

SCIENCE

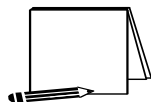
COURSE SYLLABUS

REQUIRED MATERIALS

- folder or binder for science papers
- pencil or pen
- agenda
- science book
- chromebook

IF YOU ARE ABSENT

Complete the missed assignments
Hand them in for credit within two days!



LATE WORK

Late work must be completed in order to avoid an incomplete or failing grade at the end of the quarter.

REMIND

Join to communicate with the teacher using the Browns Valley School Remind app. You can join classes as listed below:

Grade 6 Science = @fdg72a
Grade 7 Science = @9k23e3
Grade 8 Science = @96c73f

The teacher will respond to messages between 7:30 a.m and 3:30 p.m. on school days.

GRADING

- 50% Tests and Projects
- 50% Daily Participation
- Complete grade reports will be given to students at midterm and at the end of the quarter. In addition, parents of students who are incomplete or receiving below a C in science will be contacted each week.
- See student handbook for grading scale.

DAILY PARTICIPATION

Points will be determined from your participation in the daily experiments, activity sheets, IXL, HMH Online, and behavior.

TESTS AND PROJECTS

Points will be determined from your performance on the module tests and projects.

Grade 6 "Earth Science"

Why am I taking this science course?

This class is designed to help you develop and maintain interest in science programs by:

- learning basic science knowledge and concepts
- active participation by students
- opportunities for hand-on learning
- opportunities for problem solving
- scientific reasoning development.

What am I going to learn?

The curriculum in this science class is designed to support the Minnesota Academic Standards and the National Science Education Standards for grades 6-8. Throughout the year, you will be working to demonstrate your knowledge of interactions and interdependence of living systems and understanding the human body, including heredity, reproduction, and regulation and behavior plants, in animals, and microorganisms including diversity and adaptation of organisms, and populations and ecosystems; and the dynamic effect of humans interacting with the environment by:

- (1) formulating questions to be answered based on systematic observation;
- (2) designing and conducting investigations and field studies
- (3) analyzing data to support or refute hypotheses by identifying patterns in data; and comparing results to known scientific theories, current models, or personal experience; and considering multiple interpretations of data;
- (4) describing how a premise is supported by scientific concepts, principles, theories, or laws; and
- (5) creating models to illustrate a contemporary or historical concept, principle, theory, or law.

How and when am I going to learn all of this?

Consumer Science Experiment: September

- In a group with one of two of your classmates you will design, conduct, and analyze an experiment using the scientific method. This is practice being a "scientist."

Module E – Earth's Water and Atmosphere – September and October

Unit 1 – Circulation of Earth's Air and Water

Unit 2 – Weather and Climate

Module F – Geologic Processes and History - November and December

Unit 1 – The Dynamic Earth

Unit 2 – Earth Through Time

Module G – Earth and Human Activity – January, February, and March

Unit 1 – Earth's Natural Hazards

Unit 2 – Resources in Earth Systems

Unit 3 – Using Resources

Unit 4 – Human Impacts on Earth Systems

Module H – Space Science – April and May

Unit 1 – Patterns in the Solar System

Unit 2 – The Solar System and Universe

Grade 7 "Life Science"

Why am I taking this science course?

This class is designed to help you develop and maintain interest in science programs by:

- learning basic science knowledge and concepts
- active participation by students
- opportunities for hand-on learning
- opportunities for problem solving
- scientific reasoning development.

What am I going to learn?

The curriculum in this science class is designed to support the Minnesota Academic Standards and the National Science Education Standards for grades 6-8. Throughout the year, you will be working to demonstrate an understanding of the structure of earth systems, including the geosphere, hydrosphere, and atmosphere; concepts of change and constancy in the earth's history and theories of origin through evidence found in fossils, rocks and layers, land forms, and natural events; and the relative position and motion of objects in the solar system including moon phases and tides, seasons, eclipses, gravitational force, and planetary motion by:

- (1) formulating questions to be answered based on systematic observation;
- (2) designing and conducting investigations and field studies
- (3) analyzing data to support or refute hypotheses by identifying patterns in data; and comparing results to known scientific theories, current models, or personal experience; and considering multiple interpretations of data;
- (4) describing how a premise is supported by scientific concepts, principles, theories, or laws;
- (5) creating models to illustrate a contemporary or historical concept, principle, theory, or law.

How and when am I going to learn all of this?

Consumer Science Experiment: September

- In a group with one of two of your classmates you will design, conduct, and analyze an experiment using the scientific method. This is practice being a "scientist."

Module B: Cells and Heredity – September, October, November

Unit 1 – Cells

Unit 2 – Organisms as Systems

Unit 3 – Reproduction, Heredity, and Growth

Module C: Ecology and Environment – December, January, February

Unit 1 – Matter and Energy in Living System

Unit 2: Relationships in Ecosystems

Unit 3 – Ecosystem Dynamics

Module D: The Diversity of Living Things – March and April

Unit 1: The History of Life on Earth

Unit 2: Evolution

Unit 3: Human Influence on Inheritance

Module A: Engineering and Science – May

Unit 1: Introduction to Engineering and Science

Unit 2: The Practices of Engineering

Grade 8 "Physical Science"

Why am I taking this science course?

This class is designed to help you develop and maintain interest in science programs by:

- learning basic science knowledge and concepts
- active participation by students
- opportunities for hand-on learning
- opportunities for problem solving
- scientific reasoning development.

What am I going to learn?

The curriculum in this class is designed to support the Minnesota Academic Standards and the National Science Education Standards for grades 6-8. Throughout the year you will be working to demonstrate an understanding of the fundamental laws and concepts of the physical world including properties of matter, physical and chemical changes, transfer of energy, and force and motion by:

- (1)formulating questions to be answered based on systematic observation;
- (2)designing and conducting investigations and field studies
- (3)analyzing data to support or refute hypotheses by identifying patterns in data; and comparing results to known scientific theories, current models, or personal experience; and considering multiple interpretations of data;
- (4)describing how a premise is supported by scientific concepts, principles, theories, or laws;
- (5)creating models to illustrate a contemporary or historical concept, principle, theory, or law.

How and when am I going to learn all this?

Consumer Science Experiment: September

- In a group with one of two of your classmates you will design, conduct, and analyze an experiment using the scientific method. This is practice being a "scientist."

Module I – Energy and Transfer – September and October

Unit 1 – Energy

Unit 2 – Energy Transfer

Module J – Chemistry – November, December, and January

Unit 1 – The Structure of Matter

Unit 2 – States of Matter and Changes of State

Unit 3 – Chemical Processes and Equations

Unit 4 – The Chemistry of Materials

Module K – Forces, Motions, and Fields – February and March

Unit 1 – Forces and Motions

Unit 2 – Electric and Magnetic Forces

Module L – Waves and Their Applications – April and May

Unit 1 – Waves

Unit 2 – Information Transfer