

## **THE SOLAR SYSTEM**

The Earth moves around the Sun. The Moon goes around the Earth. It is smaller than ten Sun, but it looks as big as the Sun, because it's much closer to us. There are 8 other planets also moving around the Sun. Some of these planets have moons of their own. The closest planet to the Sun is Mercury. Then come Venus, Earth & Mars. Beyond come 4 very big planets, Jupiter, Saturn, Uranus and Neptune, with 1 planet Pluto. Together this whole group is known as the Solar System.

## **THE RED PLANET**

Mars is very red and it's smaller than the Earth. There are no seas and it's always very cold; the air is so thin that we couldn't breathe it. Mars has 2 moons. They are very small and they don't look like our moon.

## **THE BIGGEST PLANET**

Jupiter is the biggest planet and you can see it well for part of every year. It takes nearly 12 years to go around the Sun, but it has very short day, less than 10 hours. Its surface is made up of gas, so we never could land a rocket there. On it we can see lines which we call cloud belts. We can also see the Great Red Spot which is a huge storm. Jupiter has 16 moons and of these 4 are big. You can see these 4 moons with any telescope.

## **THE HOT PLANETS**

The first 2 planets, Mercury and Venus are very hot. It isn't easy to Mercury, because it always stays so close to the Sun. It's small and has no air, so nobody could live there. The next planet, Venus is nearly as big as Earth. It can be very bright and you can often see it in the west after sunset or in the east before the sun rises. It has very thick air which we couldn't breathe and it's so hot that any water there would boil away. It will be a long time before anyone can go to Venus for a visit.

## **THE PLANET WITH THE RINGS**

The next planet is called Saturn. It's smaller than Jupiter, but much bigger than the Earth and it looks like a bright star in the sky. Like Jupiter, Saturn has a surface made up of gas. It's very beautiful, because it has rings around it, though you can't see them without a telescope. The rings are made up of little bits of ice moving around Saturn. Saturn has 18 known moons.

## **VERY COLD PLANETS**

The last 3 planets are so far away that they look faint. Uranus has 15 moons, Neptune has 8 moons. Uranus is green and Neptune is blue. A spaceship called Voyager 2 passed by them both, so we have good pictures of them. Pluto is smaller than our moon and no spaceship yet can reach it. It is so cold that air of the kind known would freeze. If you could go to the Pluto, the Sun would look only like a very bright star.

## **HOW THE PLANETS MOVE**

All the planets go around the Sun; the closer ones move more than those which are further away. The Earth takes 1 year (365 days) to go around the Sun, but Mercury takes only 88 days, while Pluto takes 248 years. If you could live on Pluto, you would have to wait 248 years for your first birthday!!! Venus, Mars, Jupiter and Saturn are so bright that you can find them easily. Mercury always keeps close to the sun. You can just see Uranus, but the 2 last planets, Neptune and Pluto are so faint that you can't see them at all unless you use a telescope.

## **THE END OF THE SOLAR SYSTEM**

Our solar system works just fine, with the Sun and all its planets, moons, asteroids and comets revolving and rotating like a wonderful machine. But it won't last forever. The hydrogen at the Sun's center will run low. After another 5 billions years, that will cause changes to take place at the center and the Sun will expand & become huge. The outer layers will cool and redden, turning the Sun into a red giant. The total heat, though, will be enough to burn Earth to a cinder and all life upon it will be destroyed. Finally, the Sun won't be able to have any kind of nuclear fusion at its center. It will collapse into a tiny white dwarf no bigger than the Earth, will cold, dead planets circling it.

What will life be like on your planet just before this happens? Will human beings even be around? Your guess is as good as anyone's.

## **THE DISCOVERY OF SPACE**

Space is a infinite blank. THE sun, stars, planets, galaxies, constellations, meteors, all of these exist in space. We can see some of these things by naked eye, however, we need a telescope to see the further ones. Humans always dreamt to reach space. This wish and dream became stronger in the late 1800's. In the 19<sup>th</sup> century scientists invented very fast airplanes. People started to creat ideas about going to the moon by rockets, in the late 1900's. A race started between German, Russian and American scientists, to be the first to creat rockets. In the 1930's, the German scientists said that they would build rockets in which humans could travel to space. In 1957, a shuttle named Sputnik 1, was placed in the Earth's orbit by Russians. This is how the "space age" began.

In 1958, American scientists started to develop new rocket systems. Cosmonaut Yuri Gagarin performed the first confirmed manned space flight, aboard Vostok 1 on 12<sup>th</sup> April 1961. On 21<sup>st</sup> July 1969, Neil Armstrong made the first step on the moon.