



Sixth Grade Instructional Plan for Science

Course Overview

Sixth-grade science is an integrated course that covers various topics within Earth and space science, life science, and physical science. Students explore concepts like the structure of matter, the states of matter, energy transfer, Earth's systems, and the relationships between organisms and their environment. The curriculum emphasizes hands-on investigations, data analysis, and the use of the scientific processes. Instruction is based on the Texas Essential Knowledge and Skills (TEKS), with a focus on building a deep understanding of key concepts through hands-on lab investigations, STEM experiences, and real-world application. Students will engage in scientific practices, use evidence to construct explanations, and learn how science connects to everyday life.

Throughout the year, students will:

- Hands-On Investigations: frequent TEKS-aligned labs
- Interactive Notebooks: Used for vocabulary, diagrams, notes, and reflections
- Modeling & Simulations: Digital and physical models to support abstract concepts
- Collaborative Learning: Group activities, peer discussion, and cooperative lab work
- STEM Challenges: Engineering design activities tied to real-world problems
- Spiraling Review: Reinforcement of previously taught standards across the year

Contact Information

Teacher Name: **Carrie Herman, M.Ed.**

Email: carrie.herman@midlandisd.net

Phone: 432-240-6100

Classroom Expectations

Our classroom is a safe learning place, which encourages teamwork, positive feedback, and academic achievement. All students will be respectful to others.

Expectation 1: Be an Active Participant

- Stay engaged in lessons and activities.
- Listen attentively and contribute ideas.
- Ask questions and try your best.

Expectation 2: Be Respectful

- Treat classmates, teachers, and yourself with kindness.
- Use polite language and listen when others speak.
- Respect differences, materials, and personal space.

Expectation 3: Be Responsible

- Come to class prepared and on time.
- Complete assignments and manage your time well.
- Take ownership of your actions and choices.



Sixth Grade Instructional Plan for Science

Positive reinforcement and clear routines will help students learn and meet these expectations. If expectations are not met, the teacher will remind the student(s) of expectations. If a student continues to fail to meet expectations, they will be redirected, and then parents will be contacted. If a student is unable to meet expectations after these preventative measures, an office referral will be made.

Attendance Policy & Its Importance

Regular attendance is vital to your child's academic development. When students attend daily, they stay current with new skills, deepen their knowledge of the world, develop thinking skills, and practice important habits that support lifelong learning.

Please notify the school if your child will be absent. Frequent or extended absences may make it more difficult for your child to learn the necessary foundational skills that ensure student success this year and in future school years.

Learning Objectives

By the end of the first semester, students will be able to:

- use science process standards
- compare solids, liquids, and gases
- investigate the physical properties of matter
- compare the density of substances relative to various fluids.
- identify elements on the periodic table as metals, nonmetals, metalloids, and rare-earth elements
- identify the formation of a new substance by using the evidence of a possible chemical change
- identify and explain how forces act on objects
- calculate the net force on an object
- identify simultaneous force pairs that result from the interactions between objects using Newton's Third Law of Motion.
- compare and contrast gravitational, elastic, and chemical potential energies with kinetic energy.
- describe how energy is conserved through transfers and transformations
- explain how energy is transferred through transverse and longitudinal waves.
- model and illustrate how the tilted Earth revolves around the Sun causing changes in seasons.

Course Resources

- Chromebook (provided by Midland ISD)
- Journals and writing utensils (part of the school supply list)
- SAVVAS
- Lego Robotics



Sixth Grade Instructional Plan for Science

Grading Policy

According to Midland ISD Grading Policy:

The summative evaluation of a student's grade during a recording period should be based on sufficient data collected in class in the form of various assessments. Regular and periodic assessment of student progress ensures a student has ample time for remediation.

Students must receive feedback on every graded assignment within three to seven days. Major assignments will receive feedback within ten days. Teachers will, at a minimum, communicate with students and their guardians every ten school days regarding upcoming assessments, classroom reminders, learning topics covered in class, and/or expectations. Regular communication may be electronic through the adopted Student Information System or other messaging applications.

Major assignments - 60% Minor assignments - 40%

Class Dojo (School-wide System of Communication)

Our campus uses ClassDojo to communicate with families. Please ensure you join our class for important updates.

Please feel free to reach out with any questions or concerns. We are excited to work together to make this a successful year of learning!

Please fill out the portion below and return this portion to your teacher.

We acknowledge that we have read and that we understand the expectations in 6th Grade Science. We agree to contact the teacher should we have any questions or concerns regarding this instructional plan.

Parent Name: _____

Student Name: _____

Cell Phone Number: _____

E-Mail: _____

Parent Signature: _____

Student Signature: _____

Date: _____