

The reason behind beginning the year with life science standards allows the students to connect with a topic that they might be more familiar with and then bring them to the more abstract later in the year. This should also align with what students are learning in mathematics, bringing in ratios and proportions later in the year along with the mathematics that might be associated with the physical sciences. *Essential Standards

Quarter 1 Topic: (Life Science) ECOLOGY & THE ENVIRONMENT

6.L2U1.13 – Develop and use models to demonstrate interdependence of organisms and environment including biotic & abiotic factors.

6.L2U3.14 – Construct a model that shows the cycling of matter and flow of energy in an ecosystem

6.L2U3.11 – Use evidence to construct an argument regarding the impact of human activities on environment & how they positively & negatively affect competition for energy and resources.

6.L2U3.12 – Support a claim about the factors that cause species to change & how humans can impact those factors **This may be at the beginning of Quarter 2

Quarter 2 Topic: EARTH & SPACE SCIENCE (Part 1)

6.E1U1.6 – Investigate & construct an explanation demonstrating that radiation from Sun provides energy & is absorbed to warm the Earth’s surface & atmosphere. **Refer back to 6.L2U3.14

6.E2U1.7 – Use ratios and proportion to analyze data related to scale, properties & relationships among objects in our solar system.

6.E2U1.8 – Develop and use models to explain how constellations & other night sky patterns appear to move due to Earth’s rotation & revolution.

6.E2U1.9 – Develop and use models to construct an explanation of how eclipses, moon phases, and tides occur within the Sun, Earth, Moon system.

6.E2U1.10 – Use a model to show how the tilt of Earth’s axis causes variations in length of day and gives rise to seasons.

Quarter 3 Topic: (Physical Science) ENERGY & CHEMISTRY

6.P1U1.3 – Develop and use models to represent that matter is made up of small particles called atoms.

6.P1U1.1 – Analyze and interpret data to show that changes in the state of matter are caused by different rates of movement of atoms in solids, liquids, and gases (Kinetic Theory).

Quarter 4 Topic: (Physical Science) FORCE & MOTION

6.P1U1.2 – Plan and carry out an investigation to demonstrate that variations in temperature and/or pressure affect changes in states of matter.

6.P2U1.4 – Develop and use a model to predict how forces act on objects at a distance. (Gravity)

6.P4U2.5 – Analyze how humans use technology to store (potential) and/or use (kinetic) energy.