8th Grade Science

Mrs. Cawley

August 19, 2026





Agenda

- 8th Grade Science Standards
- Resources
- Grading Policy
- Missing Work
- Retake
- Communication
- Questions





8th Grade Standards-Biology

Genetics & Natural Selection

Genetics: Explain how traits are inherited and how mutations create genetic variation.

Genetic technology: Explore how advances such as DNA research and biotechnology affect human lives-both positively and negatively.

Natural selection: Use models and evidence to explain how populations change over time.

8th Grade Standards-Chemistry

Matter & Chemical Reactions

- Use models to show how atoms and molecules are rearranged during chemical reactions.
- Understand that the total number of each type of atom is conserved.
- Identify substances using their unique physical and chemical properties.



8th Grade Standards-Physics (Minor)

Energy & Waves

- Explain how energy can be transferred from one form to another.
- Use mathematical models to describe wave characteristics and interactions.
- Investigate how waves behave and how energy moves through systems.

8th Grade Standards-Earth Science (Minor)

Earth's History, Hazards & Resources

- Analyze the geological column to determine relative ages of rock layers and fossils.
- Use historical data and patterns to understand and predict natural hazards and geological events.
- Examine how human consumption of limited resources affects Earth's biosphere.

Resources:District

7, 8	OpenSciEd ⭐	OpenSciEd	on Unit Tabs in curriculum document 7th grade kits on campuses, 8th grade kits through Science Center
6-8	Gizmos ⭐	ExploreLearning	Through Clever Getting Started with Gizmos
7,8	CK-12 Flexbooks for Middle School ⭐	CK-12	• CK-12 website • Can be assigned in Canvas • Getting Started with cK-12
6-8	Data Nuggets	Data Nuggets	Data Nuggets website
6-8	PhET	University of Colorado at Boulder	PhET website

District adopted resources for instruction

Resources: iSN



Grading Policy

- Assessment – 80%

Laboratory work, Lab Reports, Module Exams/Quizzes Projects, and Presentations

- 3 Major Assessments (Quarterly)
  2 Projects
- District Assessment (5 throughout the year)
- AZ Sci Test (April)

Grading Policy

- Coursework–20%

in-class assignments, exit tickets, checks-for-understanding, ISN and CK12 Assigned

Canvas:
Your Window into Our Classroom



A parent can be an observer!

Missing Work



- No submission =0% (Missing)
- 5 days to submit (actual score)
- Student completes a missing assignment form(Parent Signature) for the assignment to be graded
- If not submitted–49% (Missing)



Retakes: Assessments



- Students may retake assessments.
- No Missing Assignment (Module)
- Student completes a Google Form to request a retake.
- Retakes usually occur before school at 7:30 AM or after school



Communication



- Bi-weekly Newsletter
- Weekly Reminders (sent to your child) @ 1pm every Sunday.
- Feel free to send me an email for any concern/questions



Thank you for coming tonight!

