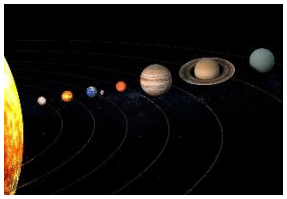
How do objects in our solar system interact?



Launch

To launch our topic, the pop-up planetarium will be visiting the school! Each class will have a chance to enter the 3D world of outer space and see how the planets align, revolve and take their place in our

Key dates

2nd January – Children return to school

4th January – Pop-up Planetarium visiting school

Topic Overview

During this topic, we will be exploring our solar system. As scientists, we will discover how the Moon moves relative to the Earth, including when and how we can observe this. We will also learn about how the Earth and other planets move around the Sun as well as how this impacts how we have day and night. As artists, we will be inspired by the works of Peter Thorpe, who is famous for his science fiction art. We will build on the variety of painting techniques that have previously been taught to create our own rocket space scenes. In a world of digital media, we will be creating stop motion animations of a rocket launch. Using a green screen, we will fly our model rockets through space, and have the chance to build, film and edit our videos to create high-quality animation. Bournemouth University will also be visiting to support us with our creations, giving us feedback and sharing their journey towards studying at computer animation and visual effects at university. This will also facilitate our learning in PSHE this half term, which will focus on our dreams and goals for the future.

Key Vocabulary

orbit
phases
solar
atmosphere
gravity
asteroid belt
comets
galaxies
shuttle
constellations
satellites

Learning Conversations

Would you like to go to space? Why?

What would you take with you to space and why?

What qualities would make a good astronaut?

What is it like to be part of a space mission team?

How long do you think it would take to get Mars?

Do you think there is life on other planets?

Did you know?

- Space is completely silent because molecules are too far apart to transmit sound.
- The Sun is over 300,000 times larger in mass than Earth.
- Venus has temperatures over 450°C and is the hottest planet in our solar system.
- All of the other planets would fit inside Jupiter.
- Earth could fit inside the Sun one million times!

Drivers

Aspiration and Community – We will be extending links to Bournemouth University, which will give us an insight into how they could become animators of the future!

Enquiry – During the topic, we will put our enquiry skills to the test to explore the impact of our position in space. We will also consider how the phases of the moon effect the Earth and how our position in relation to the sun gives us day and night.

Topic Challenge – Due Wednesday 31st January.

We would like you to create your own version of our solar system in any way you wish. You could create a poster, model or a mobile – the more creative, the better!
We would also like you to provide an information sheet to go alongside it.

Landing

We will be visited by some of the students from Bournemouth Universities animation faculty who will help us to create our stop motion animation and then critique and advise on how to improve the finished films!