



# St Hugh of Lincoln RC Primary School



## DESIGN TECHNOLOGY

### Intent

At St Hugh of Lincoln, we pride ourselves on being a happy, caring, welcoming community, where the learning environment and the wide range of opportunities offered, help every child reach their full potential and make the most of the gifts and talents given to them by God. We are committed to providing all children with learning opportunities to engage in Design and Technology. Design and Technology is about designing and making products for a specific need or purpose. It involves children learning about the world we live in and developing a wide range of skills through designing and making. Through the teaching of Design and Technology we are aiming to:

- Develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making things
- Enable children to talk about how things work, and to draw and model their ideas; To encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures
- Explore attitudes towards the made world and how we live and work within it
- Develop an understanding of technological processes and products, their manufacture and their contribution to our society
- Foster enjoyment, satisfaction and purpose in designing and making things

### Implementation

Across both Key Stages, we implement the teaching of Design and Technology through the scheme of work 'Plan Bee'. We use this as a basis for planning for in the long term and the short term. Teachers consult these to ensure technical accuracy in their teaching and to inform the programme of study for their year group. We follow a 2 year rolling curriculum programme which allows for our schools one and a half form entry, and ensures that sufficient coverage of the curriculum for all children. The key skills and knowledge for each Design and Technology Topic have been mapped by each year group to ensure that these are progressive from one year to the next. Planning considers cross curricular opportunities and we encourage creativity within the curriculum.

One unit of work is planned and undertaken each term within the creative curriculum.

Children in their designing and making will apply knowledge and skills of textiles, food, mechanisms and structures.

When designing and making, the children are taught to:

### Design

- Use research and develop design criteria to inform the design of innovative, functional appealing products that are fit for purpose, aimed at particular individuals or groups
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer-aided design

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### Make

- Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing, as well as chopping and slicing) accurately
- Select from and use a wider range of materials, ingredients and components, including construction materials, textiles and ingredients, according to their functional properties, aesthetic qualities and, where appropriate, taste

### Evaluate

- Investigate and analyse a range of existing products
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- Understand how key events and individuals in design and technology have helped shape the world

### Technical knowledge

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- Understand and use mechanical systems in their products
- Understand and use electrical systems in their products
- apply their understanding of computing to program, monitor and control their products
- Understand some of the ways that food can be processed and the effect of different cooking practices (e.g. grilling, baking)

The Foundation staff plan for children to experience creative opportunities and develop key skills and techniques within the EYFS curriculum. There will be a focus on developing fine motor skills and learning how to plan, design and produce the finished project. The knowledge and skills acquired and developed in the EYFS will provide the foundation or those identified in subsequent years. Nursery and Reception classes will be, where appropriate, included in whole school projects, workshops, events and competitions associated with Design and Technology.