## Planetary Quiz - Teacher Notes

Name the planets below (not to scale).


How many stars are there in our solar system? One, the Sun.

Name the fifth largest planet in our solar system Earth

Which planet has the most circular orbit? Mercury - closest to the Sun

Which planet is farthest from the Sun? Neptune

Which two planets rotate in the opposite direction on their axes to the direction they orbit the Sun? Venus \&Uranus

Name four rocky planets Mercury, Venus, Earth and Mars

Name four gas giants Jupiter, Saturn, Uranus and Neptune

Why is Mars known as "The red planet"? The ancient Egyptians thought it looked red. The red colour is due to iron oxide or rust.

Which planet is so massive (not large) that it's mass is greater than all the other planets put together? Jupiter. It has a mass of 1,899 million, billion, billion kilograms

What is the name of the highest mountain on Mars? Olympus Mons

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Which planet has The Great Red Spot and what causes it? Jupiter. The spot is caused by a massive atmospheric storm

Name Earth's only satellite The Moon
Which moon of Jupiter may possibly have life? Europa may have life because its surface is covered in water and ice.

What is the surface temperature of Uranus estimated to be? $-200^{\circ} \mathrm{C}$

How long does Uranus take to orbit the Sun? 30,589 Earth days - a long time between birthdays!

Which planet takes about 365 days to orbit the Sun? Earth

Which planet has a very cold atmosphere of hydrogen, methane and helium giving it a blue colour? Neptune

## Extra for experts

If you stood on the surface of Mercury, would the Sun appear larger or smaller than it does on Earth? Explain your answer.
Larger because it is closer to the Sun

Venus is about the same size as Earth, has a similar gravity and is a similarly rocky planet. Why do we not colonise Venus? Give three good reasons. The atmosphere has no oxygen and has high amounts of carbon dioxide. This makes it very, very hot $\left(4650^{\circ} \mathrm{C}\right.$ at the surface). The pressure of its atmosphere is a crushing 90 times stronger than on Earth.

What weight would a 50 kg human have on the surface of the Sun?
Trick question. The Sun does not have a solid surface and the human would have been vaporised by its extreme heat.

Which planet is the largest (takes up most room) in our Solar System? Saturn.

What are Saturn's rings made of? Frozen water, gas and dust.

Planet Earth's atmosphere is four-fifths nitrogen. Which other orbiting body has an atmosphere with four fifth's nitrogen? Titan, one of the moons of Saturn. There is also deadly hydrogen cyanide however!

