

What is DT and why is it important?

Design and technology is an inspiring, creative and practical subject. Using creative ideas and their imagination, pupils design and make products that solve real and relevant problems within a variety of contexts. Over time, they develop a range of skills and subject knowledge that draws on disciplines such as Maths, Science, Engineering, Art and Computing.

The DT curriculum also includes learning about food and nutrition. Pupils will be taught how to cook and apply the principles of nutrition and healthy eating.



What does DT look like at Bartons?

At Bartons, we feel it is vital to nurture creativity and innovation through design by exploring the designed and made world in which we all live and work.

At Bartons, we have our own dedicated STEM Hub where we can do all of our DT work in. It has all of the tools we need and work benches to create our designs safely.

All pupils are encouraged and taught to design, construct and evaluate models and mechanisms according to a brief. They learn how to progressively plan, design and refine their skills from Year R to Year 6.

What do we learn?

In Reception:

- ❖ To use simple tools e.g. scissors with control.
- ❖ To make use of and explore a variety of materials when making models or props for their play.

In Key Stage 1:

- ❖ To design products for themselves and others based on design criteria and research.
- ❖ To develop and communicate their ideas in a variety of ways.
- ❖ To make their designs using a range of tools, components, mechanisms and materials.
- ❖ To know how to cut and prepare ingredients to make simple food/cake/biscuits.

Design & Technology



What do the children think of their DT learning?

'During STEM week, we worked with students and teachers from The Regis School to build rocket powered cars. We used wood to make our designs at school, measuring and cutting it to size and thinking carefully about the design. It was fun seeing all the parts come together and visiting The Regis School to test our cars.' (Year 6 pupil)

'When we built our bug hotels we used saws to cut wood to the correct size for the frame of the house. We attached the parts using hot glue. I enjoyed being able to use all the tools in school and creating something for the environment.' (Year 5 pupil)

'I made a boat that floated. I attached a motor and a propeller to the end to make it move. It was so much fun and I mine floated.' (Year 1 pupil)

'We have been in the STEM Hub cutting out different pieces of cardboard to create our drawbridge for our castles. Miss Yardley helped us to saw. We used a special plank of wood called a bench hook. We used a hacksaw to saw the different lengths of wood and we used a glue gun to join the pieces together. It was so much fun learning new skills.' (Year 2 pupil)

What do we learn?

In Key Stage 2:

- ❖ To evaluate a range of existing products and their own.
- ❖ To evaluate how designers have helped to shape our world.
- ❖ To develop their technical knowledge of structures and mechanisms, electrical systems and apply their understanding to their products.
- ❖ To use understanding of computing to program, monitor and control their products.
- ❖ To design and make simple foods which involve baking and combining ingredients.
- ❖ To know about food sources, nutrients and healthy diets.