

## Design Technology

### Areas of study KS1:

- Construction and Use of Materials
- Textiles
- Mechanisms
- Cooking and Nutrition

### Areas of study Lower KS2:

- Mechanisms
- Construction and Use of Materials
- Textiles
- Electrical and Mechanical Components

### Areas of study Upper KS2:

- Cooking and Nutrition
- Construction
- Textiles
- Electrical and Mechanical Components

### **Substantive knowledge**

Substantive knowledge in design and technology is based on the knowledge of four key elements of the process of design (design, make, evaluate and technical knowledge). Children are taught **what they need to know**, the declarative knowledge, and **how to use what they know**, the procedural knowledge. All of these elements will be taught from Reception to Year 6 and vocabulary is taught explicitly and will be deliberately practised and applied through the 4 key elements. These are:

<b>Design</b>	Know how to design a product that is purposeful, functional and appealing to a specific group.
<b>Make</b>	Know how to cut, join and finish a range of increasingly complex materials, ranging from paper to wood.
<b>Evaluate</b>	Know how to investigate, evaluate and analyse a range of existing products and their own designs based on a specific design criteria. In addition to this, children will know key individuals have helped to shape the world in which we live in.
<b>Technical knowledge</b>	Know how to apply their knowledge of specific materials to meet the criteria listed above in the design, make and evaluate stages.

### **Disciplinary knowledge**

Disciplinary knowledge in design and technology is the process of enabling children to use their substantive knowledge of products and materials around them to make links between and across different areas of the curriculum. Knowledge in design and technology will equip the children with the opportunity to explain how and why products have changed over time and how they might be further improved in the future. They can use their knowledge and understanding to suggest how existing products may be improved with the advances in modern technology. Children will demonstrate that they have the cultural capital to become global citizens, following global themes and fundamental British Values, in an ever changing and technologically advancing world.