



We are Engineers: Embracing Technology to Solve Problems

In this theme, children will use skills of STEM (Science, Technology, Engineering and Maths) to solve problems and create products. All children will be given a design brief to follow in order to create their own products – they will then explore the 'design, make, evaluate process' to create their products. Some children will have the opportunity to combine their products with elements of computing to develop 21st century products.



Year 5 - Space

Throughout this focus, children will explore space and learn about how space works.

Through **Art** children will explore a range of fabrics to create 3D aliens. They will draw annotated sketches, think about their choice of materials and create instructions on how to make their alien. They will then draw on their sewing skills to make a stuffed 3D alien, which will use a range of sewing skills.

In **Science** children will explore the earth, sun and moon, comparing day and night. They will work scientifically to create shadows and understand how shadows work too.

In **Computing** children will design scratch games using sequencing, selection and their critical thinking skills to solve problems.

Finally, in **English** children will write a sci-fi narrative, focusing on an alien landing and will draw on key concepts they have learnt throughout **Science** to help them understand how space works.

Science

Earth, sun and moon

PE

Athletics and Cricket

MFL - French

My home

Cooking

Chickpea and Mushroom Curry

Theme Impact

Children will explore in depth the exciting wonders of space and will learn about how the Earth rotates, the effect of gravity and how the movement of the sun and moon create day and night. Children will draw on their knowledge of space to design, create and evaluate how to make rockets, while exploring the forces needed to allow this to happen. Children will further enhance their creative skills by linking their English theme of an alien lost in space to their own creative textile project where they will design their own planets.

Catholic Social Teaching

Option for the poor and vulnerable: This means that God invites us to care in a special way for those who need the most help.

Through Collective Worship, children will explore the many various conditions and environments that people live in- both locally and globally and the reasons for this. They will think about how they can support people who are victims of things like famine, unjust oppression, prejudice and unemployment. This will be taught alongside the virtues of Compassionate and Loving; compassionate towards others, near and far, especially the less fortunate; and loving by their just actions and forgiving words.

Application

Lots of research went into how to safely launch and land Apollo 9 to help scientists gather additional information about space. How can we safely launch a rocket outside with an egg inside that lands safely and is undamaged?

Children will draw on their knowledge of rockets from DT and think about how they can use different materials to help keep their egg safe. They will need to use their understanding of forces, including air resistance to make their launch successful.

Class Reader

