

During this project, the driving subjects are Geography and Design & Technology. We learn about real-world issues and how we can make a difference, learning about different places and communities and how technology can improve people's lives.

Project Launch: Religious Education
Living Well, being good.
We begin our project by exploring our values in the context of Hindu beliefs. We learn about Hindu belief in Dharma (**duty & responsibility**) and how they live their lives seeking Karma and how their belief in Atman teaches them to live, **aspiring** to be good human beings.

Science: Properties of Materials
What is plastic and why is it such a problem in our oceans? We find out about the properties of different materials and how they behave when they are put in water. We investigate the challenges of separating solids from liquids in solutions and mixtures and consider what this means for our oceans.

Geography
We find out about the scale of the plastic problem in our oceans. Using maps and atlases, we locate the oceans of the world and use knowledge of ocean currents to understand why garbage patches have formed in some parts of the world.
We find out about the route this plastic waste can take from starting locations all over the world.

Year Five
Explore
Spring Term

Project launch

Focus 1

Focus 2

Focus 3

Design and Technology: Designing
One way we can reduce our plastic waste is to use re-usable carrier bags. We explore and evaluate existing sustainable bags, testing different materials and designs to see which we think are most successful.
We incorporate these features into our own bag designs, communicating our design ideas through exploded diagrams which show how we will join our materials together.

Music:
We will explore the different dynamics of music, listening and evaluating music written on the theme of plastic and then having a go at composing our own.

Design and Technology: The work of designers and engineers
We learn about the work of teams of designers who are trying to clean up our oceans. We find out about the Ocean Clean Up and their innovative technology. We consider the challenges presented by underwater currents and the need to protect ocean-life. We find out how the designers have found solutions to these problems, demonstrating resilience and commitment to their projects.

Art: Sketching
After finding out about the different marine life that can be harmed by ocean pollution, we have opportunities to practice drawing from observation, creating sketches of fish scales and turtle shells. We use this to develop our use of patterns, tone and texture in drawing.

Design and Technology: Making and Evaluating
We build our textiles skills by learning different stitches, finding out which ones are best for different purposes.
We learn to accurately measure and cut fabric to create pattern pieces and join these securely by stitching.
We test our finished bags to see what they can hold and how comfortable they are to use so that we can evaluate our final products.

Focus 6

Focus 5

Focus 4

Art: Textiles
We use different embellishing techniques to add texture and detail to our bag designs so they aren't just sustainable, but they are also attractive to consumers.

Geography:
To help us learn more about our local waterways, we use Ordnance Survey maps to explore waterways in our own local area, finding out about how Birmingham became a city with the arrival of our famous network of canals. We use map keys and symbols as well as 4 and 6 figure grid references.
We find out about the damage plastic pollution is doing to the canals near our school and how we can look after them, learning about the ways we can impact our local environment.

History:
As well as learning about the geography of Birmingham's famous canal network, we also find out the ways the arrival of the canals changed life in our local area. We learn about the Industrial Revolution and what life was like for workers in cities during this time. We find out about some of the key figures who were significant in bringing about change in Birmingham including James Brindley.

Focus 7

Focus 8

Focus 9

Focus 10

Religious Education
Easter and Salvation
We find out about Christian beliefs about Easter the importance of Jesus' death and resurrection. We learn about why this is such an important event in the Christian calendar.

Answering the Project Question:
At the end of the project, we reflect on all of our learning and answer our project question: How can we overcome challenges facing our world?

Design and Technology: Mechanical systems—Pulleys
As part of our learning about canals, we find out how people were able to transport heavy goods on and off canal boats. We learn about the use of pulleys in cranes to do this and why pullers enable us to lift heavy objects more easily. We explore creating our own pulleys, testing how the work to create successful models.

Focus 13

Focus 12

Focus 11

How can we overcome challenges facing our world?