Science 6th
Year at a Glance (YAG)
2023-24

GT Modifications

First Semester		Second Semester	
1st Nine Weeks – 41 days (August 15th – October 12th) *(September 5th – No School)* *(October 10th – No School)*		**3rd Nine Weeks – 47 days** (January 3rd – March 10th) *(January 18th – No School)* *(February 20th – PD Day)* *(March 13th – 17th – Spring Break)* *(March 20th – Teacher Workday)*	
TEKS Nature of Science (6.1a,b; 6.2 a-e; 6.3 a-d; 6.4 a,b) Matter and Energy: Elements and Compounds; Investigating Chemicals (6.5a, 6.5c)	**Nature of Science (24 days)** Students conduct descriptive, comparative and experimental investigations in a safe manner utilizing appropriate scientific tools. In these experiments, they formulate hypotheses, measure and record data, construct data tables and graphs, and formulate conclusions. **Matter and Energy: Investigating Chemicals (17 days)** Students explore the differences between elements and compounds. Students learn to identify the evidence of a chemical change in an experiment.	**TEKS** Energy Resources and Conservation of Energy (6.7a; 6.8 a, 6.9 a,b,c) Force and Motion (6.8 a-e)	**Energy Resources and Conservation of Energy (23 days)** Students explore the advantages and disadvantages of energy resources and how energy transforms, for example from potential chemical to kinetic electrical energy. Students investigate methods of thermal energy transfer and learn how thermal energy moves from hot to cold. **Force and Motion (24 days)** Students compare and contrast potential and kinetic energy. Students calculate average speed. Students identify and describe the position, direction, and speed of an object when acted upon by unbalanced forces and measure and graph changes in motion. They investigate how inclined planes can be used to reduce the force needed to move a load.
2nd Nine Weeks – 42 days (October 13th – December 16st) *(November 21st – 25th – Thanksgiving Break)* *(December 19th – January 1st – Holiday Break)* *(January 2nd – Teacher Workday)*		**4th Nine Weeks – 45 days** (March 21st – May 24th) *(April 7th – No School)* *(April 28th – No School)*	
TEKS Matter and Energy: Physical Properties of Matter (6.6 a,b) Taxonomic Groups and Ecosystems (6.12 a-f, 6.5 b)	**Matter and Energy: Properties of Matter (17 days)** Students learn that matter has properties that can be used for classification or identification. Students differentiate between metals, nonmetals and metalloids based on the physical properties and calculate the density of an unknown to identify it. **Taxonomic Groups and Ecosystems (25 days)** Students learn that organisms are composed of cells and identify prokaryotic and eukaryotic cells, based on the presence or absence of a nucleus. They describe the biotic and abiotic parts of an ecosystem and explain how organisms are classified into domains and kingdoms based on their characteristics. Students recognize that domains are the broadest groups, which are further subdivided into kingdoms. Students explore the differences between elements and compounds and recognize that a limited number of elements make up Earth's systems.	**TEKS** Earth Materials and Plate Tectonics (6.6c; 6.10 a-d) Solar System and Exploration (6.11 a-c)	**Earth Materials and Plate Tectonics (27 days)** Students identify minerals based on their physical properties. They build a model to illustrate the compositional and mechanical layers of the Earth. Students classify rocks based on their formation. Students identify the major tectonic plates, describe their motion and the geological features that form at each type of boundary. **Solar System and Exploration (18 days)** Students describe the physical properties, locations, and movements of objects in our Solar System. Students understand that gravity is the force that governs motion in our solar system. Students describe the history and future of space exploration, including the type of equipment and transportation needed for space travel.