YEAR 5 & 6 MONDAY – FILL IN THE GAP QUESTIONS

8 PLANETS IN THE SOLAR SYSTEM

A solar system is a sun and the planets that move around it. Our solar system contains eight planets. Not all have been explored fully, but scientists and experts have managed to piece together a range of facts to help us understand them.

Mercury

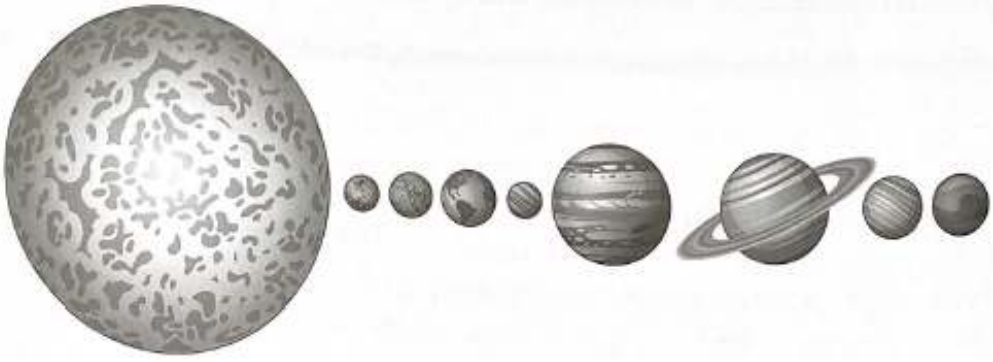
Mercury is the smallest planet in the Solar system, only a little bigger than Earth's moon. It is the closest to the Sun but not the hottest – and it's still a staggering 57 million kilometres away. It takes around 88 Earth days to complete a round journey or 'orbit' around the Sun (which takes Earth a year). This is the shortest time of any planet in the Solar system. However one full rotation (which is how we measure a day on Earth) lasts almost 59 Earth days.

Venus

Venus has extreme temperatures and acidic clouds, which make the existence of life there unlikely. It is the hottest of the planets, with a surface temperature of around 460°C. A year for Venus takes 224.7 Earth days, and a day lasts almost the same amount of time: 243 Earth days. Unusually, Venus's rotation is in the opposite direction to Earth's.

Earth

The fifth largest planet in the solar system, our planet is the only one we know is inhabited by living things and the only one we know has liquid water. Earth is around 150 million kilometres from the Sun and takes 365 days to orbit it.



Mars

Mars is home to polar ice caps, extinct volcanoes and canyons. This planet – the fourth from the Sun – is well explored by humans. A day on Mars lasts just over 24 hours and it takes the planet 687 Earth days to orbit the Sun. It is known as the 'red planet' due to the rusty fragments of iron in its soil.

Jupiter

By far the largest planet in the solar system, Jupiter is twice as big as all of the other planets combined. It has 79 moons. A day lasts about ten Earth hours but a year takes about 12 Earth years. Jupiter is made mostly of hydrogen and helium: it does not have a solid surface, so spacecraft would be unable to land. Its extreme pressures and temperatures would also destroy any vehicle.

Saturn

Similar to Jupiter, Saturn is mainly made up of hydrogen and helium. Perhaps its most famous feature is its many rings, which are made of ice and rock. Saturn is believed to have a total of 62 moons. Although Saturn itself cannot support life similar to that on Earth, some of its moons are believed to have conditions that may support it. A year on Saturn lasts around 29.5 Earth years, and a day lasts almost 11 hours.

Uranus

Uranus is four times wider than Earth. It takes about 84 Earth years to complete a full orbit of the Sun, and about 17 hours to rotate once. Similar to Venus, Uranus's rotation is in a direction opposite to that of most planets. Uniquely, Uranus rotates on its side.

Neptune

Almost 30 times as far away from the Sun as Earth is, Neptune is the most distant planet in the solar system. Neptune, which was not discovered until 1846, is not visible to the naked eye from Earth. It takes about 16 Earth hours to rotate once, but around 165 Earth years to orbit the Sun, meaning it has so far completed only one rotation since its discovery. It has 13 moons and six known rings. Due to its icy properties, it would not be able to support life as we know it.

Now complete the sentences below so that they make sense using the information from the text you have just read.

8 PLANETS IN THE SOLAR SYSTEM

FILL IN THE GAP

Read the sentences and choose the correct word or words to fill the gap.

Our Solar system contains _____ planets.

Not all have been _____ fully, but scientists and experts have managed to piece together a range of facts to help us understand them.

Mercury is the smallest planet in the Solar system, only a little bigger than Earth's _____.

It is the _____ to the Sun, but not the hottest – and it's still a staggering 57 million kilometres away.

Venus has extreme temperatures and _____ clouds, which make the existence of life there unlikely.

Unusually, Venus's rotation is in the _____ direction to Earth's.

A day on Mars lasts just over 24 hours, and it takes the planet 687 Earth days to _____ the Sun.

It is known as the 'red planet' due to the rusty fragments of _____ in its soil.

A day lasts about _____ Earth hours, but a year takes about 12 Earth years.

Jupiter is made mostly of hydrogen and helium: it does not have a solid surface, so _____ would be unable to land.

Saturn is believed to have a total of _____ moons.

It takes about 84 Earth years to complete a full orbit of _____, and about 17 hours to rotate once.

Almost 30 times as far away from the Sun as Earth is, _____ is the most distant planet in the Solar system.

It takes about 16 Earth hours to rotate once, but around 165 Earth years to orbit the Sun, meaning it has so far completed only one rotation since its _____.

Due to its icy _____, it would not be able to support life as we know it.