# **Areas of Study Autumn 1 2024**

**Topic Title: Earth and Beyond** 

**Key Question: What is the relationship between Earth and space?** 

## **English (Reading and Writing)**

## Reading

The mysteries of space have fascinated and enthralled people for generations. As a result, the genre of science-fiction primarily focuses on imagining what could be in the great beyond and how, as a species, we would react to it. Authors such as H.G. Wells created imaginary scenarios of alien landings that went on to inspire films such as Star Wars and Avatar to name a few. In this unit, children will experience the classic novels 'War of the Worlds' and modern sci-fi novel 'Phoenix'.

# Writing

Aliens have landed... people are in panic and chaos. It is imperative that someone reassure the public that they need to remain safe. Children will take up the call of creating a poster to give detailed instructions on how to avoid an encounter with aliens and what to do in case you meet one. Children will then develop their ability to thrill and capture and audience through the use of mystery, suspense and tension in a piece of narrative; they will describe someone's first encounter with an alien life-form. The children when then report on the landing described in their narrative by creating a newspaper report about the event.

## **Maths**

This half term, children will expand on their previous learning of multiplication and division by developing their understanding of how to solve problems using written methods. Children will use short multiplication to multiply single-digit numbers by numbers with up to 4-digits; learn how to multiply numbers with up to four-digits by a two-digit number.

Towards the end of the unit, children will expand their understanding of mathematical terminology – learning the definition and how to use/find factors, primes, multiples, square and cube numbers.

### Science

Since the beginning of time, humans have looked up at the stars and wondered what is beyond; from the initial explorers discovering the earth was not flat, to those who bravely ventured out into space. In this unit, children will discover how the Earth orbits the Sun and how, in turn, the moon orbits the Earth. Children will take a journey into space and explore the planets of the solar system and some of the astronomical bodies. They will understand how the Earth's cycle of day and night is reliant on how it orbits the Sun and rotates on its own axis.

In addition, children will take on the role of engineers, using their knowledge of forces. Children will consider the appropriate construction of space capsules and how they can use gravity, air resistance, water resistance and friction to ensure that a capsule returns safely to earth from its trip to the stars.

## **History**

Not delivered this half term.

## Geography

The Earth supports and sustains a wide variety of life, which thrives in a dazzling array of biomes that make up the surface of our planet. In this unit, children will discover how Earth supports life through the study of the planet's biomes and climate zones, looking at the similarities and differences between each. Children will know how and why our planet is divided into hemispheres and where the equator is located and why the biomes are affected by this 'line'.

#### Art

Artists strive to create 3D images from 2D mediums. The creative use of perspective, depth and tone is one way in which many artists have succeeded in bringing a 2D representation of the life. In this unit, children will attempt to represent and explore techniques to create realistic impressions of depth, by playing with perspective to create dramatic or disorienting images of rockets blasting off into space, astronauts working or floating off into the great unknown.

They will use one-point perspective to capture the illusion of depth and, in some cases, move on to using two-point perspective to create a scene.

# **Design Technology (DT)**

Not delivered this half term.

## Music

The song, Kisne banaaya (Who Made Us?) from India and Pakistan explores how our world, and the different creatures that inhabit it, came into existence. Pupils will learn choreography to support the learning and understanding of the song (in Hindi), learn to sing the song comparing different performances and play an instrumental accompaniment on tuned percussion.

# Religious Education (RE)

# To what extent do religious beliefs encourage and influence good behaviour?

Through a stand-alone analysis of modern religious practice, they will be able to place the views and beliefs that they will study into context.

In this unit, Children will begin by looking at morality, rules and what they think is good behaviour. They will then move onto look at each religion's rules and beliefs and how these encourage good behaviour. For example, the children will look at the ten commandments and how these have encouraged Christians to live a 'good' life; how the Torah influences the lives of Jewish people; the role of the 5 pillars of Islam on their followers; the teachings of Guru Nanak and the concept of Seva for Sikhs; and the use of festivals such as Diwali for Hindus.

# **Physical Education (PE)**

Ensuring that children are mindful of their own bodies and learn a level of self-control, we have introduced a Yoga program to PE at Owlsmoor. Children will be taking part in some core Yoag poses, learning how to regulate their movements and ensure a level of mindfulness through miditative excercises.

During their outside sessions, the children will focus on invasion games, particularly hockey.

## Computing

Steven Spielberg's classic science-fiction film 'Close Encounters of a Third Kind' is legendary for its music – composed by John Williams. In the film, experts attempt to use digital music to communicate with an alien spaceship. The simple

combination of digitally created notes eventually leads to a successful communication with the aliens. In this unit, children will compose their own digital message using the composition software SonicPi.

This will also give the children the opportunity to develop their knowledge and understanding of text-based coding and how to debug and use algorithms successfully for a purpose.

# Personal, Social and Health Education (PSHE)

Throughout this unit, the children have been developing their understanding of what makes a good friend and how they can identify the traits that they covet in a good friendship. Through discussions and activities, the children will consider appropriate actions and when peer-pressure and the actions of friends can lead to negative consequences for themselves.

Additionally, children will continue to explore their actions and how the actions of others affect them, including how different forms of touch can elicit a negative or positive response and how some are inappropriate. Children will be given the opportunity to discuss their ideas and thoughts and explore what they should do if the y feel they have had an experience that falls into this category.

Lastly, children explore the terminology surrounding racism, stereotyping and prejudice and look at the social and emotional effects that these have on groups and individuals. Children will explore why racism and prejudice are not tolerated in our society and how they can help to combat these views when they come against them in real life. They will create an informative video for younger children that will aim to provide an education about these issues.

# Modern Foreign Languages (MFL)

In their studies of the French language thus far, children have continued to develop and expand their vocabulary and understanding of this language. This half-term, children will study the unit 'Je me présente' where they will learn how to count to twenty, say their name and age, say 'hello' and goodbye', explain where they live, ask how someone is feeling and give a response and then give their nationality. Children will also develop their knowledge of the basic gender rules in the French language and how this affects the written and spoken form of some words.