

Curriculum Map
Theme: Power of One

7th Grade	September	October	November	December	January	February	March	April	May	June
Component	Power of the Universe			Power of Innovation			Power of a Life Form			
Topic	Nature of Science	Earth's History: Tectonic Plates, Weathering and Erosion, Rocks and Minerals, Human Impact		Atoms	Chemistry		Photosynthesis and Cellular Respiration	Ecology		STEM Sports: Science Review
Topic Description	Nature of Science	Plate Tectonics, Seafloor Spreading, Continental Drift, Volcanoes and Earthquakes, Mapping Earthquake and Volcano Activity Weathering, Erosion, Deposition (NOT IN 18-19 School Year) Soil, Minerals, Rocks and Fossil basics (just fossil types found in sedimentary rocks- dinos covered in 8th Earth Science) Natural Resources and Synthetic Products, Resource Distribution		History of the Atom Atoms Structure Periodic Table of Elements	Elements, Mixtures, Compounds Chemical Bonding Chemical Reactions Chem Equations Types of Reactions		Photosynthesis and Cellular Respiration	Review of ecology definition Feeding and Energy Flow Ecological Roles and Relationships Nutrient Cycling Biomes and Aquatic Ecosystems Environmental Changes Biodiversity		Review of Science Engineering Concepts from the school year
Core Knowledge Correlation	Plate Tectonics-surface, layers, crust movements, earthquakes, volcanoes			Atomic Structure-Theories of Matter, Start of modern chemistry Science Bio: Demetri Mendeleev, Neils Bohr	Chemical Bonds-Metallic, Covalent, Ionic, Oxidation, Reductions, Acids, Bases, Catalyst Science Bio: Lavoisier, Meitner		Chemistry and Food Respiration-Photosynthesis, animal respiration Bio: Robert Hooke			
Essential Questions	How do the materials in and on the Earth's crust change over time? How does the movement of tectonic plates impact the surface of Earth? What are renewable and nonrenewable resources and how can humans use them?			How do scientists build on previous work when developing theories?	What role does chemistry play in the world around us?		How does structure relate to function in living systems from the cellular to the organismic level?	How does a system of living and non-living things operate to meet the needs of the organisms in an ecosystem?		