
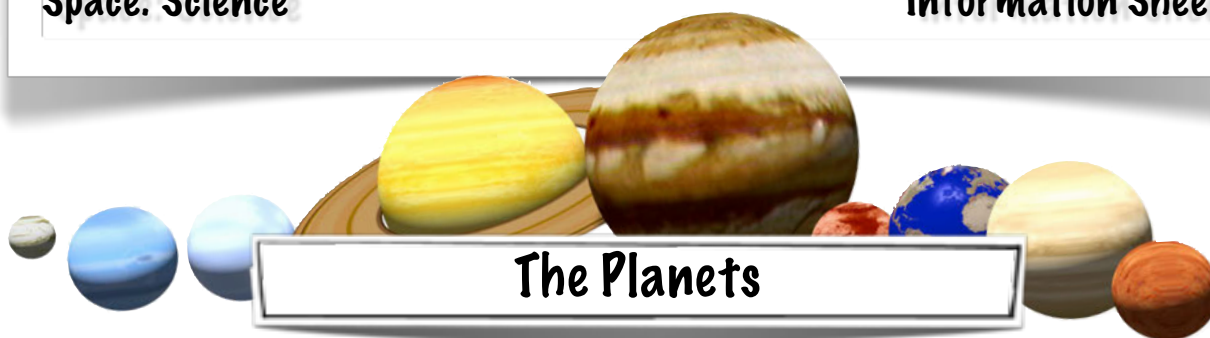


Name: _____ Date: _____



Use a variety of sources of information to find out about the 8 planets in our solar system. Write the 3 most interesting facts for each in the boxes below.

<p>Mercury</p> <p>★</p> <p>★</p> <p>★</p>	<p>Venus</p> <p>★</p> <p>★</p> <p>★</p>	<p>Earth</p> <p>★</p> <p>★</p> <p>★</p>
<p>Mars</p> <p>★</p> <p>★</p> <p>★</p>		<p>Jupiter</p> <p>★</p> <p>★</p> <p>★</p>
<p>Saturn</p> <p>★</p> <p>★</p> <p>★</p>	<p>Uranus</p> <p>★</p> <p>★</p> <p>★</p>	<p>Neptune</p> <p>★</p> <p>★</p> <p>★</p>



The Planets

Mercury

Mercury is the planet closest to the sun at a distance of 58 million km. This causes extreme changes in temperature. During the day temperatures can reach up to 450°C and at night they can drop to -170°C. Mercury is composed of rock and metal and has no moons. It takes Mercury just 88 days to orbit the sun but it takes about 59 earth days to spin once on its axis. That means that on Mercury there are less than 2 days in a year!

Venus

Venus is often mistaken for a star because it is the brightest object in the night sky after the moon. This is because dense clouds of sulphuric acid in the atmosphere reflect the sun's rays. Venus was named after the Roman goddess of love. Venus is 108 million km away from the sun and it takes 255 days to orbit the sun. It is composed of rock and metal and has no moons. The surface of Venus is covered in shallow craters.

Earth

Earth is the only planet known to support life. This is because its distance from the sun (around 150 million km) means that it is the only planet on which water can exist as a liquid. Any closer and the water would evaporate and any further away and it would turn to ice. Earth is made up of rock and metal. It is 109 times smaller in diameter than the sun. It takes 365.25 days to complete an orbit of the sun and spins on its axis every 24 hours.

Mars

Mars is known as the Red Planet because its surface is covered in a reddish dust. It is composed of rock and metal and its surface is covered in craters and canyons. Mars is half the size of planet Earth. It is 230 million km away from the sun and takes 687 days to complete an orbit. Mars has 2 moons called Phobos and Deimos. Many scientists think Mars could support extraterrestrial life because of its 24 hour days, polar caps and atmosphere.



Jupiter

Jupiter is the largest planet in the solar system and has a diameter of 142,980 km. It is 778 million km away from the sun and takes around 4332 days to complete an orbit. This is the same as 11.86 Earth years. However, it takes only 9 hours and 55 minutes to complete a rotation on its axis. Jupiter is composed of gas, mainly hydrogen and helium, although it does have a rocky core. It has at least 63 known moon, several of which are large enough to be planets themselves.

Saturn

Saturn is famous for the rings that surround it. Although the rings look solid from Earth, they are actually composed of billions of particles made of ice and dust, some of which are minute while others measure hundreds of metres in length. Saturn is 778 million km from the sun and takes 10,756 days to complete an orbit. This is equivalent to 29.4 Earth years. Saturn is mainly composed of hydrogen gas. Its density is such that it is light enough to be able to float on water.

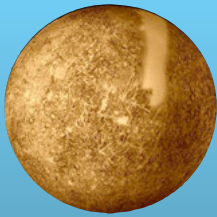
Uranus

Uranus is 778 million km away from the sun and takes around 30,600 days to complete an orbit. This is the same as 84 Earth years. Uranus is the only planet it spin on its side. This means that during the 84 year orbit, the north pole of Uranus will have 42 years of summer and the 42 years of winter. Uranus is composed of ice, rock and gas. Like Saturn, Uranus has a series of rings made mostly of dust although they are not as big as Saturn's rings. Each particle is around 1m wide.

Neptune

Neptune is very blue in colour due to the methane gas it is composed of. It is also the coldest planet in the solar system. Neptune is 4.5 billion km away from the sun and takes around 60,100 days to complete an orbit. This is the same as 164 Earth years. Neptune has 13 moons, the largest of which (Triton) is largest than Pluto. Triton is unique because it travels in the opposite direction to Neptune whereas most moons travel in the same direction.

Mercury



Inner Planet
Small Planet (4,878 km)
Composition: Rock/Metal
Moons: 0
Rotation period: 58.6 days
Sun orbit: 88 days

Venus



Inner Planet
Small Planet (12,100 km)
Composition: Rock/Metal
Moons: 0
Rotation period: 243 days
Sun orbit: 225 days

Earth



Inner Planet
Small Planet (12,800 km)
Composition: Rock/Metal
Moons: 1
Rotation period: 24 hours
Sun orbit: 365.25 days

Mars



Inner Planet
Small Planet (6,800 km)
Composition: Rock/Metal
Moons: 2
Rotation period: 24.5 days
Sun orbit: 687 days

Cut out these cards
and classify them into
different groups.
How many different
ways can you group
the planets?

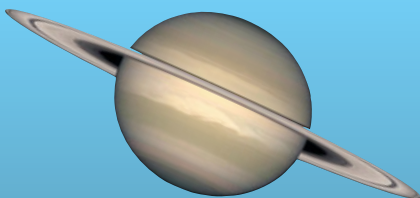


Jupiter



Outer Planet
Giant Planet (142,980 km)
Composition: Gas
Moons: At least 63
Rotation period: 9h 55min
Sun orbit: 4332 days

Saturn



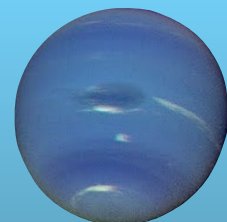
Outer Planet
Giant Planet (120,535 km)
Composition: Gas
Moons: At least 60
Rotation period: 10h 40min
Sun orbit: 10,756 days

Uranus



Outer Planet
Giant Planet (51,120 km)
Composition: Gas
Moons: At least 27
Rotation period: 17h 14min
Sun orbit: 30,600 days

Neptune



Outer Planet
Giant Planet (49,530 km)
Composition: Gas
Moons: 13
Rotation period: 16h 7min
Sun orbit: 60,100 days