Design Technology

At Portway Junior School, our Design Technology curriculum aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle. We want to provide our children with the opportunities, responsibilities, and experiences they need to be innovative, resourceful and creative problem solvers.

All teaching of DT follows the 'design, make, evaluate' cycle. Each stage is rooted in technical knowledge. Skills and knowledge progression is designed and sequenced appropriately to maximise learning for all children, in all areas of DT (textiles, mechanisms, structures, food and electrical systems), throughout Key Stage 2. Each project addresses the principles of designing, making, and evaluating; whilst incorporating relevant technical knowledge, key vocabulary and relevant health and safety. We encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. DT is taught in alternate half-terms to Art and often taught in several blocks of lessons to allow the time needed for the children to be critical, inventive and reflective within their work.

As children progress through the school they will develop:

• The ability to carry out thorough research, show initiative and ask questions to develop a detailed knowledge of users' needs.

- The ability to apply mathematical and scientific knowledge and skills accurately.
- A thorough knowledge of which tools, equipment and materials to use to make their products.
- The ability to manage risks well to manufacture products ethically, safely and hygienically.
- An understanding of how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.
- The ability to evaluate and identify areas to improve functional and aesthetic properties.
- A passion for the subject and a desire to explore their learning further in the future.