

6th grade Science Syllabus

Mrs. Collins – Lake Dallas Middle School

Semester 1, Fall 2026

Dear Parents and Guardians,

Welcome to 6th grade science at Lake Dallas Middle School! This syllabus outlines the course plan for your child's class this semester, including key topics, expectations, and how you can support their success. As required by Texas law (Senate Bill 12), this document serves as the instructional plan and is available for your review. I look forward to working with you and your child!

Contact Information

- **Teacher:** Hannah Collins
 - **Email:** hcollins@ldisd.net
 - **Phone:** 940-497-4037
 - **Conference Time:** Monday–Friday, 2:35-3:10
 - **Best Way to Reach Me:** Email or call the school office. I'll respond within 24 hours on school days.
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Course Overview (Instructional Plan)

This semester, your child will study the following topics in Science, based on Texas state standards, Texas Essential Knowledge and Skills (TEKS):

Unit 1: Investigating Properties of Matter

Learning Objectives: Students will compare solids, liquids, and gases based on structure, shape, volume, and the kinetic energy of the substance's particles. Students will also distinguish between pure substances, homogeneous mixtures, and heterogeneous mixtures. They will compare the density of solids and liquids relative to different fluids.

TEKS: 6.5(A,B), 6.6(A,B,D))

Unit 2: Investigating Elements and Chemical Change

Learning Objectives: Students will use physical properties to identify elements found on the periodic table as metals, nonmetals, metalloids, and rare earth elements. Students will also relate the importance of elements to modern life, such as the use of silicon to manufacture semiconductors. They will identify the formation of a new substance by using evidence of chemical change.

TEKS: 6.5(A), 6.6(C,E))

Unit 3: Investigating Force and Motion

Learning Objectives: Students will identify and explain the different types of forces that act on objects using real-world applications. They will also calculate the net force of an object using diagrams and study Newton's Third Law of Motion by identifying simultaneous force pairs that are equal in magnitude and opposite in direction.

TEKS: 6.5(D,G), 6.7(A,B,C))

Unit 4: Investigating Energy

Learning Objectives: Students will describe how energy is conserved during the transfer and transformation of energy in real-world scenarios in systems, such as electrical circuits, food webs, amusement park rides, or photosynthesis. Lastly, students will explain how energy is transferred through transverse and longitudinal waves.

TEKS: 6.5(E), 6.8(A,B,C)

Unit 5: Investigating the Solar System

Students will address expectations of how the tilted Earth revolves around the Sun causing seasons. Students will also describe and predict how the positions of the Earth, Moon, and Sun cause daily tides in our oceans.

TEKS: 6.5(C,G), 6.9(A,B)

Additional Skills/Activities

Developing critical thinking, note-taking, and time management

Activities include: Hands-on labs, group projects, and data analysis; Quizzes, exit tickets, and performance tasks; Research and presentations on scientific innovations; Optional: Novel Study or career exploration activity

Thank you for supporting your child's education! Feel free to contact me with questions.

Sincerely,

Mrs. Collins