

## Design and Technology at Ladysmith Federation

### Intent

At Ladysmith Federation our Design and Technology schemes of work aim to inspire children to be innovative and creative thinkers who have an appreciation for the product design cycle through ideas, creation and evaluation. We want children to develop the confidence to take risks through drafting design concepts, modelling and testing and be reflective learners who evaluate their work and the work of others. Through our schemes of work, we aim to build an awareness of the impact of design and technology on our lives and encourage children to become resourceful.

Our Design and Technology schemes of work will support children to reach the National Curriculum end of key stage attainments. We want our children to develop their ability, explore their imagination, nurture their talent and interests, acquire skills, and express their ideas. As a result, design and technology will encourage the development of transferable skills which will enhance learning in other curriculum areas.

### Implementation

The Design and Technology National curriculum outlines the three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical and technical understanding required for each strand. Cooking and nutrition has a separate section with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality.

The National curriculum organises the Design and Technology attainment targets under five subheadings:

- Design
- Make
- Evaluate
- Technical Knowledge
- Cooking and Nutrition

The Ladysmith Federation schemes of work provide a progression of skills and knowledge within these five strands across year groups. Children respond to design briefs and scenarios that require the consideration of the needs of others, developing their skills in these 6 areas: mechanisms, structures, textiles, cooking and nutrition, electrical systems and the digital world. Each of our key areas follow the design process (design, make and evaluate) and has a particular theme and focus. Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles.

### Impact

Our Design and Technology curriculum will equip children with a range of skills ready to make the transition through their school journey. These skills include:

- Understand the functional and aesthetic properties of a range of materials and resources
- Understand how to use and combine tools to carry out different processes for shaping, decorating and manufacturing products
- Have an appreciation for key individuals, inventions and events in history and of today that impact our world
- Understand and apply the principles of healthy eating, diets and recipes including key processes, food groups and cooking equipment.
- Self-evaluate and reflect on learning at different stages and identify areas to improve
- Meet the end of key stage requirements outlined in the National curriculum