

Dear Parents,

During the 2nd nine weeks we will learn about forms of energy, magnetism, patterns of movement, and objects in the sky.

Student Expectation

The student is expected to investigate the effects on an object by increasing or decreasing amounts of light, heat, and sound energy such as how the color of an object appears different in dimmer light or how heat melts butter. The student is expected to observe and identify how magnets are used in everyday life. The student is expected to trace and compare patterns of movement such as sliding, rolling and spinning. such as sliding, rolling, and spinning. In the beginning of earth and space, the student is expected to observe, describe, and record patterns of objects in the sky, including the appearance of the Moon.

Key Concepts

- Changes in the amount of light can affect how objects appear
- Changes in the amount of heat can cause physical changes to objects, such as butter melting when heat is added
- Changes in the amount of sound energy can cause objects to move or vibrate differently
- Some objects will stick to magnets, especially objects made with iron.
- Magnets are used in many ways such as holding small objects to a refrigerator or lifting objects.
- Magnets are also used in common everyday objects like doorbells, phones, speakers, compasses, and devices with electric motors.
- Objects can move and change position over time
- The motion of objects can be predicted, observed, traced and described
- Patterns of motion can include sliding, rolling, or spinning
- Objects in the sky, such as the Sun and Moon, appear to change appearance at different times of the day.
- We can observe and record how the Moon appears to change its shape during the month.
- We can observe and record how the Sun appears to change position at different times of the day.

Fundamental Questions:

- How does the amount of light affect how objects appear?
- What changes occur to objects when they are heated?
- How do changes in the amount of sound energy affect objects?
- What is the physical property that allows an object to be attracted to a magnet?
- How are magnets used in everyday life?
- In what everyday objects can magnets be found?
- How can we trace the changes in the position of an object as it moves?
- How can we predict, trace, and describe the motion of objects?
- How does the motion of an object compare when it is sliding, rolling, and spinning?
- What observations can we make of the changes in the Moon's appearance and the change in the position of the Sun during the day?
- How can we record the changes in the Moon's appearance?
- How can we record the changes in the Sun's position during the day?

If you have any questions, please contact your second grade team and happy investigating!

The Second Grade Team