

## **Year 5 Activity Sheet**

# **Solar System**

What is outer space? Are we alone in this universe? What do you know about the other planets and how they differ from Earth? What about the sun: what is it and why is it important? Earth is part of a solar system of planets surrounding the Sun. This section is going to test your knowledge on our place in the Milky Way!

#### Q1. Which is not a planet?

Neptune

**Uranus** 

Venus

Pluto

### Q2. What is the coldest planet in our solar system?

Neptune

**Uranus** 

Venus

Pluto

#### Q3. What is the hottest planet in our solar system?

Neptune

Uranus

Venus

Pluto

#### Q4. Is the following statement true or false: the sun is a star

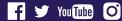
True

False















Q5. What is the main purpose of our sun?

To provide light

To provide energy for life on earth

To help hold the solar system together

To be a heat source for our whole solar system

Q6. In one sentence describe an orbit

Q7. How long does it take for our earth to orbit the sun?

1 day

1 month

1 year

10 years

Q8. Who was the first man to walk on the moon?

Michael Collins

**Neil Armstrong** 

Luke Skywalker

Buzz Aldrin

Q9. Explain why the moon shines and why it changes shape?

**ACTIVITY TIME – Star Gazing (complete this activity at night time)** 

If the night sky is clear and you can see all the stars, go outside and take a look! What do you see? Do you think that everything that shines in the sky is a star? If not, what else could it be?















#### Q1. Which is not a planet?

**Pluto!** It was actually a planet until 2006! However due to new research into what makes a planet it was found that Pluto was actually a dwarf planet.

#### Q2. What is the coldest planet in our solar system?

**Neptune!** It is the furthest from the sun. This means its ice caps never melt.

#### Q3. What is the hottest planet in our solar system?

Venus! While it is not the closest planet to the sun, it has an atmosphere like earth that traps in heat.

#### Q4. Is the following statement true or false: the sun is a star.

**True!** The Sun is a medium sized star but because all the other stars are very far away they look tiny in the night sky.

#### Q5. What is the purpose of the sun?

**All answers are correct!** The sun is super important for life on earth but so is the structure of our solar system.

#### Q6. What is an orbit?

It is how the planets travel around the largest object in their galaxy's gravitational pull or how moons travel around their planets. A planet's orbit is usually a big circle around the sun, but it can be affected by other large planet's gravitational pulls.

#### Q7. How long does it take for the earth to orbit the sun?

**It takes a year!** That is why we get seasons as we move around the sun, which you can see a great example of in our Awesome Earth Gallery at Questacon.

#### Q8. Who was the first man to walk on the moon?

**Neil Armstrong!** He took the first step on the moon on July 20th, 1969 during the Apollo 11 moon landing mission with the help of fellow astronauts Buzz Aldrin and Michael Collins. You can learn more about how Australia played an important role in the Apollo 11 Moon Landing at our Moon Gallery at Questacon.

#### Q9. Explain why the moon shines and why it changes shape?

The moon reflects the sun's rays. In the night, Earth sits in between the sun and the moon which means the Earth will block light from the sun reaching the moon. That's why the moon 'changes shape' as it orbits around us.





