



# Fifth Grade Science

## Earth and Space

Dear Families,

Here is what your child is learning in Fifth Grade, during the study of Earth and Space with some specific ways you can help. Look for additional newsletters for upcoming units.

### Earth and Space

#### Students need to:

- Observe the patterns of the night / day cycle as well as shadows. These patterns can be used to confirm the motions (rotation and revolution) of the Earth. Patterns of motion can be used to predict future motion.
- Recognize that stars range greatly in size and distance from Earth and this can explain their apparent brightness.
- Observe and explain the effect of gravity on an object results in a change of motion. Some forces act through contact, some forces act even when the objects are not in contact. The gravitational force of Earth acting on an object near Earth's surface pulls that object toward the planet's center.
- Observe the night sky in order to keep a moon journal at home.

#### Key Vocabulary

Apparent Brightness: How bright an object appears to be from Earth.

Axis: an imaginary line that passes through the center of a body. Rotation occurs around this line.

Celestial Objects: an object that is permanently present in the sky, a star or planet.

Constellation: a group of stars that form a recognizable, named, pattern

Gravitational Force: the attractive force between two separate bodies.

Gravity: a force of nature that pulls objects toward each other.

Orbit: revolution, the elliptical path of the Earth around the sun

Revolution: the motion of the Earth around the Sun.

Rotation: the motion of the Earth around its axis.

#### Ways FAMILIES Can Help

- Use the Discovery Education link to find more information about the Earth, Sun, Moon, Stars, and Gravity ([see the following page for log-in information](#)).
- Throughout the year, when your child is waking up in the morning, or getting ready for bed, have them notice if there is still daylight.
- Have your child keep a journal of the different Moon phases they see.
- Attempt to locate constellations in the night sky.
- Discuss with your child where the Sun came up in the morning and where it set in the evening.