

The Solar System

Planets are in Order from the Sun

Terrestrial Planets – Rocky Inner Planets

Mercury → No moons(Satellites)

Extremely hot

No moons

Shortest year

Smallest terrestrial planet

Venus → No moons(Satellites)

Extremely hot – Hottest planet from “greenhouse effect”

“Earth’s Sister” – similar size, slightly smaller

Longest day of any planet – rotates backwards

No moons

Earth → 1 moons(Satellites)

Largest terrestrial planet

The Moon – Earth’s Satellite

Surface is heavily cratered

The moon is responsible for the tides on the Earth

The moon blocks the Sun during a solar eclipse.

Mars → 2 moons(Satellites)

Rocky

Known as red planet

Jovian Planets – Gaseous Outer Planets – These have rings

Jupiter → 63 moons(Satellites) – Most of any planet

Largest planet in the whole solar system

Has the “great red spot”, a large 300+ year old storm

Shortest day, under 10 hours long

Has four large moons

Saturn → 61 moons(Satellites)

Has large rings

Uranus → 27 moons(Satellites)

Rotates on its side

Neptune → 13 moons(Satellites)

Farthest true planet

Smallest Jovian planet

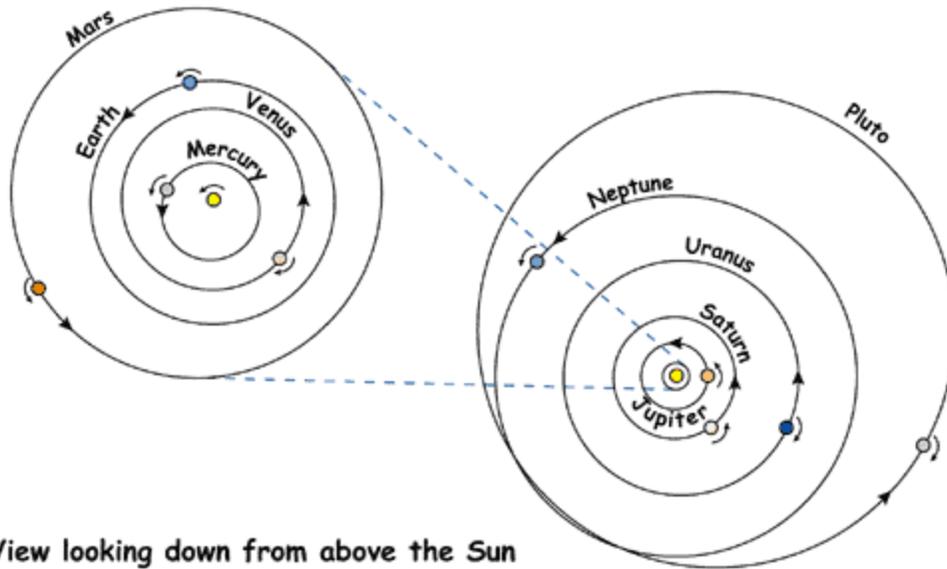
Minor Planet – No longer Called a Planet

Pluto → 3 moons(Satellites)

Rocky, icy planet

Has elliptical orbit out of line from solar system.

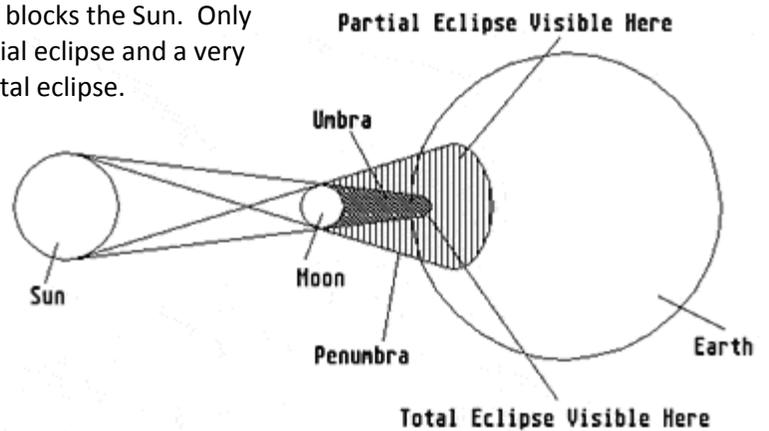
Enlargement of inner solar system



View looking down from above the Sun

How a solar eclipse occurs:

eclipses on Earth occur when the moon blocks the Sun. Only certain parts of the Earth will see a partial eclipse and a very small part on the Earth will witness a total eclipse.

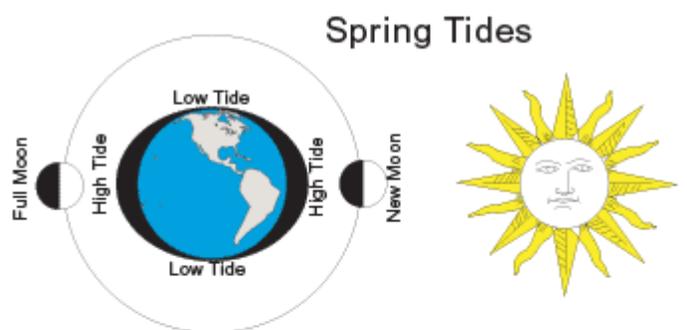


How the moon affects the tides:

Tides are caused by the effect gravity from the Sun and Moon. The Moon will have a much greater impact since it is much closer to the Earth.

Spring Tides

These tides tend to be extra high because the gravitational pull of the Sun and Moon are combined. These occur during the new moon or full moon.



Neap Tides

Neap Tides

These tides tend to be weak high because the gravitational pull of the Sun and Moon are at right angles and partially cancel. These occur during the half moons.

