To Infinity... and beyond!

Year 4 Summer Term

There are more stars in the universe than grains of sand on all the beaches on Earth. That's at least a billion trillion!

A black hole is created when big stars explode. Its gravitational force is so strong that nothing can escape from it – luckily the closest black hole is about 10,000 light-years from Earth. When venturing into space, astronauts wear spacesuits which have to be warmed, cooled, pressurised and supplied with fresh air. This takes six hours for them to put on! The universe has no centre and is constantly expanding (getting bigger) every second – making it impossible to reach the edge. The Earth is about 4.5 billion years old – but that's only a third of the age of the universe – which is 13.5 billion years old!

The Earth is tiny in comparison with the rest of the universe – it could fit into the sun 1.3 million times. How small does that make you feel? Check out this cool clip for fascinating facts about the sun...

In 840AD Emperor Louis of Bavaria died of hight when experiencing an eclipse of the sun – this is when the moon moves between the Earth and the sun and a shadow falls over parts of the Earth. The moon is the reason why we have tides and waves on Earth. Along with the sun, it moves billions of tonnes of water each day. A day on Mercury lasts longer than its year! Mercury moves around the sun faster than any other planet – making its year the equivalent of 86 Earth days. While a day on Mercury – the interval between one sunrise and the next – lasts 176 Earth days!

Some questions we hope to answer this term are...

- o Why do we have different seasons?
- o How do we get night and day?
- o What is the difference between solids, liquids and gases?
- o How do astronauts sleep, eat and drink?
- o Does the sun move?
- o How did humans manage to reach outer space?
- o What happened during 'The Moon Landing'?

This term, we will enrich the learning with.... *An astronaut training day! *Visiting South Downs Planetarium and exploring some artefacts *Designing and creating our very own ice-cream.

What will we be learning in each subject?

In **English**, we will be writing our own sci-fi stories. We will also focus our writing around creating imagery and exploring poetry forms that will allow the children to utilise their imaginations even further. Finally, we will create some eye-catching non-fiction pages about the planets in our solar system.

In **computing**, children will use Scratch to create a simple space themed computer game.

In French, we will be developing the children's vocabulary about days of the week, months of the year and items of food.

For **DT**, the children will create their own ice cream using their solids/liquids and negative numbers knowledge.

In **art**, we will explore the fabulous works of Peter Thorpe and create layered, abstract space-themed paintings using pastels, paints and marble ink. In science, we will be exploring Earth and beyond which involves the children investigating the position of the sun, moon and Earth. They will learn about the order of the planets in our solar system and how to distinguish between planets and stars. Children will also be exploring the different properties of solids, liquids and gases.

In **PSHCE** we will be exploring chores and how we can help at home, whilst also looking into what contributes towards a healthy lifestyle. You can join in with our learning at home by...

12

HED: IN MUSE

Websites:

<u>www.nasa.gov/audience/fo</u> <u>rkids/kidsclub/flash/index.</u> <u>html</u>

http://www.esa.int/esaKID <u>Sen/</u>

Reading ...



FICTIONAL AND FUN

0.C W2

Visiting... Øbservatory Science Centre **Herstmonceux**