Big idea: Earth is a part of a solar system within a universe made up of various objects which are interrelated; there are forces acting on the Earth.

1. Looking at the Planets
   - Scientists study the characteristics of the nine known planets and other celestial objects in our solar system.
   - The movement of planets around the sun is called revolution.
   - The movement of a planet on its axis is called rotation.
   - The movement of a planet determines the length of the day/night/year on that planet.

2. The Moon
   - A moon is a satellite that revolves around a planet.
   - The moon appears to rise and set because of the rotation of the Earth.
   - The position of the earth and moon to the sun creates the phases of the moon.
   - The lunar cycle takes about 28 days to complete.

3. Objects in the Night Sky
   - Asteroids, comets, meteors, and stars are some of the celestial objects that can be viewed from Earth.
   - Gravity is the natural force between objects that makes them pull toward each other.
   - The gravitational force between two objects is dependent on their masses.
   - Celestial objects sometimes appear to move in ways that are different from their real motion.

4. Space Exploration
   - Humans have always been interested in the universe beyond Earth.
   - As technology has improved humans have been able to travel farther into space to explore the celestial objects in our solar system.