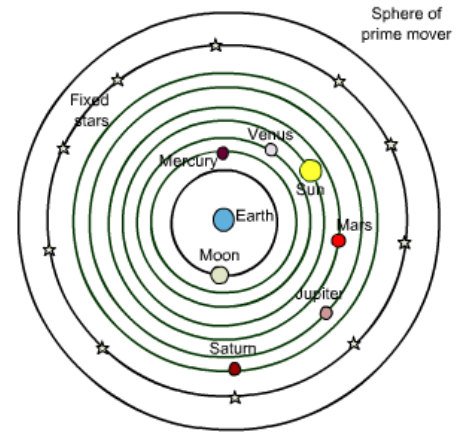









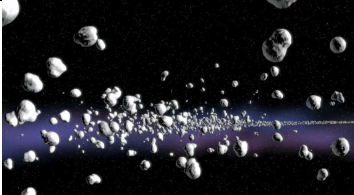

# Astronomy (Our Galaxy)


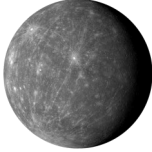


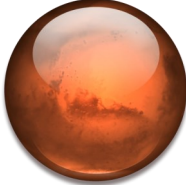

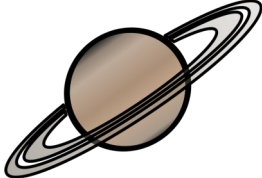
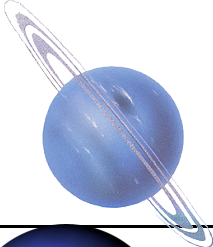
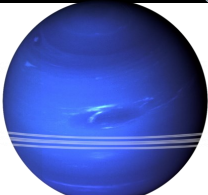
**S6E1 Obtain, evaluate, and communicate information about current scientific views of the universe and how those views evolved.**

- A. Ask questions to determine changes in models of Earth's position in the solar system, and origins of the universe as evidence that scientific theories change with the addition of new information.
- B. Develop a model to represent the position of the solar system in the Milky Way galaxy and in the known universe.
- 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.
- E. Ask questions to compare and contrast the characteristics, composition and location of comets, asteroids, and meteoroids.



Term	Info	Picture
Heliocentric		<p>A diagram of the heliocentric model of the solar system. The Sun is at the center, with concentric orbits for Mercury, Venus, Earth, Mars, Jupiter, and Saturn.</p>
Geocentric		<p>A diagram of the geocentric model of the universe, similar to the one in the top right, showing Earth at the center with orbits for the Moon, planets, and fixed stars.</p>
Universe		<p>An image showing Earth from space with the text "Our UNIVERSE" overlaid.</p>
Galaxy		<p>An image of a spiral galaxy in space.</p>
Solar System		<p>A diagram of the solar system showing the Sun and the planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. Pluto is also shown.</p>
Big Bang Theory		<p>A diagram illustrating the Big Bang theory, showing a funnel-like structure representing the expansion of the universe from a central point.</p>

Term	Info	Picture
Milky Way Galaxy		
Comet		
Kuiper Belt		
Meteor		
Meteoroid		
Meteorite		
Asteroid		
Asteroid Belt		
Copernicus		

Term	Info	Picture
Gravity		
Mercury		
Venus		
Earth		
Mars		
Jupiter		
Saturn		
Uranus		
Neptune		

## Learning Targets:



1. I can evaluate the geocentric and heliocentric views of our solar system and explain why views and knowledge have changed over the years.
2. I can describe “Big Bang” as a theory of how the universe began and cite evidence scientists used to develop that theory.
3. I can describe the sun as the center of our solar system.
4. I can compare and contrast the planets of our solar system in terms of size, atmosphere, composition, distance from the sun, and ability to support life.
5. I can point out our solar system’s position in the Milky Way Galaxy
6. I can planets of our solar system differ in size, composition (rock or gas), surface and atmospheric features, and distance from the sun.
7. I can describe the shape of the planets’ orbits and model it.
8. I can identify the planet(s) that can support life.
9. I can compare and contrast comets, meteors and asteroids.
10. I can describe gravity as the force that keeps planets in orbit around the sun and governs the rest of the motion in the solar system.