

Our Solar System



EARTH AND SPACE SCIENCE Tennessee Standard:

Content Standard: 7.0 Earth and Its Place in the Universe

☞ The student will investigate the structure of the universe.

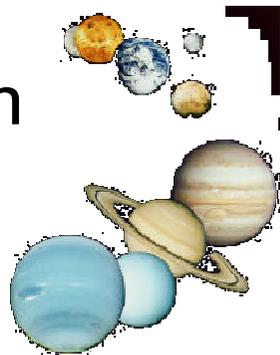
Learning Expectations:

☞ 7.1 Recognize the basic components of the universe.

Our Solar System

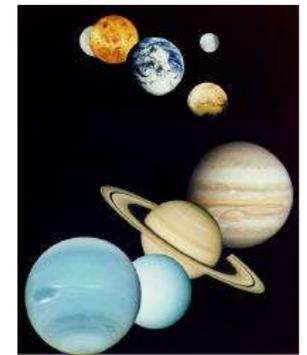
Our solar system is made up of:

- ☞ Sun
- ☞ Nine planets
- ☞ Their moons
- ☞ Asteroids
- ☞ Comets



Inner Planets

- ☞ Mercury
- ☞ Venus
- ☞ Earth
- ☞ Mars



Mercury



- ☿ Planet nearest the sun
- ☿ Second smallest planet
- ☿ Covered with craters
- ☿ Has no moons or rings
- ☿ About size of Earth's moon

Venus



- ☿ Sister planet to Earth
- ☿ Has no moons or rings
- ☿ Hot, thick atmosphere
- ☿ Brightest object in sky besides sun and moon (looks like bright star)
- ☿ Covered with craters, volcanoes, and mountains

Earth



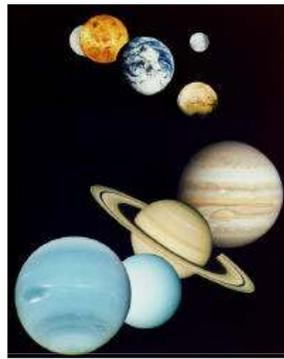
- ☿ Third planet from sun
- ☿ Only planet known to have life and liquid water
- ☿ Atmosphere composed of composed of Nitrogen (78%), Oxygen (21%), and other gases (1%).

Mars



- ☿ Fourth planet from sun
- ☿ Appears as bright reddish color in the night sky
- ☿ Surface features volcanoes and huge dust storms
- ☿ Has 2 moons: Phobos and Deimos

Outer Planets



- ♆ Jupiter
- ♆ Saturn
- ♆ Uranus
- ♆ Neptune

Jupiter



- ♆ Largest planet in solar system
- ♆ Brightest planet in sky
- ♆ 60+ moons, 5 visible from Earth
- ♆ Strong magnetic field
- ♆ Giant red spot
- ♆ Rings have 3 parts: Halo Ring, Main Ring, Gossamer Ring

Saturn



- ♆ 6th planet from sun
- ♆ Beautiful set of rings
- ♆ 31 moons
- ♆ Largest moon, Titan,
- ♆ Easily visible in the night sky
- ♆ Voyager explored Saturn and its rings.

Uranus



- ♆ 7th planet from sun
- ♆ Has a faint ring system
- ♆ 27 known moons
- ♆ Covered with clouds
- ♆ Uranus sits on its side with the north and south poles sticking out the sides.

Neptune



- ¢ 8th planet from sun
- ¢ Discovered through math
- ¢ 7 known moons
- ¢ Triton largest moon
- ¢ Great Dark Spot thought to be a hole, similar to the hole in the ozone layer on Earth

Outermost Planet

- ¢ Pluto, the outermost planet, is a small solid icy planet is smaller than the Earth's Moon.



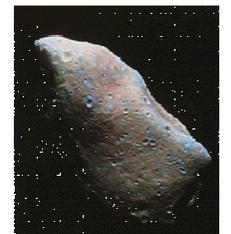
Pluto



- ¢ 9th planet from sun (usually)
- ¢ Never visited by spacecraft
- ¢ Orbits very slowly
- ¢ Moon, Charon, is very close to Pluto and about the same size

Asteroids

- ¢ Small bodies
- ¢ Believed to be left over from the beginning of the solar system billions of years ago
- ¢ 100,000 asteroids lie in belt between Mars and Jupiter
- ¢ Largest asteroids have been given names



Comets

- ☼ Small icy bodies
- ☼ Travel past the Sun
- ☼ Give off gas and dust as they



Writing Activity

- ☼ Write a paragraph about the solar system. Include 5 facts covered

Solar System Activities

Solar System Activities

- ☼ [Order the Planets](#)
- ☼ [Fun with Planets](#)
- ☼ [Constellations of the Northern Sky](#)
- ☼ [Planets](#)
- ☼ [Solar System](#)

