BIG IDEA on Planets and Motion

**S6E1. Obtain, evaluate, and communicate information about current scientific views of the universe and how those views evolved.**

c. Analyze and interpret data to compare and contrast the planets in our solar system in terms of:

* size relative to Earth,
* surface and atmospheric features,
* relative distance from the sun, and
* ability to support life.

d. Develop and use a model to explain the interaction of gravity and inertia that governs the motion of objects in the solar system.

* The planets of our solar system differ in size, composition (rock or gas), surface and atmospheric features, and distance from the sun.
* The planets are divided into two groups. The inner planets are smaller, closer to the sun, and have rocky surfaces, while the outer planets are larger, farther from the sun and do not have solid surfaces
* Planets move around the sun in elliptical orbits.
* The Earth is the only body in the solar system that appears to be able to support life.
* Gravity is the force that keeps planets in orbit around the sun and governs the rest of the motion in the solar system.
* Inertia and gravity combine to keep the planets in orbit. The mass of an object and the distance between objects determine the force of gravity