



## 8th Grade Science Syllabus

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### Course Description

8th Grade Science provides students with a comprehensive understanding of Earth, life, and physical sciences. Through inquiry, lab investigations, and data analysis, students explore topics ranging from force and motion to ecosystems and the universe. The course prepares students for high school science and the STAAR Science 8 assessment.

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### Curriculum Overview

Quarter	Unit	Topic	Guiding Question	TEKS
Q1	Intro	Lab Safety & Routines	How can we be safe in the lab?	—
Q1	Unit 1	Matter & Energy	How can matter be classified? How is matter conserved?	8.6A–E
Q1	Unit 2	Force & Motion	How are force and motion related within systems?	8.7A–B
Q2	Unit 3	Energy	How is energy transferred through waves?	8.8A–B
Q2	Unit 4	Universe	How is the universe composed? What is the scale?	8.9A–C
Q3	Unit 5	Weather & Climate	How do the Earth, ocean, and weather systems impact climate?	8.10A–C
Q3	Unit 6	Natural Events & Human Impact	How do natural events and human activities impact global climate?	8.11A–C
Q4	Unit 7	Ecosystems	How do stability and change coexist in populations and ecosystems?	8.12A–C



Q4	Unit 8	Cells & Organisms	How do cell functions support organism health? How do adaptation and variation relate to survival?	8.13A–C
Q4	STAAR Review	Meets & Masters Focus	—	Spiral Review

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## Skills & Standards

- Safely conduct scientific investigations and use lab tools appropriately
  - Analyze physical properties and changes in matter
  - Explore Newton's laws and their real-world applications
  - Investigate wave behavior and energy transformations
  - Understand astronomical systems and the structure of the universe
  - Analyze weather patterns and the interaction of Earth systems
  - Evaluate environmental changes from natural and human causes
  - Examine ecosystems and the interdependence of organisms
  - Investigate cellular structure, function, and genetic variation
  - Prepare for STAAR Science through rigorous review and mastery tasks
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## Grading

Please refer to the Forney ISD Grading Guidelines for grading expectations, late work policies, and reassessment procedures.