



## Design and Technology- Curriculum Overview

### Curriculum Intent

D&T gives pupils technical and practical experiences to develop essential skills for life. It draws on disciplines such as science, maths and art enabling them to think creatively and innovatively when solving problems and developing the skills needed to design and make finished products. Pupils enjoy deepening their knowledge by evaluating a wide range of products and understanding the impact that they have on the wider world. D&T promotes a safe working environment and builds respect by providing pupils with opportunities to work collaboratively

The Design and Technology curriculum reflects our school values in the following ways:

#### Ready:

- We always try our best
- We keep going when things get difficult
- We set high expectations of ourselves
- We are positive about new challenges

#### Respectful:

- We look after our environment and our equipment
- We respect difference and know that we are all equal

#### Responsible:

- We look after ourselves and each other

### Content Knowledge

	Nursery	Reception	Y1	Y2
<b>Knowledge</b>	<p>Use one-handed tools and equipment, for example, making snips in paper with scissors.</p> <p>Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.</p>	<p>Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons.</p> <p><b>ELG:</b> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p>	<p><b>STRUCTURES:</b> Explore how to make structures stronger.</p> <p>Investigate different techniques for stiffening a variety of materials.</p> <p>Know how to make a simple structure more stable and test different methods of enabling structures to remain stable.</p> <p>Join appropriately for different materials and situations e.g. glue, tape.</p> <p><b>TEXTILES:</b> Use technical vocabulary to refer to fabric and tools. Cut out shapes which have been created by drawing round a template onto fabric.</p>	<p><b>MECHANISMS:</b> Start to use technical vocabulary when describing mechanisms, tools and materials Join appropriately for different materials and situations e.g. glue, tape.</p> <p>Use technical vocabulary when describing mechanisms, tools and materials. Join appropriately for different materials and situations e.g. glue, tape, stapler.</p>

### Cooking and nutrition

	Nursery	Reception	Y1	Y2
<b>Knowledge</b>	<p>Start to eat independently and learning how to use a knife and fork.</p> <p>Make healthy choices about food, drink, activity and toothbrushing.</p>	<p>Know and talk about the different factors that support their overall health and wellbeing: - regular physical activity - healthy eating - toothbrushing - sensible amounts of 'screen time' - having a good sleep routine –</p> <p><b>ELG:</b> Use a range of small tools, including scissors, paintbrushes and cutlery.</p>	<p>Group familiar food products e.g. fruit /veg. Cut and chop a range of ingredients.</p> <p>Work safely and hygienically.</p> <p>Know about the need for a variety of foods in a diet.</p> <p>Develop a food vocabulary using taste, smell, texture and feel.</p>	<p>Follow procedures for safety and hygiene. Know about the Eatwell Plate. Understand where food comes from.</p>

### Skills

	<b>Nursery</b>	<b>Reception</b>	<b>Y1</b>	<b>Y2</b>
<b>Design</b>	Explore different materials freely, in order to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them.	Explore, use and refine a variety of artistic effects to express their ideas and feelings.	Work confidently within a range of contexts e.g. imaginary, story-based, home, school, gardens, playgrounds. Use simple design criteria to help develop their ideas. Use pictures and words to convey what they want to design/make Describe what their products are for and how they will work. Explore ideas by rearranging materials Select pictures to help develop ideas Use mock-ups e.g. recycled material trial models to try out their ideas. Select appropriate technique explaining First...Next...Last... Say whether their products are for themselves or other users.	Work confidently within a range of contexts e.g. home, school gardens and playground environment. Propose more than one idea for their product using design criteria. Use kits/reclaimed materials to develop ideas. Use ICT to communicate ideas. Use drawings to record ideas as they are developed. Add notes to drawings to help explanations. Describe their models and drawings of ideas and intentions. Select from two designs and give reasons for choice. Say how they will make their products suitable for intended users.
<b>Make</b>	Join different materials and explore different textures.	Explore, use and refine a variety of artistic effects to express their ideas and feelings.	Select materials from a limited range that will meet the design criteria. Explain what they are making. Name the tools they are using Use tools safely. Make simple models / products. Measure, mark out, cut and shape materials and components. Assemble, join and combine materials and components. Use finishing techniques, link to art	Discuss their work as it progresses. Select and name the tools needed to work the materials, explaining choices. Explain which materials they are using and why. Describe what they need to do next. Make simple models / products confidently
<b>Evaluate</b>		Return to and build on their previous learning, refining ideas and developing their ability to represent them. <b>ELG:</b> Share their creations, explaining the process they have used.	Explore existing products and investigate how they have been made. Talk about their design as they develop and identify good and bad points. Say what they like and do not like about items they have made and say why. Suggest how the products could be improved.	Decide how existing products do/do not achieve their purpose. Discuss how closely their finished product meets their own design criteria and how well it meets the needs of the user. Note changes made during the design process as annotation to plans/drawings.

### Vocabulary Progression

Nursery	Reception	Year 1	Year 2
	<p>cut, stick, fix, join, fold, build, glue, masking tape, Sellotape, card, scissors, hole punch, stapler, split pin, paper fastener, lolly stick, craft stick, bottle top, string, fabric, ribbon, box modelling Food - hard, soft, lumpy, rough, smooth, sweet, sour, crunchy, healthy, cutting</p>	<p>Structures: base, top, side, edge, structure, wall, tower, weak, strong, metal, wood, plastic, circle, triangle, square, rectangle, cuboid, cube, cylinder Mechanisms - sliders and levers: slider, lever, pivot, slot, moving, pull, push, forwards, backwards, Textiles: tools, fabrics, components, template, pattern pieces, mark out, decorate, finish, features, suitable, choose</p>	<p>Mechanisms - wheels and axles: vehicle, wheel, axle, axle holder, chassis, body, cab, assemble, fixed, free, moving, mechanism</p>
		<p>Food - fruit and veg, equipment and utensils: soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard, flesh, skin, seed, pip, core, slicing, peeling, cutting, grating, squeezing, healthy diet, ingredients, tasting, popular. General: cut, stick, fix, join, fold, build, design, make, evaluate, user, purpose, ideas, design criteria, product, function, mock-up, design brief, attach, material, investigating, improving, structure, template, wheel, axle, assembling, axle holder, vehicle.</p>	