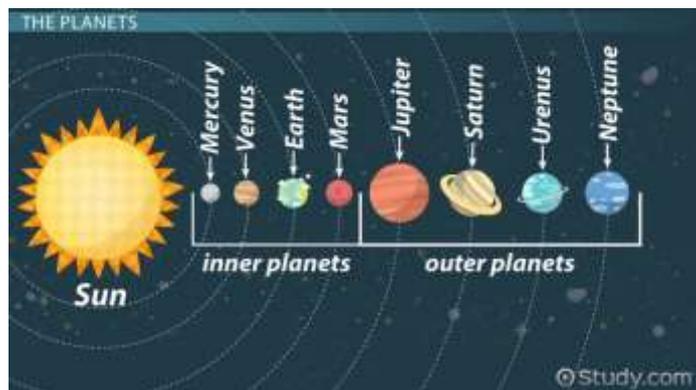


THE PLANETS OF OUR SOLAR SYSTEM



The word 'solar' comes from the Latin word for 'sun'. Our solar system is made up of eight planets which orbit the Sun, which is a star. The first four, inner, planets – Mercury, Venus, Earth and Mars – are known as *terrestrial planets* because the surface is rocky. The four outer planets – Jupiter, Saturn Uranus and Neptune – are known as *gas giants* because of their huge size and gassy atmospheres.

MERCURY



Mercury is the closest planet to the sun and also the smallest of the eight planets. It only takes 88 days for it to orbit the sun, so their year is only around 3 months long! The Ancient Romans knew Mercury as the messenger to their gods. This may be because it seems to be in a rush to get around. Mercury is a cratered planet, being very similar to Earth's Moon in appearance. Craters are caused by rocks, called meteorites, crashing into the surface of the planet over billions of years. Mercury has no moon and no atmosphere, so it would be impossible to breathe there.

VENUS



Venus is the second planet away from the Sun and the closest planet to Earth. It is the brightest object in the sky after the Sun and the Moon and can, in the right conditions, be seen during the day! At night, because it is so bright, it is also able to cast shadows! Venus is named after the Roman goddess of Love and Beauty although, if we look closer at Venus, at its poisonous atmosphere and deadly volcanic surface, we soon discover that there is nothing beautiful about the planet. The planet has a thick swirling cloud cover which never clears to reveal the surface. The thick clouds also mean that heat cannot escape from the planet, meaning that Venus' temperature can be 480°C, so it is the hottest planet in the Solar System. Venus, like Mercury, has no moon.



EARTH



Earth is the third planet from the Sun and the largest of the four Inner Planets. It is the planet that you live on and is special because it is the only place in the whole Solar System known to support life. It is in the perfect position in the Solar System - not too close to the Sun and not too far away - meaning that it has the right climate for life to exist - not too hot nor too cold. It also has plenty of water and oxygen to keep living things alive. Surrounding the planet is a layer of atmosphere which prevents most of the Sun's poisonous rays from reaching the surface. Earth has one moon, which we call the Moon.

MARS



Mars is often known as the Red Planet as it is red in colour. In mythology, Mars was the Roman god of War, a name probably inspired by the planet's colour as it represents blood. Mars has two small moons named Phobos and Deimos. Mars was once volcanically active and is home to the largest volcano in the Solar System - Olympus Mons. Olympus Mons is over double the height of Mount Everest, Earth's tallest mountain! For almost half a century, a number of space craft have visited Mars to investigate.

JUPITER



The Earth fits into Jupiter over 1300 times! The planet has a very strong pull of gravity and very faint rings spinning around it, just like Saturn's rings only much, much thinner. Jupiter is made up almost entirely of gas. This means that the whole planet is just like sky without any land below it. In this sky are electrical storms (lightning) and winds and hurricanes. Amazingly, Jupiter has 79 moons!

SATURN



Saturn is often considered one of the most beautiful and outstanding objects in the Solar System. It is a gigantic planet with huge rings surrounding it, and a moon which resembles an early Earth! Saturn is named after the Roman god of gardens, planets and farming. However, there is no actual land on Saturn to grow plants! The entire planet, like Jupiter, is made up of gas and most of the planet is just gigantic sky.

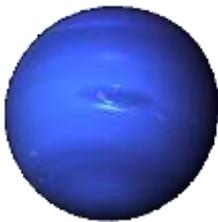


URANUS



The seventh planet in the Solar System is Uranus. It was discovered by William Herschel, an English astronomer and composer, in March 1781 using a home-made telescope. The planet is named after the Greek god, Uranus, who, in mythology, ruled the heavens. It takes just over 84 years on Earth for Uranus to orbit the Sun because the planet is so far away from the Sun. It has 27 known moons!

NEPTUNE



Neptune is often seen as Uranus' twin planet. It is similar in size and colour (blue), and has a similar chemical make-up. Surrounding Neptune are thirteen known moons. A space craft called Voyager was sent to Neptune to photograph and explore the surface. They showed Neptune to be a deep blue-coloured planet with white, wispy clouds in its atmosphere, the strongest winds in the Solar System, and a dark spot which was the size of Earth. Neptune has incomplete rings which suggests the planet may still be changing.

FIND OUT MORE

<https://www.youtube.com/watch?v=F2prtmPEjOc>

<https://www.youtube.com/watch?v=mQrlgH97v94>

EXAMPLE QUESTIONS

1. What is the Latin word for sun?
2. Which is the closest planet to the Sun?
3. Which two planets are closest to Earth?
4. Which planets are known as the inner planets?
5. Which planets are known as the outer planets?
6. Which planet is the hottest?
7. Which planet is the largest?
8. Who discovered Uranus?
9. Which planets have moons?