

At the end of the school year, students will be able to...

GOAL 11 Inquiry

(Integrated into the whole year) Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.

STANDARD A

Know and apply the concepts, principles and processes of scientific inquiry.

- _____ Describe what happened orally.
- _____ Ask random questions about science topics.
- _____ *Observe, collect and compare data using all the senses.
- _____ Record data in pictorial form.
- _____ Describe patterns in data, with teacher prompt.
- _____ Compare individual and group results, with teacher prompt.

STANDARD B

Know and apply the concepts, principles and processes of technological design.

- _____ State the design problem in his/her own words.
- _____ Describe how something could be made to work better.
- _____ Observe and help teacher build device.
- _____ Try the idea with teacher assistance.

GOAL 12 Concepts

Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences.

STANDARD A

Know and apply concepts that explain how living things function, adapt and change.

STANDARD B

Know and apply concepts that describe how living things interact with each other and with their environment.

UNIT A1 LIVING and NONLIVING

- _____ Identify living things and their needs.
- _____ *Compare and contrast living and non-living things.

UNIT A2 ANIMALS

- _____ Identify animals and describe their coverings and how they move.
- _____ *Identify animal needs.
- _____ Identify baby animals and describe how animals care for them.

UNIT A3 PLANTS

- _____ Describe how seeds grow into plants.
- _____ *Identify things that plants need to grow.
- _____ Identify plant parts.

STANDARD C

Know and apply concepts that describe properties of matter and energy and the interactions between them.

UNIT B1 MATTER

- _____ Describe and classify objects in terms of observable physical properties.
- _____ *Compare the relative weights and volume of objects.
- _____ Name parts of objects.

UNIT B2 SOUND, HEAT and LIGHT

- _____ Compare and contrast loud and soft sounds.
- _____ *Classify objects as hot/cold, light/dark or loud/soft.
- _____ Identify sources of light and describe how light helps us.

STANDARD D

Know and apply concepts that describe force and motion and the principles that explain them.

UNIT B3 MOVEMENT

- _____ Describe ways that objects move.
- _____ *Classify objects that float or sink.
- _____ Describe how magnets interact with objects.

STANDARD E

Know and apply concepts that describe the features and processes of the Earth and its resources.

STANDARD F

Know and apply concepts that explain the composition and structure of the universe and the Earth's place in it.

UNIT C1 EARTH and SKY

- _____ *Identify that the earth is made of land, water and air.
- _____ Identify objects that can be seen in the day sky.
- _____ Identify things that can be seen in the night sky.

UNIT C2 WEATHER

- _____ Identify and record weather.
- _____ *Describe the four seasons.

UNIT C3 CARING FOR THE EARTH

- _____ Identify natural resources.
- _____ Describe ways to conserve energy and natural resources.
- _____ *Identify recycling as a way to save resources.

GOAL 23 Human Body

Understand human body systems and factors that influence growth and development.

STANDARD A

Describe and explain the structure and functions of the human body systems and how they interrelate.

STANDARD B

Explain the effects of health-related actions on the body systems.

STANDARD C

Describe factors that affect growth and development.

UNIT D1 YOUR SENSES

- _____ *Identify and describe objects using the senses.
- _____ Classify objects using the senses.

UNIT D2 GROWING and CHANGING

- _____ Identify body parts.
- _____ Describe ways that humans change as they grow.
- _____ *Describe how people are alike and different.

UNIT D3 BEING HEALTHY

- _____ *Identify things that contribute to good health (e.g. food, exercise, rest and hygiene).
- _____ Identify ways to keep clean and reasons for doing so.

GOAL 13 Connections

Understand the relationship among science, technology and society in historical and contemporary contexts.

STANDARD A

Know and apply the accepted practices of science.

- _____ *Follow teacher directions regarding safety when doing activities.
- _____ State simple predictions.
- _____ State simple observations about science phenomena.

STANDARD B

Know and apply concepts that describe the interaction between science, technology and society.

- _____ Use simple scientific equipment (e.g. hand lens, sieve, magnet).
- _____ Name the scientific tools used in an activity.
- _____ Listen to stories about science and scientists from various ethnic and gender groups.
- _____ *Listen to stories about the way science and technology affects people's lives.
- _____ State ways to reduce, reuse and recycle materials.