



Tsehootsoo Middle School
Mr. Ironwater- Science (7th/8th)
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Classroom Phone: 928-729-6893

Course Overview

By the end of seventh grade, students will investigate the impact of forces on motion and energy transfer in geologic, atmospheric, and environmental processes. They will explore force and motion in various systems, model the role of heat energy in weather cycles, and understand cell structure and function. Students will hone their scientific and engineering skills through data collection, observation, and measurement, utilizing practices like questioning, modeling, investigating, analyzing, and communicating information. The seventh-grade standards emphasize understanding natural phenomena through patterns, cause and effect, and structure and function while allowing connections to crosscut concepts in individual lessons.

By the end of eighth grade, students should know about Biology, Chemistry, Physics, Earth Science, and Environmental Science. The curriculum intends to prepare students for the science education to next academic level and introduce vigorous topics in science to become globally competitive. The curriculum will be enhanced with reading, writing, mathematics, and engineering aligned with the Common Core State Standards. Scientific inquiry, Nature and History of Science, Science, Technology and Society, Earth and Space, Physics and Life Science will be the topics woven into the curriculum for the entire year.

Attendance

This course is tailored to optimize your subject matter comprehension and skill development through diverse activities. Accordingly, our attendance policy is aligned with our educational objectives. Assignments aimed at preparing you for class, such as online quizzes, discussions, or in-class/section homework, must be submitted on time and will not be accepted after the due date. Lab activities are integral to your learning and overall success in written lab assignments and future exams. In the event of missed lab activities, you should consult your teacher, but please be aware that making up labs may not be possible due to space and equipment limitations.

Assessments

Throughout the course, exams will be scheduled either at the end of the quarter or at the beginning, depending on the class pacing. Additionally, quizzes will be conducted at the end of each week through the APEX Digital Learning Middle School Science Course that aligns with the unit or topic. Apart from these class assessments, the school will also administer State and District Assessments,

Gmail: Students will be required to have access to a Gmail account. The purpose of their Gmail account is to align with the district's initiative to reduce paper usage and increase student typing and technology skills. Students may not need to create a new account just for this class or utilize an old account; they may share an account with a sibling or parent.

Assignments: Students will have daily assignments. These assignments may vary in difficulty and may have different deadlines, but one assignment will be issued each day.

Extra Credit: There will be opportunities given to gain extra credit throughout the quarter, usually these involve going beyond the normal expectations on assignments

Late/Make-up/Missing Assignments will be accepted up to the end of the quarter exam day, with a valid excused absence.

8th GRADE

Unit Topics

Quarter	Topic/Unit
1	Atoms and Periodic Table
1	Chemical and Physical Properties
1	Wave Properties
1	Energy Transformation
2	DNA and Genetics
2	Inheritance
2	Communities and Populations
2	Biological Evidence
3	The Continental Drift
3	Rock Cycle
3	Natural Hazards-Earthquakes and Volcanoes
3	Human Consumption
4	Review
4	Constellations-Rotation and Revolution
4	Earth's Tilt

7th Grade

Course Outline

Quarter	Topic/Unit
1	Gravity
1	Laws of Motion
1	Force at a Distance
2	Weather Predictions
2	Cycling of Matter and Flow of Energy
2	Plate Tectonics
3	Cell Theory and Structure
3	Cells, Tissues, and Organ Systems
3	Internal Stability/
3	Plant Cells/Photosynthesis
4	Review
4	Rotation, Revolution, Axis
4	Sun-Earth-Moon System

A – 90% - 100%

B – 80% - 89%

C – 70% - 79%

D – 60% - 69%

F - 0% - 59%

General Classroom Rules

- Be Safe: follow lab, fire drills, lockdown, and assembly expectations as outlined in the handbook
- Be Respectful: language, peers and teacher, classroom materials, online...etc.
- Be Responsible: materials, school activities, assignments, etc.
- Be Prepared: science journal, pencils, homework (Workbooks)