

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) CELL AS THE BASIC UNIT OF LIFE**

**7.L1U1.8** – Obtain, evaluate and communicate information to provide evidence that all living things are made of cells, cells come from existing cells, and cells are the basic structural and functional unit of all living things.

**7.L2U1.9** – Construct an explanation to demonstrate the relationship between major cell structures and cell functions (plant & animal).

**Quarter 2 Topic: (Life Science) CELL [Continuation];  
ECOLOGY & THE ENVIRONMENT**

**7.L1U1.10** – Develop and use a model to explain how cells, tissues, and organ systems maintain life (animals).

**7.L1U1.11** – Construct an explanation for how organisms maintain internal stability and evaluate the effect of the external factors on organisms' internal stability.

**7.2U1.12** – Construct an explanation for how some plant cells convert light energy into food energy.

**Quarter 3 Topic: (Earth Science) EARTH'S GEOLOGY,  
WEATHER & CLIMATE**

**7.E1U1.5** – Construct a model that shows the cycling of matter and flow of energy in the atmosphere, hydrosphere, and geosphere.

**7.E1U1.6** – Construct a model to explain how the distribution of fossils and rocks, continental shapes, and seafloor structures provides evidence of past plate motions.

**7.E1U1.7** – Analyze and interpret data to construct an explanation for how advances in technology has improved weather prediction.

**Quarter 4 Topic: (Physical Science) FORCES & MOTION**

**7.P3U1.4** – Use non-algebraic math and computational thinking to explain Newton's laws of motion.

**7.P2U1.2** – Develop and use a model to predict how forces act on objects at a distance.

**7.P3U1.3** – Plan and carry out an investigation that can support an evidence-based explanation of how objects on Earth are affected by gravitational forces.

**7.P2U1.1** – Collect and analyze data demonstrating how electromagnetic forces can be attractive or repulsive and can vary in strength.