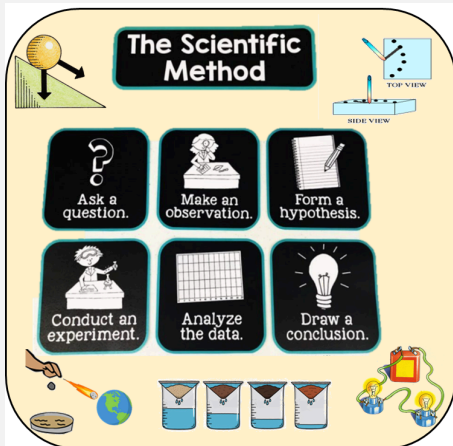


Year at a Glance

The number of days for each unit are approximate.

1st Nine Weeks

Introduction to 3rd Grade Science: Inquiry (9 days)

**Essential Questions**

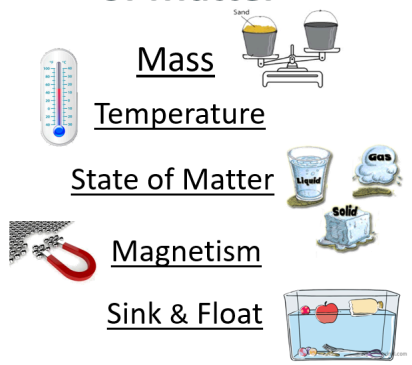
- ❑ How do we raise questions and seek answers about the world around us?

In this unit, students learn that the study of science uses appropriate tools, notebooks and safe practices in planning and implementing investigations, asking and answering questions, collecting data by observing and measuring, and by using models to support scientific inquiry about the natural world.

Unit 1: Physical Properties of Matter (33 days)

5-6 STAAR Items

Physical Properties of Matter



Essential Questions

- ❑ How are physical properties used to describe our world?

In this unit, students measure, test and record physical properties that describe matter. Students identify matter by its state and investigate how these states of matter change by heating and cooling. They explore and identify how mixtures are created by combining two or more materials with at least one different property..

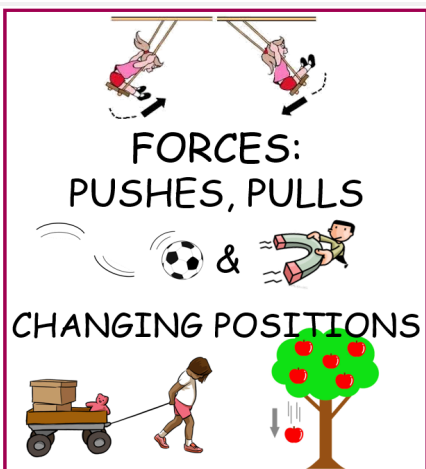
Mastery comes with the ability to

- Measure the mass and temperature of items
- Identify a material's state as either a liquid, solid, or gas
- Explain the properties of the material that distinguishes its state
- Identify items that sink or float in water
- State the stages of change from solid to liquid, liquid to gas and vice versa.
- Predict what changes in state or matter will occur when a material is heated or cooled.

2nd Nine Weeks

Unit 2: Force, Motion and Energy (15 days)

8-9 STAAR Items



Essential Questions

- ❑ Where and how is energy used?
- ❑ How does force cause change?

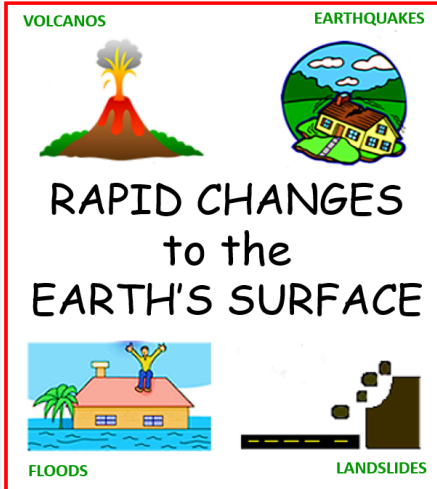
In this unit, students explore mechanical, light, sound, and thermal energy in everyday life. Students manipulate objects by pushing and pulling to demonstrate changes in motion and position and observe forces of gravity and magnetism.

Mastery comes with the ability to

- identify the form of energy
- Distinguish between forces that pull and push.
- Identify gravity and explain its force.
- Identify magnetism and explain its force.
- Describe how an object is changing or moving due to a force on it.

Unit 3: Earth's Surface (28 days)

4-6 STAAR Items



Essential Questions

- ❑ What's so great about soil?
- ❑ Why is the Earth today different from Earth yesterday?
- ❑ How do we use the Earth's resources??

In this unit, students study the Earth's surface and how it can change quickly due to natural forces. Students examine soil and explore its components and the processes that lead to its creation. Students evaluate resources found on Earth and how their characteristics make them useful. They discuss the importance of conservation in preserving these resources for future generations.

Mastery comes with the ability to

- Explain the processes that occur in the creation of soil
- Describe a volcano and describe changes that are brought about by an eruption
- Describe an earthquake and describe the changes caused by one
- Describe a landslide and describe changes caused by one
- Determine the type of rapid change to the Earth and site evidence to support the claim.

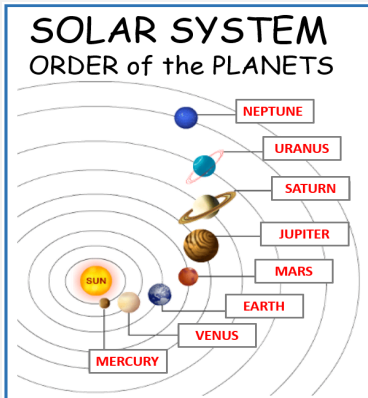
Human Sexuality and Responsibility (5 days) no modification to the number of days allowed



Students learn how to successfully navigate changing relationships among family members and classmates. Students learn about the need for a growing awareness, creation, and maintenance of personal safety. Students learn several fundamental aspects of people's understanding of who they are. Students learn the physical, social, and emotional development and potential for reproduction of humans. Students learn about how pregnancy happens. Students learn the content and skills necessary to understand sexually transmitted diseases and HIV.

Unit 4: Relationship of the Sun and Earth (24 days)

2-5 STAAR Items



Essential Questions

- ❑ What is so great about the sun?

In this unit, students identify the planets and their position in relation to the Sun. Students explore and model the relationships of both the positions and orbits of the Sun, Earth, and Moon. Students learn of the sun's impact on the Earth and its role in creating weather patterns. Students study day-to-day changes in weather through observations and measurement comparisons.

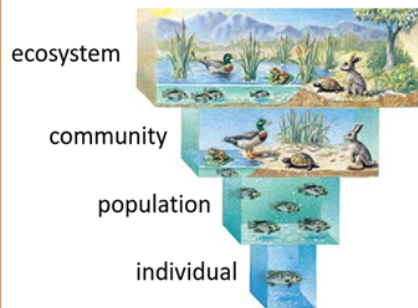
Mastery comes with the ability to

- Label planets based on their position from the sun.
- Describe the orbits of the Earth and moon.
- Know and measure the components that constitute weather.

Unit 5: Ecosystems (14 days)

6-7 STAAR Items

ENVIRONMENTS



Essential Question

- ❑ How does our planet support life?
- ❑ What does it take to survive on Earth?

In this unit, students examine how the environment plays a key role in survival. Students know that when changes in the environment occur, organisms may thrive, become ill, or perish. Students describe the flow of energy in food chains and make predictions on how changes in food chains affect ecosystems. Students will explore, investigate, and compare how organisms undergo life cycle changes.

Mastery comes with the ability to

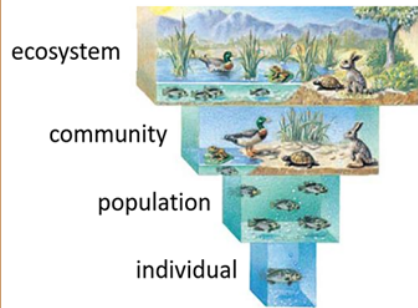
- Identify the living and nonliving components in an ecosystem
- Share what is needed by all living organisms to survive.
- Describe the flow of energy through a food chain
- Predict how a change in a food chain impacts the organisms above and below the point of change.

4th Nine Weeks

Unit 5: Ecosystems (10 days)

6-7 STAAR Items

ENVIRONMENTS



Essential Question

- How does our planet support life?
- What does it take to survive on Earth?

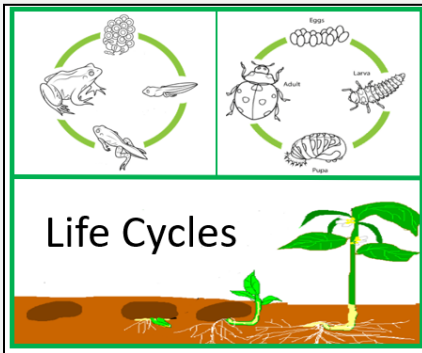
In this unit, students examine how the environment plays a key role in survival. Students know that when changes in the environment occur, organisms may thrive, become ill, or perish. Students describe the flow of energy in food chains and make predictions on how changes in food chains affect ecosystems. Students will explore, investigate, and compare how organisms undergo life cycle changes.

Mastery comes with the ability to

- Identify the living and nonliving components in an ecosystem
- Share what is needed by all living organisms to survive.
- Describe the flow of energy through a food chain
- Predict how a change in a food chain impacts the organisms above and below the point of change.

Unit 6: Life Cycles and Survival (24 days)

5-6 STAAR Items



Essential Questions

How does Earth continue to be known as a “living” planet?

In this unit, students examine the structures, functions and behaviors of organisms which allow them to survive in their ecosystem. Students explore how all living organisms go through a life cycle.

Mastery comes with the ability to

- Name and label the life cycle of a plant
- Compare and identify differences and similarities in the life cycle of frogs and beetles.
- Explain what constitutes the adult stage of a life cycle
- Match a function to the proper structure

Intervention, Practice and Review (10 days) and STAAR Testing



General review of science concepts is afforded to all students. Teachers assess performance progress and benchmark data to determine the areas of support needed by specific students or groups of students and provide opportunities for small group and individualized instruction. Time will be allotted for the administration of STAAR in all content tested areas.