



# Be a creator!

## Design Technology Curriculum – Intent and Implementation

The aim of our Design and Technology curriculum is to give our pupils the opportunities to master key practical skills through designing and making a range of different products for a specific purpose. Through designing and making products that solve real and relevant problems within a variety of contexts, pupils develop an understanding of how subjects and specific skills are linked to future jobs (e.g. automotive engineer, carpenter, theme park designer, architect). By evaluating past and present design and technology they develop a critical understanding of its impact on daily life and the wider world.

Much of the Design and Technology Curriculum is taught through cross-curricular topics that ensure coverage of the National Curriculum objectives with a particular focus on skills. Topics are reviewed on a yearly basis to ensure relevance for the current cohort, and to encourage reflective practise. There is no set formula for the Design and Technology curriculum, and there is flexibility in the long-term plan to reflect the needs and cultural capital of the pupils.

### Oracy

Oracy is a key focus for our school and we wish to develop Literacy skills across the curriculum. Our communication rich DT curriculum enables pupils to discuss their ideas at the design stage, and also to evaluate their product and identify ways to improve it next time. The technical vocabulary they will learn and use is listed below.

## Design and make - skills and knowledge

<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>
<p><b>3- 4 year olds</b></p> <p><b>Explore different materials freely, in order to develop their ideas about how to use them and what to make.</b></p> <p><b>Develop their own ideas and then decide which materials to use to express them.</b></p> <p><b>Join different materials and explore different textures.</b></p> <p><b>Reception</b>  <b>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</b></p> <p><b>Create collaboratively, sharing ideas, resources and skills</b></p> <p><b>ELG</b>  <b>Safely use and explore a variety of materials, experimenting with colour, design, texture, form and function;</b></p> <p>I know the names of a variety of materials.</p> <p>I know why certain products move.</p>	<p><b>I can design a product for a purpose/ to solve a real life problem</b></p> <p><b>I can make a design through talking and drawing,</b></p> <p><b>I can build structures,</b></p> <p><b>I can explore and use slider mechanism.</b></p> <p>I know what materials I need to create my product.</p> <p>I know what a slider mechanism is and how it works.</p> <p>I know how to design a product that moves using a slider mechanism.</p>	<p><b>I can design and develop a product for a purpose/ to solve a real life problem</b></p> <p><b>I can make a design through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</b></p> <p><b>I can build structures, exploring how they can be made stronger, stiffer and more stable</b></p> <p><b>I can explore and use hinge and wheel and axle mechanisms</b></p> <p><b>I can choose a mechanism for a specific task</b></p> <p>I know the names of the materials I need to create my product.</p> <p>I know which ones are the most appropriate and why.</p> <p>I know what a hinge mechanism is and how it works.</p> <p>I know that the axle has to move to enable to wheel to turn.</p>
<p><b>I can use words like materials, cardboard, paper, glue, tape, string and plastic.</b></p>	<p><b>I can use the words slider, mechanism, design, plan and product.</b></p>	<p><b>I can use the words hinge, wheels, axles, stiffer, stronger and stable.</b></p>

## Evaluate- skills and knowledge

EYFS	Year 1	Year 2
<p><b>Reception</b> Return to and build on their previous learning, refining ideas and developing their ability to represent them.</p> <p><b>ELG</b> Share their creations, explaining the process they have used;</p> <p>I know what I have made and I know what the different parts are.</p> <p>I know how to make additions to my product</p>	<p>I can explore and talk about a range of existing products.</p> <p>I can talk about a product I have made, saying what does/ does not work well</p> <p>I know the names of some existing successful products.</p> <p>I know why an existing product is successful.</p> <p>I know how successful my product is after testing it.</p>	<p>I can explore and evaluate a range of existing products, saying what I think works well</p> <p>I can talk about a product I have made, saying what does/ does not work well and suggest ways to improve it next time</p> <p>I know the names of some existing successful products and I know why they are successful.</p> <p>I know how to test my product to check that it is successful.</p> <p>I know how successful my product is after testing it and explain what changes I may need to make.</p>
<p><b>I can use words like build and change.</b></p>	<p><b>I can use words like successful, improve and test.</b></p>	<p><b>I can use words like evaluate and alter.</b></p>

## Technical aspects- skills and knowledge

<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>
<p><b>Reception</b> Create collaboratively, sharing ideas, resources and skills</p> <p><b>ELG</b> Safely use and explore a variety of materials, tools and techniques</p> <p>I know how to hold scissors correctly.</p> <p>I know how to make snips on the paper.</p> <p>I know that materials can be joined together using tape and glue.</p> <p>I know that I can choose from a range of construction materials.</p>	<p><b>I can name and use a variety of tools and equipment to perform practical tasks</b></p> <ul style="list-style-type: none"> <li>• Cutting</li> <li>• Shaping</li> <li>• Joining</li> <li>• Finishing</li> </ul> <p><b>I can choose and use a wide range of construction materials.</b></p> <p>I know how to use scissors to cut materials into specific shapes.</p> <p>I know how to join materials using tape and glue.</p> <p>I know the difference between a finished product and unfinished product.</p> <p>I know what construction material is appropriate for my product.</p>	<p><b>I can name and use a variety of tools and equipment to perform practical tasks, and can choose the best tools for the task giving reasons for my answer.</b></p> <ul style="list-style-type: none"> <li>• Cutting</li> <li>• Shaping</li> <li>• Joining</li> <li>• Finishing</li> </ul> <p><b>I can choose, use and talk about the characteristics of a wide range of materials and components</b></p> <ul style="list-style-type: none"> <li>• construction materials</li> <li>• fabrics</li> </ul> <p>I know how to use scissors with precision to cut materials into specific shapes.</p> <p>I know how to join materials using tape, glue, string and thread.</p> <p>With the final design in mind, I can successfully finish my product.</p> <p>I know how to join fabrics using different techniques.</p>
<p><b>I can use words like scissors, snip, tape and glue.</b></p>	<p><b>I can use words like cutting, shaping, joining and finishing.</b></p>	<p><b>I can use words like precision, thread, string and fabrics</b></p>

## Cooking and Nutrition- skills and knowledge

EYFS	Year 1	Year 2
<p><b>I can make healthy choices about food, drink activity and tooth brushing.</b></p> <p><b>I know and talk about the different factors that support my overall wellbeing.</b></p> <p>I know that I need to eat fruit to be healthy.</p> <p>I know that I need to brush my teeth at least twice a day.</p> <p>I know that I need to drink water.</p>	<p><b>I can use the basic principles of a healthy and varied diet to prepare dishes.</b></p> <p><b>I understand where food comes from.</b></p> <p>I know that I need to eat 5 portions of fruit and vegetables per day.</p> <p>I know that I must eat a variety of different foods.</p> <p>I know that fruit and vegetables need to be grown and meat comes from animals.</p>	<p><b>I can use the basic principles of a healthy and varied diet to prepare dishes.</b></p> <p><b>I understand where food comes from.</b></p> <p>I know the names of the different food groups – fruits and vegetables, carbohydrates, proteins, dairy, fat and oils</p> <p>I know that I should have a variety of different food groups in each meal to be healthy</p> <p>I know that some foods are sourced from different countries.</p> <p>I know what the fair-trade symbol means.</p>
<p><b>I can use words like fruit, vegetables, healthy, teeth and water.</b></p>	<p><b>I can use words like diet, variety, portions, grow and meat</b></p>	<p><b>I can use words like carbohydrates, protein, fats, dairy, fibre, sourced and fair trade</b></p>