Robots

Literacy

At the beginning of our topic, Robots, the children will be immersed in our Power of Reading Text, The Iron Man. They will identify a range of literary devices used by the author including: repetition, similes and metaphors. Considering the impact of such devices, the children will write their own opening to the story with the intent of engaging their reader!

The children will innovate the narrative considering different settings in which they could place the Iron Man e.g. stood at the school gates. Whilst writing, the children will structure their writing by using paragraphs to signal a change in event, time or place.

Revisiting report writing, in role as a news reporter from the story, the children will write an article reporting on the surprising and unusual events of Iron Man's challenge with the space monster.

History

The children will be looking thematically at the world changing inventions and placing them on a timeline to develop their chronological understanding.

During each session, they will deep dive into human flight inventions, optical inventions, surgical inventions and the development of computers. Towards the end of the unit, the children will observe, compare and evaluate their timelines.

Physical Education

Tennis:
The children will learn to move with balance and control whilst bouncing a ball on their racket, varying the speeds and direction in which they move.

Health-Related Fitness:
They will be introduced to the concept of fitness training and be able to describe different fitness tests.

The children will take part in a variety of fitness tests and experience these first hand. These will be suitably adapted to ensure they are age appropriate.

Science

The children will construct simple electrical circuits using cells, wires, bulbs, switches and buzzers in order to understand how electricity works.

They will be investigating and identifying whether or not a lamp will light when we change the test conditions and remove and add in different components.

The children will also investigate the use of switches to open and close a circuit. This will bring the children to designing their own circuits to light up a feature of their model robot.

Music

The children will learn how music can be created from simple repeating patterns, and will learn to perform a repetitive piece on boomwackers. They will learn how music can be created using simple body percussion and vocal sounds, using Anna Meredith's **Connect It** as inspiration.

During their music lessons, they will listen to the **Honda Civic Advert** composed by **Steve Sidwell**, and learn the basics of beatboxing.

To close the topic, the children will create simple vocal and body percussion sounds as part of a class ensemble.

Enrichment

To begin, the children will be challenged to 'junk model' a robot which will give them the opportunity to share their understanding of what a robot is and what they are capable of. The finale of our topic will provide the children with an opportunity to share their new understanding and debate whether robots a good thing.

Computing

The children will create programs by planning, modifying, and testing commands to create shapes and patterns – including the outline of a robot! They will learn about repetition and loops within programming.

Design Technology

Having read the text where Bilbo is in his workshop, the children will be tasked with designing and making their own robots. As well as focussing on the aesthetic features, they will explore how best to use an electrical circuit to light up a feature of their robot. Once their creation is complete, the children will learn how to use a computer program to control the electrical feature of their product.

Mathematics

The children will be learning about and naming different shapes. They will consider their properties before using a combination of quadrilaterals and triangles to design their own robot.

They will learn how to find the area of a shape by counting the squares inside and, when confident, will apply this skill to find the area of their robots! They will also learn to measure and calculate the perimeter of their shapes.

The children will also be challenged to draw symmetric robots so that their bodies are exactly mirrored.

Religious Education

In the Easter unit, children will focus on the appearances of Jesus after the resurrection focusing on the road to Emmaus story. They will then examine the Ascension story and its teachings. The Hindu festival of Divali is also explored in the multi-faith element.

Children will then explore the events of Pentecost in detail and look at how the gift of languages is expressed.

Art and Design

The children will create 2D drawings of robots and then begin to incorporate some elements of 3D into their designs.

Inspired by the illustrations of Chris Mould in 'The Iron Man,' the children will learn to add shadows to make their creations more imposing! A focus on scale and proportion will enable them to convey the size of their robots relative to the background details.

PSHE/RHE

During this half term, the children will be exploring how to keep safe with their friends, family and strangers. They will come to understand what is bullying and what is acceptable behaviour from others. The children will also be made aware of unsafe substances that they may be exposed to.

After this, the children will move onto explore in greater detail the community aspect of the Trinity and encourages them to think about what the Trinity means to them and how as they were made in God's image, they too are created to live in community.