

Planets

Mercury

- Closest planet to the sun
- No atmosphere therefore temperature ranges from -180°C to 400°C
- Contains craters caused colliding rocks
- Too close to the sun and therefore is rarely visible in at night
- No moons

Venus

- Has a thick atmosphere made of Carbon Dioxide, and Nitrogen.
- Hottest planet due to the greenhouse effect
- Only planet that rotates backwards compare to the other planets
- Brightest object in the night sky with exception of the sun and moon
- no moons

Earth

- Atmosphere is made of Nitrogen, Oxygen, and water vapor. Slight greenhouse effect
- Temperature ranges from -85°C to 65°C
- The surface is made up of 70% water
- One moon

Mars

- Called the "Red Planet" because of rusty soil
- Mars' atmospheric components consist of carbon dioxide, nitrogen and argon
- Explored with space probes
- Once contained glaciers and water
- Two moons

Jupiter

- Largest planet
- Has the greatest mass
- Can be seen in the night sky
- Has a huge hurricane that is known as the "Great Red Spot"
- Has approximately 55 moons

Saturn

- Second largest planet
- least dense
- Has rings that contain particles of ice rocks the size of dust to the size of a mountain
- *Has approximately 66 moons

Uranus

- Rotates on a horizontal axis
- atmosphere is mostly hydrogen, with some helium & methane
- Coldest planet
- About 27 moons
- Also have rings

Neptune

- Known as the "Ice Giant"
- Atmosphere contains Hydrogen and helium
- Approximately 13 moons

Objects in space

Satellites are natural objects that revolve around planets

-The moon is the earth's natural satellite

The first human-made object to reach the surface of the Moon was the [Soviet Union's Luna 2](#) mission on 13 September 1959.

The [United States' Apollo 11](#) was the first manned mission to land on the Moon on 20 July 1969. There have been [six manned landings](#) (between 1969 and 1972) and numerous unmanned landings

Asteroids are made up of thousands of small rocky objects.

- Asteroid belt is the ring of asteroids. There is an asteroid belt found between Mars and Jupiter.

meteoroid is a lump of rock or metal that is trapped by the earth's gravity and pulled down through Earth's atmosphere.

- A bright streak of light across the sky is a meteor.
- If the object hits the earth before vaporizing it is a meteorite.

Comet is a chunk of frozen matter that travels in a very long orbit around the sun. (DRAW Picture) FROM BOARD

Comets' tails are caused when the comets get close to the Sun. The outer layers of ice turn into gases that are pushed away from the Sun by the solar winds. These gases glow brightly.

A galaxy is a huge collection of gas, dust, and hundreds of planets, billions of stars and moons.

The space shuttle was made to take astronauts and cargo to and from Earth orbit. (Used to launch satellites into space and sometimes used as a science laboratory while orbiting earth)

The **Space Shuttle Challenger disaster** occurred on January 28, 1986, when Space Shuttle *Challenger* broke apart 73 seconds into its flight, leading to the deaths of its seven crew members. The spacecraft disintegrated over the Atlantic Ocean, off the coast of central Florida

The **Space Shuttle Columbia disaster** occurred on February 1, 2003, when shortly before it was scheduled to conclude its 28th mission, the Space Shuttle *Columbia* disintegrated over Texas and Louisiana during re-entry into the Earth's atmosphere, resulting in the death of all seven crew members