

## Holy Trinity CE Primary Design Technology Curriculum

### Curriculum Intent

Children will learn to solve problems independently or as part of a team, using all the tools and technology at their disposal.

They will produce the best solutions possible for their ability and will challenge themselves to be lifelong learners.

They will enjoy planning, designing, building, cooking, creating, testing and evaluating things using modern technology.

### Projects – To be covered over the course of two years

	Stonehenge	Whitehorse	Sarum	Avebury	Silbury
Textiles	Toy/puppet	Sewing project – bag	Christmas Decorations	Fabric containers eg. iPad cover	Hats
Food	Healthy eating and where food comes from	Nutrition and how to prepare food safely	Food around world – more detail on where food comes from and how it grows.	Making Bread	Run a School Restaurant for parents for one afternoon
Structures	Boats	Shelters	Picture Frame	Art/museum exhibition stand	Moving toys
Mechanics	Moving Pictures	Winding up mechanisms	Pneumatics and levers	Electric Alarms/light	Controllable Vehicles

### Curriculum content showing progression

	Stonehenge	Whitehorse	Sarum	Avebury	Silbury
<b>Design</b>	Design purposeful, functional, appealing products for themselves and other users based on design criteria.	Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology	Use research and develop design criteria to inform the design of functional, appealing products that are fit for purpose.	Generate, develop and communicate ideas through annotated sketches and cross-sectional diagrams.	Generate, develop. Model and communicate ideas through annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

<b>Make</b>	Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].	Select from and use a wide range of tools, materials and components, including construction materials, textiles and ingredients, according to their characteristics.	Select and use from a wide range of tools and equipment to perform the tasks of cutting, joining and finishing.	Select and use a wider range of materials and components including textiles and ingredients according to their functional and aesthetic qualities.	Select from a wide range of materials and components including construction materials, textiles and ingredients according to functional properties and aesthetic qualities.
<b>Evaluate</b>	Explore and evaluate a range of existing products.	Explore and evaluate a range of existing products. Evaluate their ideas and products against design criteria.	Investigate and analyse a range of existing products	Investigate and analyse a range of existing products. Evaluate their own products against their design criteria.	Evaluate ideas and products against their criteria and consider how to improve their work.
<b>Technical Knowledge</b>	Build structures, exploring how they can be made stronger, stiffer and more stable.	Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms [for example, wheels and axles], in their products.	Apply their understanding of how to strengthen and stiffen structures. Understand and use levers and linkages	Understand and use electrical systems in their own products. Series circuits including switches, bulbs, buzzers and motors.	Understand and apply knowledge of computing to control a product.
<b>Food Tech</b>	Understand where food comes from and how to eat healthily.	Use the basic principles of a healthy and varied diet to prepare dishes.	Understand how food differs round the world and how to prepare multi-cultural healthy food.	Prepare and cook a variety of mainly savoury dishes using a range of cooking techniques. Understand seasonality.	Prepare and cook a variety of dishes and know about seasonality and where ingredients come from.