THE EARTH IN SPACE

The Planets

[Images of the planets]
THE INNER PLANETS

✦ There are 4 inner planets. Can you guess which ones they are? M V E M
✦ These planets are composed mainly of rock
Mercury

- Closest planet to the sun
- One revolution takes only 88 days.
- It is rocky and bare and takes 59 earth days to rotate on its axis.
Venus

- Rocky like Mercury but has high mountains and deep valleys.
- Thick yellow clouds surrounding its atmosphere make it very hot.
  (Greenhouse Effect).
Earth

- Third planet from the sun
  - 93 million miles from the sun.
  - 150 000 000 km
  - We revolve in an orbit around the sun once every 365 ¼ days.
  - Tilts at 23 ½ degrees. This causes the seasons.
  - We rotate on this axis every 24 hours. This causes day and night.

Mars

- Atmosphere around Mars has a small amount of oxygen.
- Mars is red from rust.
These planets are made up of gases.

Pluto is made of ice and rock.
Jupiter

- Fifth planet from the Sun
- The large red spot is an atmospheric storm.
- To date, we know of 18 moons orbiting Jupiter.
Saturn

✦ Is a planet of gas, but Scientists believe the core to be solid.
✦ The rings are made of ice and rocks.
✦ Has 23 moons in its orbit.
Uranus

- A planet of gas with a solid core.
- 15 rings around it.
- 17 known moons orbiting it.
Neptune

- Has the GREAT DARK SPOT. This is a violent storm of gases.
- Has 8 moons orbiting it.
- There are also rings around Neptune.
Pluto

* Farthest planet from the Sun.
* Cannot be seen without a telescope
* It is the only planet that comes within orbit of another planet.
The Moon

This is Earth’s natural satellite. It revolves around the Earth every 29 ½ Earth days and rotates every 29 ½ days. This is why Earthlings never see the dark side of the moon! Humans landed on the Moon July 20, 1969.
The Moon - continued

- The moon is the earth’s nearest neighbour in space.
- It is 400 000 kms away from Earth.
- 50 moons could fit in Earth if it were hollow.
- The force of gravity is 1/6 that of Earth’s.
- The gravitational pull of the Moon on the Earth causes ocean tides on the Earth.
- The moon has no atmosphere and so it has no air.
Apogee – is when the moon’s orbit is farthest from the Earth. (low tide)

Perigee – is when the moon’s orbit is closest to the Earth. (high tide)
Eclipses

- Solar Eclipse...The Moon moves between Earth and the sun. The moon casts a shadow on the Earth.
- Lunar...The Earth moves between the Moon and the Sun. The earth casts a shadow on the moon.