

Course Name: 6th Grade Science On-level and Honors

School Year: 2025-2026

Course Purpose and Relevance:

Grade 6 science is interdisciplinary in nature; however, the content focus includes physical science, earth and space science, and life science. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. Recurring themes such as patterns, cycles, systems, models, and scale transcend disciplinary boundaries and are integral to understanding the interconnected nature of science, mathematics, and technology

6th Grade Honors Science is an accelerated course that covers standards from 6th, 7th, and/or 8th grade. This curriculum is designed to build on students' existing knowledge, providing an in-depth understanding of the units of study and preparing them for advanced science courses in the future.

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

Scientific and Engineering Practices: Students conduct investigations to answer questions and explain phenomena using scientific and engineering practices, appropriate tools, and models. Investigations include descriptive, correlative, comparative, or experimental methods.

- Matter and Energy: Students explore properties of solids, liquids, and gases, classifying elements as metals, nonmetals, or metalloids. They investigate mixtures, compare densities of substances, and identify evidence of chemical changes.
- Force, Motion, and Energy: Students investigate the relationship between force and motion, studying Newton's Third
 Law of Motion and exploring potential and kinetic energy. They learn that energy is conserved through changes and
 transfers within systems.
- Earth and Space: Students study cycles within Sun, Earth, and Moon systems, seasons, and tides. They examine the Earth's spheres, geosphere processes, and resource management's advantages and disadvantages.
- Organisms and Environments: Students learn about cells, ecosystems, and the organization of communities, populations, and organisms. They examine relationships between organisms, biotic, and abiotic factors, and how variations impact survival.
- Nature of Science: Students understand that science is the use of evidence to construct testable explanations and predictions of natural phenomena. They learn that science involves physical, mathematical, and conceptual models.

Students will learn that scientific observations involve acquiring information through the senses, while inferences are conclusions drawn based on evidence. They will understand that hypotheses are testable statements and that scientific theories are well-established explanations grounded in extensive evidence.

Students will analyze systems in terms of structure and function, utilizing recurring themes and concepts such as systems, models, and patterns. They will observe and model change and constancy in systems, comprehend the limitations of models, and make scientifically testable predictions.

Available Support for Student Learning:

Refer to the teacher's Course Syllabus for resources and course-specific opportunities. The student textbook and/or digital version are available through the CCISD Student Portal.

Link to Course TEKS on State website:

6th Grade TEKS Link

	Year-at-a-Glance 25-26	Grade Level	6 th Grade OL and Honors Science			
	First Semester Instruction					
	Unit 1: Scientific and Engineering Practices (6.1-6.5)					
	BB 1: Lab Safety (6.1C, 6.1D)					
 S	BB 2: Exploring Phenomena through Inquiry (6.1-6.5)					
Weeks	TEKS 6.1-6.5 will be embedded throughout each unit supporting the implementation of 3-Dimensional Instruction					
	OL Unit 2: Matter and Energy (6.6) H Unit 2: Matter and Energy (6.6)					
Nine	BB 1: States of Matter (6.6A)		BB 1: States of Matter (6.6A)			
1st Ni	BB 2: The Periodic Table (6.6C)		BB 2: The Periodic Table (6.6C)			
	BB 3: Physical Properties of Matter (6.6B)		BB 3: Physical Properties of Matter (6.6B, 8.6A)			
	BB 4: Density (6.6D)		BB 4: Density (6.6D)			
	BB 5: Chemical Change (6.6E)		BB 5: Chemical Change (6.6E, 7.6C)			
	OL Unit 3: Force & Motion (6.7)		H Unit 3: Force & Motion (6.7)			
	BB 1: Forces (6.7A)		BB 1: Forces (6.7A)			
S	BB 2: Net Forces (6.7B)		BB 2: Net Forces (6.7B, 7.7D)			
Weeks	BB 3: Newton (6.7C)		BB 3: Newton (6.7C)			
e	OL Unit 4: Energy (6.8)		H Unit 4: Energy (6.8)			
Nine	BB 1: Potential and Kinetic Energy (6.8A)		BB 1: Potential and Kinetic Energy (6.8A)			
Z	BB 2: Transfer of Energy (6.8B)		BB 2: Transfer of Energy (6.8B, 7.8A)			
2 nd	BB 3: Waves (6.8C)		BB 3: Waves (6.8C, 8.8A, 8.8B)			
	Curriculum Based Semester Exam/District Created CBA					
	Assessment	ment				

	Year-at-a-Glance 25-26 G	rade Level	6 th Grade OL and Honors Science	
		Semester Instruction		
3 rd Nine Weeks	OL Unit 5: Sun, Earth, and Moon (6.9) BB 1: Seasons (6.9A) BB 2: Tides (6.9B)		H Unit 5: Sun, Earth, and Moon (6.9) BB 1: Seasons (6.9A) BB 2: Tides (6.9B)	
	OL Unit 6: Earth (6.10) BB 1: Earth's Systems (6.10A) BB 2: Earth's Layers (6.10B) BB 3: Rock Cycle (6.10C)		H Unit 6: Earth (6.10 & 7.10) BB 1: Earth's Systems (6.10A) BB 2: Earth's Layers (6.10B) BB 3: Rock Cycle (6.10C) BB 4: Plate Tectonics (7.10A, 7.10B)	
	OL Unit 7: Earth's Resources (6.11) BB 1: Resource Management (6.11A, 6.11B)		H Unit 7: Earth's Resources (6.11 & 8.11) BB 1: Resource Management (6.11A, 6.11B) BB 2: Human Impact on Climate (8.11B)	
4th Nine Weeks	OL Unit 8: Organisms and Environments (6.12) BB 1: Ecological Organization (6.12C, 6.12A) BB 2: Relationships (6.12B)		H Unit 8: Organisms and Environments (6.12 & 7.12) BB 1: Ecological Organization (6.12C, 6.12A) BB 2: Relationships (6.12B) BB 3: Energy in Ecosystems (7.12A, 7.12B)	
	OL Unit 9: Characteristics & Variations of Organisms (6.13) BB 1: Introduction to Cells (6.13A) BB 2: Characteristics of Organisms (6.13B) BB 3: Variations and Survival (6.13C)		H Unit 9: Characteristics & Variations of Organisms (6.13 & 8.13) BB 1: Introduction to Cells (6.13A) BB 2: Characteristics of Organisms (6.13B, 8.13A) BB 3: Variations and Survival (6.13C)	
	Exam Semester Exam			