	Chapter 14 Conserving Resources(8th grade text)

3rd Six Weeks	Curriculum Standards	Resources
Week 1	<ul style="list-style-type: none"> ❖ Distinguish between renewable and nonrenewable resources. ❖ Identify various energy sources ❖ Infer that human activities may be helpful or harmful to the environment. 	Chapter 14 Conserving Resources(8th grade text)
Week 2	<ul style="list-style-type: none"> ❖ Review structure of cells ❖ Distinguish between sexual & asexual reproduction. 	Supplemental Materials Chapter 11 The Role of Genes and Inheritance
Week 3	<ul style="list-style-type: none"> ❖ Differentiate between dominant & recessive traits. ❖ Predict the genotypes of offspring in a monohybrid cross using a punnett square. ❖ Select models or illustrations that are representations of DNA. 	Supplemental Materials Chapter 11 The Role of Genes and Inheritance (8 th grade text) Chapter 11 (7 th grade text) Heredity
Week 4	<ul style="list-style-type: none"> ❖ Differentiate between dominant & recessive traits. ❖ Select models or illustrations that are representations of DNA. ❖ Associate a change in a DNA molecule with a mutation. 	Supplemental Materials Chapter 11 The Role of Genes and Inheritance & Possibly Ch. 12 section 2 (8 th grade text)
Week 5	<ul style="list-style-type: none"> ❖ Identify similarities & differences among organisms. ❖ Classify plants & animals into groups according to their features. ❖ Infer the relatedness of different organisms 	Supplemental Material not yet determined. Possibly 6 th grade text. *Possible dissection lab.
Week 6	<ul style="list-style-type: none"> ❖ Identify similarities & differences among organisms. ❖ Classify plants & animals into groups according to their features. ❖ Infer the relatedness of different organisms 	Supplemental Material not yet determined. Possibly 6 th grade text.

4th Six Weeks	Curriculum Standards	Resources
Week 1	<ul style="list-style-type: none"> ❖ Determine the genus & species of an organism using a dichotomous key. ❖ Use a simple classification key to identify an unknown organism. 	Supplemental Material not yet determined. Possibly 6 th grade text.
Week 2	<ul style="list-style-type: none"> ❖ Introduce the periodic table. ❖ Identify a substance as an acid or base given its pH. 	Chapter 18 (8 th) and supplemental materials. *Lab activity with acids & bases
Week 3 & 4	<ul style="list-style-type: none"> ❖ Distinguish between physical or chemical changes. ❖ Recognize the mass of the reactants is the same as the mass of the products given simple chemical equations. ❖ Determine how temperature and concentration might affect the rate of chemical reactions. ❖ Classify a reaction as exothermic or endothermic. 	Chapter 20 (8 th)
Week 5 & 6	<ul style="list-style-type: none"> ❖ Recognize that forces cause changes in speed and/or direction. ❖ Solve problems pertaining to distance, speed, velocity, and time given illustrations, diagrams, graphs, or scenarios. ❖ Recognize the relationship between mass, force, & acceleration. 	Chapter 21 Motion & Momentum (8 th) Possible use of supplemental materials as well (Prentice Hall Forces at Work)

5th Six Weeks	Curriculum Standards	Resources
Week 1 & 2	<ul style="list-style-type: none"> ❖ Identify Newton's 3 Law's of motion and relate the first two concepts to the concepts of inertia & momentum. ❖ Identify the relationship between the mass of objects, the distance between them, and the amount of gravitational attraction. 	Chapter 22 Force & Newton's Laws (8 th) (Prentice Hall Forces at Work)
Week 3	<ul style="list-style-type: none"> ❖ Identify simple machines. ❖ Choose the most appropriate simple machine to use for a specific task. 	Prentice Hall – Forces at work "Simple Machines"
Week 4	<ul style="list-style-type: none"> ❖ Review for T-CAP 	
Week 5	<ul style="list-style-type: none"> ❖ Review For T-CAP 	
Week 6	<ul style="list-style-type: none"> ❖ T-CAP Testing ❖ Review when possible 	

6th Six Weeks	Curriculum Standards/Gateway standards	Resources
Weeks 1	<ul style="list-style-type: none"> ❖ Possible Abstinence Before Marriage classes 	Sevier County Health Educators
Week 2, 3, & 4	<ul style="list-style-type: none"> ❖ Predict the function of an organ, given a description of its component tissue. 	Chapter 6 the Skeletal System Chapter 8 the Circulatory system.
Weeks 5 & 6	<ul style="list-style-type: none"> ❖ Demonstrate appropriate use and care of compound light microscopes. ❖ Prepare a slide using proper staining technique. ❖ Prepare wet mount slides. ❖ Examine plant & animal cells using compound light microscopes. 	Supplemental materials use microscopes.