

Curriculum Map/Scope & Sequence

Unit Name/Time Period	BIG Ideas/Skills	IL Priority Learning Standards	<u>Assessments</u>
Earth Science	*Continental Drift *Earthquakes *Erosion and Deposition *Fossils *Layers of Earth *Oceans *Fossils	MS ESS1-1-Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons. MS ESS1-4-Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history. MS ESS2-1-Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process. MS ESS2-3-Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions. MS ESS3-2-Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.	Station Labs Lab Packets Quizzes Interactive Science Notebook
Chemistry	*Acids and Bases *Physical and Chemical Changes *Metals, Non-Metals, Metalloids *Periodic Table *Solids, Liquids, Gasses	MS LS1-7-Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism. MS PS1-1 - Develop models to describe the atomic composition of simple molecules and extended structures. MS PS1-2 - Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred	Station Labs Lab Packets Quizzes Interactive Science Notebook

Energy	*Conduction, Convection, and Radiation *Renewable and Non-Renewable Resources	MS PS1-6 - Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes MS PS1-4 - Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed. MS PS3-3-Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.* MS ESS3-3-Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.	Station Labs Lab Packets Quizzes Interactive Science Notebook
Force and Motion	*Balanced and Unbalanced Forces *Newton's Laws *Speed, Velocity, Acceleration, and Average Speed	MS PS2-1-Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects. MS PS2-2-Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object. MS PS3-2-Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system	Station Labs Lab Packets Quizzes Interactive Science Notebook
Space	*Asteroids, Comets, and Meteors *Eclipses *Planets *Seasons *Tides	MS ESS1-1-Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons MS ESS1-2-Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system. MS ESS1-3-Analyze and interpret data to determine scale properties of objects in the solar system.	Station Labs Lab Packets Quizzes Interactive Science Notebook