

CURRICULUM GUIDE  
8<sup>th</sup> Grade Science  
Second and Third Six Weeks

Unit of Study— Geology Objective 2: Structure and Properties of Matter; Objective 5: Earth and Space Systems: Objective 4: Motion, Forces, and Energy (Activities and Unit includes various Science processes TEKS 8.1 to 8.5)					
TEKS #	Knowledge and Skill TEK	Student Expectation	Vocabulary	Tools	Instructional/Assessment Resources
8.7 B	The student knows that there is a relationship between force and motion	Recognize the waves are generated and can travel through different media	Minerals Crystal Magma Lava Silicate		1. Chapter 8 Notes and discussion 2. <i>Quiz – Chapter 8</i> 3. Mineral Identification Notes
8.9 B	The student knows that substances have chemical and physical properties	Interpret information on the periodic table to understand that physical properties are used to group elements	Hardness Luster Dull Pearly Glassy Silky	Streak plate Glass plate Nail	4. Mineral Identification activity 5. Minerals and their use in everyday life – PowerPoint 6. Review Rock cycle
8.9 D		Identify that physical and chemical properties influence the development and application of everyday materials including but not limited to cooking surfaces, insulation, adhesives, and plastics	Specific Gravity Strak Cleavage Fracture Gem Inorganic Organic Magnetic		7. <b>Quiz</b> 8. Rock Type Review – igneous rocks 9. Chocolate rocks lab 10. Rock Types Review Sedimentary and Metamorphic
8.10 A	The student knows that complex interactions occur between matter and energy	Illustrate interaction between matter and energy including specific heat	Hexagonal Orthorhombic Cubic Tetragonal	Mystery Cans Lab sheets	11. Sedimentary and Metamorphic mystery Identification
8.10 B		Describe interactions among solar, weather and ocean systems	Monoclinic Triclinic Weathering		

Unit of Study—						
TEKS #	Knowledge and Skill TEK	Student Expectation	Vocabulary	Tools	Instructional/Assessment Resources	
8.12 A	The student knows that cycles exist in Earth Systems.	Analyze and predict the sequence of events in the lunar and rock cycles.	Erosion Sedimentary Metamorphic	Crayons paper	12. <i>Quiz</i> 13. Walking Field trip to local cemetery – rubbings showing weathering	
8.12 C		Predict the results of modifying the Earth's nitrogen, water and carbon cycles	Igneous Extrusive Intrusive Rock Cycle Fusion Uplift			Internet Computers
8.14 A	The student knows that natural events and human activities can alter Earth systems	Predict land features resulting from gradual changes such as mountain building, beach erosion, land subsidence and continental drift.	Pressure Deposition Detrital Sedimentary Chemical Sedimentary Organic sedimentary	Internet Computers	14. <b>Geology Project</b>  15. Pangaea Discussion 16. Plate tectonics discussion and notes 17. <i>Quiz</i> 18. Continental Drift Notes 19. <i>Quiz</i> 20. Sea Floor Spreading Notes	
8.14 B		Analyze how natural or human events may have contributed to the extinction of some species	foliated Non-foliated Acid Rain Alfred Wegener Continental drift			
8.14 C		Describe how human activities have modified soil, water, and air quality.	Climate Fossil Glacial Deposits Glaciers Sea floor spreading Plate tectonics Mid-oceanic ridges			Materials to build cities Materials to measure and create earthquake

Unit of Study—					
TEKS #	Knowledge and Skill TEK	Student Expectation	Vocabulary	Tools	Instructional/Assessment Resources
			Lithosphere Asthenosphere Mantle Core Crust Magnetic Magnetometer Pangaea Continent Plates Boundaries Divergent Convergent Transforming fault Rift Valley Earthquake Mountain Volcano Reverse fault Normal fault Strike-slip fault Fault Subduction zone San Andreas Fault Elastic rebound Focus Epicenter Seismic wave		24. Volcanoes notes  25. Volcano Video  26. <i>Quiz</i>  27. Study Guide  28. Review  <b>29. Geology Test using CPS system</b>

Unit of Study—					
TEKS #	Knowledge and Skill TEK	Student Expectation	Vocabulary	Tools	Instructional/Assessment Resources
			Primary Wave Secondary wave Surface wave Seismograph Richter scale Mercalli Intensity scale Tsunamis Tephra Blocks Bombs Basaltic lava Shield volcano Composite volcano Cinder Cone volcano Fissure eruptions Crater Cone Vent Magma chamber Hot spots Convection current Mt. Saint Helens Mt. Fuji Andes Mountains		