

The Design Technology Curriculum at Hunsley Primary

At Hunsley Primary, our design technology curriculum reflects our aims to develop children's independence and confidence in designing and creating a finished product. We recognise that our children are keen to create and talk about their experiences of using products or cooking outside of school, our curriculum then supports children to independently use skills such as trial and error and problem solving to develop these ideas into their own finished product. Our curriculum therefore supports our children to develop key skills such as how to understand a design brief, explore existing products and learn a variety of methods to design their own products. We teach our design technology curriculum through an explore, design, create and evaluate sequence which supports children to explore and learn how to choose appropriate materials, components and equipment to satisfy the design brief and their designs. Our curriculum then enables our children to learn how to evaluate their work, developing and adapting it as necessary through reflection and feedback. They also explore the impact of design on life in the past and today, discussing the ethical nature of product development.

	Reception:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Electrical					Electrical game -Circuits and switches, buzzer		Moving fairground model -Pulleys or gears, including an electrical circuit Crumble -control Tinker cad-CAD
Structures	Junk modelling	Building homes -Building a structure	Chair -Making more stable structures	3D Packaging sustainability, affordability functionality		Bridges -Strengthening and reinforcing structures	
Mechanisms	Simple moving parts	Moving picture -sliders and levers	Vehicles -Wheels and axels	Moving monster – pneumatic	Pop-up book -Lever and linkages	Moving toy -Cams/wheels/axles	
Textiles	Exploring materials	Weaving	Puppet -Join two pieces together using Running	Cushion -Introduce overstitch stitch, add decorations	Money container -choose from a range of stitches and incorporate a fastening	Hanging decoration (3D) -Choose from a range of stitches and decorate with embroidery	
Nutrition and food	Biscuits	Make a healthy Sandwich - Food categories	Healthy Soup -A balanced diet -combining ingredients	Seasonal cake -Eating seasonally	Bread - Adapting a recipe	Nutritional recipe -What could be healthier?	A meal for a purpose -Writing a recipe

Key threshold concepts

- Our children understand the design process (explore, design, make, evaluate) and use this for all their design projects.
- Our children can critically evaluate existing products.
- Our children understand what a design brief is.
- Our children know how to join different materials to make simple structures. They know how to make these stronger, stiffer and more stable.
- Our children can prepare simple food products safely and hygienically. They can use many kitchen tools. They understand there are different ways to heat and cook food.
- Our children understand the nutrition needed for good health and have some understanding of different diets and dietary needs. They have explored seasoning and ways to combine ingredients to make different products.
- Our children understand where different food comes from, how this is produced and how some foods are seasonal.
- Our children understand how simple mechanisms work (including levers, gears, wheels, axles, cams, pneumatics) and use these in their designs.
- Our children have acquired some basic sewing skills and are able to use a pattern, sew parts together using basic stitches.
- Our children can use their electrical knowledge to add working circuits to their designs
- Our children can use computers to control the ways their designs work.
- Our children understand and use mock ups, prototypes, annotated designs, exploded designs and computer aided design.
- Our children know when to ask for support, but are confident to carry out their design makes independently alongside their developing skills
- Our children can evaluate their own products, and those of others. They are reflective, constructive and critical with their feedback and use this to improve their designs.
- Our children understand how key events and individuals in design and technology have helped shape the world.