Course Name: 6th Grade Science
School Year: 2021-2022

Course Purpose and Relevance:
Grade 6 science is interdisciplinary in nature; however, much of the content focus is on physical science. National standards in science are organized as multi-grade blocks such as Grades 5-8 rather than individual grade levels. In order to follow the grade level format used in Texas, the various national standards are found among Grades 6, 7, and 8. Recurring themes are pervasive in sciences, mathematics, and technology. These ideas transcend disciplinary boundaries and include change and constancy, patterns, cycles, systems, models, and scale.

Overview of Student Outcomes:

- The student, for at least 40% of instructional time, conducts laboratory and field investigations following safety procedures and environmentally appropriate and ethical practices
- The student uses scientific practices during laboratory and field investigations.
- The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists.
- The student knows how to use a variety of tools and safety equipment to conduct science inquiry.
- The student knows the differences between elements and compounds.
- The student knows matter has physical properties that can be used for classification.
- The student knows that some of Earth's energy resources are available on a nearly perpetual basis, while others can be renewed over a relatively short period of time. Some energy resources, once depleted, are essentially nonrenewable.
- The student knows force and motion are related to potential and kinetic energy.
- The student knows that the Law of Conservation of Energy states that energy can neither be created nor destroyed, it just changes form.
- The student understands the structure of Earth, the rock cycle, and plate tectonics.
- The student understands the organization of our solar system and the relationships among the various bodies that comprise it.
- The student knows all organisms are classified into domains and kingdoms. Organisms within these taxonomic groups share similar characteristics that allow them to interact with the living and nonliving parts of their ecosystem.

Available Support for Student Learning:
Refer to the teacher's Course Syllabus for resources and course specific opportunities.
Student textbook and/or digital version are available through the CCISD Student Portal.

Link to Course TEKS on State website:
http://ritter.tea.state.tx.us/rules/tac/chapter112/ch112c.html#112.33

Year-At-A-Glance 2021-2022	Department	Secondary Science	PEIMS Code	
	Subject Area	6th Grade Science	Grade Level	6

	1st Nine Weeks		2nd Nine Weeks		
	August	**September**	**October**	**November**	**December**
Week 1		**Energy** **6.8A, 6.9C** Forms and Transformation	**Force and Motion** **6.8B** Balanced and Unbalanced Forces **9 weeks Exams** End of 9 weeks	**Force and Motion w/ EXPERIMENTAL DESIGN** 6.1 – 6.4, 6.8B-E	**Geology Foundations** **6.10B** Rock Cycle Review
Week 2		**Energy** **6.9A, 6.9B** Thermal Energy Flow	**Force and Motion** **6.8C, 6.8D** Speed (including motion graphs)	**Force and Motion w/ EXPERIMENTAL DESIGN** 6.1 – 6.4, 6.8B-E	Semester Exams
Week 3	**Safety and Scientific Skills** **6.1 – 6.4** Safety & Equipment Scientific Reasoning Skills **These skills should be incorporated throughout the year.*	**Energy** **6.7A** Sources and Management	**Force and Motion** **6.8C, 6.8D, 6.8E** Speed (including motion graphs) Inclined Planes	**Geology Foundations** **6.6C** Minerals	Holidays
Week 4	**Safety and Scientific Skills** **6.1 – 6.4** Scientific Reasoning Skills	**Force and Motion** **6.8B** Balanced and Unbalanced Forces	**Force and Motion w/ EXPERIMENTAL DESIGN** 6.1 – 6.4, 6.8B-E	**Thanksgiving**	Holidays
Week 5	**Energy** **6.8A, 6.9C** Forms and Transformation			**Geology Foundations** **6.10B** Rock Cycle	

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	3rd 9 Weeks			4th 9 Weeks	
	January	**February**	**March**	**April**	**May**
Week 1	Review and Analyze Semester ExamData	**Chemistry** **6.1A, 6.5A, 6.5B** Elements vs Compounds Chemical Labels	**Chemical Changes** **6.5C** Chemical Changes	**Cells** **6.4A, 6.12A** Microscope Skills Building Blocks	**Classification** **6.12D** Kingdoms
Week 2	**Plate Tectonics** **6.3B-C** Layers of the Earth	**Chemistry** **6.1A, 6.5A, 6.5B** Elements vs Compounds Chemical Labels	**Chemical Changes** **6.5C** Chemical Changes 9 Weeks Exam End of 9 Weeks	**Cells** **6.12B** Prokaryote vs Eukaryote	**Ecology** **6.12E** Biotic and Abiotic STAAR Testing
Week 3	**Plate Tectonics** **6.10A, 6.10C, 6.10D** Plate Tectonics Spiraling: Balance and Unbalanced Forces	**Physical Properties** **6.6A, 6.6B** Phys. Prop. Of Elements	Spring Break	**Classification** **6.12C** Classifying Domains	**Ecology** 6.12F Ecological Levels of Organization Semester Exam Review
Week 4	**Plate Tectonics** **6.10A, 6.10C, 6.10D** Plate Tectonics	**Physical Properties** **6.6A, 6.6B** Phys. Prop. Of Elements	**Solar System Exploration** **6.11A** Sun, Planets, Moons, Meteors	**Classification** **6.12D** Kingdoms	Semester Exams
Week 5			**Solar System Exploration** **6.11B, 6.11C** Gravity Space Exploration		