

Science

Topic: Earth and space

Year 5

Strand: Space

Planet Earth facts

The planet Earth is a sphere. It is about 4.5 billion years old. Earth spins at 1000 miles per hour. It takes 24 hours to complete a full rotation. It's daytime on the side of the Earth that faces the Sun and night time on the side that is facing away. As the Earth rotates on its axis, shadows that are formed change in size and orientation. As it is night in some parts of the world while it is day in other parts, different places in the world have different times. This is why the world is divided into 24 different time zones. One for each hour in a day. The Earth takes 365 days to travel around the Sun. Planet Earth has one moon, which is held in orbit by gravity. Earth is the third planet from the Sun. The Earth is the only planet in our solar system not to be named after a Greek or Roman deity.

Tim Peake, British Astronaut

Major Tim Peake became the first British astronaut in space for over 20 years when he blasted off for the International Space Station on 15th December 2015. When he applied to be an astronaut he was selected from 8000 applicants. As part of his training he has learnt Russian, spent 12 days under the sea and completed a winter survival mission.



Solar system facts

To be able to explain what I have just learned.

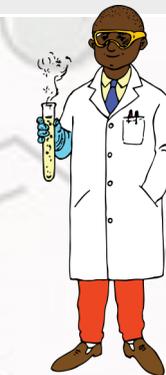
To be able to suggest a hypothesis in relation to the topic.

To be able to plan simple experiments related to rocks.

An easy way to remember the names of planets in order is: My Very Easy Method Just Speeds Up Naming.



Major Peake lived aboard the International Space Station for 6 months conducting experiments in microgravity and maintaining links with schools and children on Earth.



Key Vocabulary

Sphere	A three dimensional version of a circle, like a football or a marble
Solar system	The solar system consists of the sun and everything that orbits, or travels around, the sun
Orbit	The path taken by one body circling around another body The earth makes an orbit around the sun
Dwarf Planet	Planets similar to the solar system's eight planets but are smaller
Axis	an imaginary line through the middle of something
Time zone	A time zone refers to any region where the same standard time is kept
Astronaut	a person who travels beyond the earth's atmosphere
astronomy	The study of astronomy involves all of the objects outside Earth's atmosphere

What I should know?

The Milky Way

The Milky Way is the galaxy that includes the Solar System, with the name describing the galaxy's appearance from Earth: a hazy band of light seen in the night sky formed from stars that cannot be individually distinguished by the naked eye.

Planets

Earth and the other three inner planets of our solar system (Mercury, Venus and Mars) are made of **rock**, containing common minerals like feldspars and metals like magnesium and aluminum. So is Pluto. The other planets are not solid. Jupiter, for instance, is made up mostly of trapped helium, hydrogen, and water.

What is the sun made off?

Structure. The Sun, like others stars, is a ball of gas. In terms of the number of atoms, it is made of **91.01 hydrogen and 8.91 helium**. By mass, the Sun is about 70.61 hydrogen and 27.41 helium.

Skills I will develop

To be able to explain what I have just learned.

To be able to suggest a hypothesis in relation to the topic.

To be able to plan simple experiments related to rocks.

