Moon

Mars

Jupiter

What is the origin of the moon?

## 3 theories

Fission theory..once was part of the earth but separated

The sister theory..formed together but independently (like a set of twins)

Capture theory..formed somewhere else but caught by the earth's gravity (like an asteroid that missed)

What is a 'giant impact' crater?
How does it relate to Tunguska?
Why don't we see a lot of craters on the Earth?

The moon looks different at different phases.

## Moon vs. Mars

Moon has no atmosphere, but Mars does. Mars has some plate tectonics if mountains and volcanoes exist. It also appears to have traces of water.

It's pretty far away to visit. 10 years of travel vs. 7 days

Mars has a 'thinner atmosphere'....meaning less air pressure. but similar to Earth. Very humid to night.

Moon has mostly no astmosphere...meaning nothing to change in terms of wind.

Mars vs. Gas Giant atmosphere

Mars has a solid crust and gas giant is mostly gas (tough to step on)

The earth has a radius of 6400 km

The moon is 1/4 that, or 1200 km

Jupiter is 71,000 km in radius

Mars is roughly 90% of the diameter of the Earth, or about 5800 km in diamter.

Big atmosphere on Jupiter---considerably more wind.

Moon--3, Jupiter--0, Mars--12

<sup>\*</sup>supplies

<sup>\*</sup>aliens

<sup>\*</sup> asteroids

<sup>\*</sup>space junk (camera, radar, communication)

<sup>\*</sup>RIGHT LAUNCH WINDOW