## Literacy

This half term, Year 5 will learn about the Space Race. As they progress through our Power of Reading text, Professor Astro Cat's Frontiers of Space, the children will explore different text types. The children will use further research to write an explanation text to: describe the Earth's movement in relation to the Sun, the creation of the seasons and the reason why we have day and night. As part of this, they will explore the changing appearance of the Moon.

Before writing a further explanation text, they will create a model of the Moon's phases, using different sized milky-buttons to represent each stage. To aid cohesion when writing a non-fiction text, the children will use a variety of causal conjunctions and signposting words to indicate cause and effect, as well as practicing the skill of using a colon to introduce a list, a semi-colon to separate two independent clauses and using commas for ambiguity.

Focussing on report writing, the children will then write a report to detail the sequences of events leading up to the first moon landing - focussing on events from JFK's announcement to the nation claiming the USA's stake in the Space Race to the moon landing itself!

## History

In history, the children will be learning about the relationship between America and the Soviet Union following the Second World War. In particular, the children will consider how the Cold War tensions contributed to the Space Race and the desire to explore more of our Solar System. Throughout our topic, the children will use a timeline to record the important events, including the Apollo missions which culminated in 1969 with the historic Moon Landing.

## Geography

After learning about the success of the Apollo 11 mission, the children will explore the physical landscape of the spaceports used by both America and the Soviet Union during the Space Race. They will discuss the benefits of launching a rocket on a peninsula, such as Florida, or in a vast, deserted area such as the Kazakhstan steppe. By studying the land use patterns of the UK, they will consider why we are yet to have our own spaceport and suggest a possible region for a future launch site.

## Design Technology

The children will explore mechanisms with gears, focusing on the effect of using gears which are different sizes to increase power. They will design a mechanism to move a space buggy before competing in space buggy races.

## Mathematics

In maths this half term, the children will learn to:

- Drawing and measuring angles up to 180 degrees.
- Calculating and measuring angles in shapes.
- 3D shapes.
- Read and plot co-ordinates.
- Translation with co-ordinates.
- Finding lines of symmetry.

## Religious Education

Focusing on Easter, the children will unpick the significant events that take place during the Easter Triduum and how these events can help and guide us in our everyday lives. Towards the end of the unit, children will look at how symbolism plays an important role in religion. With the children being familiar with important symbols that are used in the Catholic religion, they will compare these symbols to that which are used in the Hindu religion by discussing the similarities and differences.

Prior to half term, children will begin their Pentecost unit. They will examine the words of Peter after Pentecost. They will also explore the church's belief in the Holy Spirit within the Trinity and look at the role of the apostles proclaiming the Good News.

# The Space Race


## Enrichment

The children will be going on a trip to the Winchester Science Museum where they will take part in a workshop, experience the planetarium show and explore a variety of interactive exhibits.

## Physical Education

In tennis, children will be introduced to a wider range of shots, including: forehand, volley and backhand. They will understand the concept of a rally and be able to complete these using simple forearm shots with a partner. During dance lessons, the children will follow a sequence of movements based on a different theme each week.

## PSHE/RHE

The children will learn the importance of making safe and sensible decisions about what content to share or not share online, including photos, passwords and other personal information. Children will also explore how they can chat safely online; the impact cyberbullying can have and what behaviour is acceptable and unacceptable online. Finally, we will equip children with some basic First Aid knowledge, including the recovery position.

## Science

This half term, Year 5 will be busy learning about our Solar System as part of our cosmic topic, *The Space Race*. At the start of our topic, they will look at two opposing views of the universe: the heliocentric and geocentric models. Working scientifically, they will develop their skills of enquiry by identifying questions and evidence that would need to be gathered in order to prove the accuracy and validity of these theories. The geocentric model assumes that the earth is at the centre of the universe whereas the heliocentric model assumes that the Sun is at the centre of our solar system and all other planetary bodies orbit around it.

Linking the children's science learning to their maths, they will use scientific knowledge and logic to solve time problems.

Finally, the children will explore time zones and relate this to the movement of the earth.

## Computing

The children will find out that vector images are made up of shapes while learning how to use the different drawing tools and how images are created in layers. They will explore the ways in which images can be grouped and duplicated to support them in creating more complex pieces of work.

## Art and Design

The children will be introduced to abstract art by looking at the backgrounds that Peter Thorpe created in his 'Rocket Paintings.' They will find out that this began as 'a way to use paint that would otherwise have been thrown away.' Inspired by his work, the children will paint rockets or planets on top of their own abstract backgrounds.

## Music

This half term, the children will listen to a variety of songs about Space. Within this, they will watch an orchestral performance of *John William's Star Wars*, and be able to identify some orchestral instruments, learn how to play the main Star Wars theme on tuned instruments (xylophone, boom whackers, recorders) and perform as part of a class ensemble. In addition, the children will understand how to play triplets, and how they are notated as well as compose musical ideas on tuned and untuned percussion using triplets.