



Course Name: 7th Grade Science
School Year: 2021-2022

Course Purpose and Relevance:

Grade 7 science is interdisciplinary in nature; however, much of the content focus is on organisms and the environment. National standards in science are organized as [a] 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 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 that interactions occur between matter and energy.
- The student knows that matter has physical and chemical properties and can undergo physical and chemical changes.
- The student knows that there is a relationship among force, motion, and energy.
- The student knows that natural events and human activity can impact Earth systems.
- The student knows components of our solar system.
- The student knows that there is a relationship between organisms and the environment.
- The student knows that populations and species demonstrate variation and inherit many of their unique traits through gradual processes over many generations.
- The student knows that living systems at all levels of organization demonstrate the complementary nature of structure and function.
- The student knows that a living organism must be able to maintain balance in stable internal conditions in response to external and internal stimuli.
- The student knows that reproduction is a characteristic of living organisms and that the instructions for traits are governed in the genetic material.

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	Science	PEIMS Code	
	Subject Area	7 th Grade On Level Science	Grade Level	7 th

Area	1 st Nine Weeks	2 nd Nine Weeks
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	August	September	October	November	December
Week 1		Cells and Level of Organ Life & Cell Theory Organelles and Functions Levels of Organ.	Human Body System 10 body systems End of 1 st 9 Weeks	Human Body System 10 body systems	Review
Week 2		Energy Transformations Sun to the Cell	Human Body System 10 body systems	Human Body System 10 body systems	<u>14</u> Semester Exams
Week 3	Safety and Scientific Skills Safety Reasoning Skills Data	Plants Plant Structure Forces and Ext Stim Forces and Int Stim	Human Body System 10 body systems	Human Body System 10 body systems	<u>21</u> Winter Holidays
Week 4	Safety and Scientific Skills Safety Reasoning Skills Data	Plants Plant Structure Forces and Ext Stim Forces and Int Stim	Human Body System 10 body systems	Thanksgiving Break	Winter Holidays
Week 5	Cells and Level of Organ Life & Cell Theory Organelles and Functions Levels of Organ.			Heredity Heredity, Genes & Chromosomes Sexual/Asexual Repro.	

Week is based on the month that the first day of the week occurs.

Year-At-A-Glance	Department	Science	PEIMS Code	03060800
	Subject Area	7 th Science On Level	Grade Level	9-12

3rd Nine Weeks	4th Nine Weeks
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	January	February	March	April	May
Week 1	Semester Exam Analysis Ground & Surface Water Ground & Surface Water	Weathering, Erosion, & Deposition WED	Ecoregions and WED Ecoregions WED in Texas Ecoregion Catastrophic Events	Energy Flow in Ecosystems Energy Flow (chains, webs, pyramids)	Diversity and Natural Selection Microhabitats & Biomes Pop. Variation & Natural Selection Biodiversity & Sustainability
Week 2	Ground & Surface Water Ground & Surface Water	Weathering, Erosion, & Deposition WED	Ecoregions and WED Ecoregions WED in Texas Ecoregion Catastrophic Events End of 3 rd 9 Weeks	Energy Flow in Ecosystems Energy Flow (chains, webs, pyramids)	Diversity and Natural Selection Microhabitats & Biomes Pop. Variation & Natural Selection Biodiversity & Sustainability
Week 3	Ground & Surface Water Ground & Surface Water	Weathering, Erosion, & Deposition WED	Spring Break	Energy Flow in Ecosystems Energy Flow (chains, webs, pyramids)	Review
Week 4	Ground & Surface Water Ground & Surface Water	Ecoregions and WED Ecoregions WED in Texas Ecoregion Catastrophic Events	Succession and Dich. Keys Succession Dichotomous Keys	Diversity & Natural Selection Microhabitats & Biomes Pop. Variation & Natural Selection Biodiversity & Sustainability	Semester Exams
Week 5			Succession and Dich. Keys Succession Dichotomous Keys		