



### KNOWLEDGE

EYFS: Represent own ideas, thoughts and feelings using a variety of materials.

Year 1/2: Identify simple design criteria and work to the design to evaluate and improve using new tools and techniques.

Year 3/4: Generate ideas and select appropriate tools.

Year 5/6: Investigate and evaluate materials for a purpose

## DESIGN TECHNOLOGY CURRICULUM INTENT



### SKILLS

**Make** their design using appropriate techniques

**Assemble, join and combine** materials and components together using a variety of temporary methods such as glue and tape.

**Evaluate** their product.

**Construct** products using permanent techniques such as sewing, nails etc.

### CULTURAL CAPITAL



Design and Technology prepares children to take part in the development of today's rapidly changing world. Creative **thinking** encourages children to make positive changes to their quality of life. The subject encourages children to become **autonomous and creative problem-solvers**, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of design and technology they combine **practical skills** with an **understanding** of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to **reflect** on and **evaluate** present and past design and technology, its uses, and its impacts.

### EXPERIENCES



**Global & National Events:** Great British Bake off /Junior bake off, Great British Sewing Bee

**50 Things to do:** Yum, yum– plan and prepare a meal. Learn a new skill- sewing, crocheting.

**Trips:** Pizza Express– cooking workshop

**Visitors:** Cultural cooking with local members of the village  
Local artists

### CHARACTER



**Roots that Strengthen:** Acquiring knowledge of techniques and materials

**Branches that Reach:** Making and designing products using a variety of tools, materials and methods for a specific purpose

**Fruit that Flourishes:** Engaging in evaluating, developing and improving a design fit for a purpose

### IMPACT



**We measure the impact by:**  
Planning & Book Monitoring  
Developmental Drop In's

**We record this impact through:**  
Subject Leader Monitoring  
Governor Visit Monitoring

Nursery/ Reception	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Class Topic	Houses and Homes	Fabulous Festivals	Dinosaurs	Once upon a time	Marvellous Minibeasts	Think Big!
<b>National Curriculum objectives</b>	<b>Development Matters</b>	<p>Begin to develop complex stories using small world equipment like animal sets, dolls and dolls houses etc.</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>Explore different materials freely, in order to develop their ideas about how to use them and what to make.</p> <p>Develop their own ideas and then decide which materials to use to express them.</p> <p>Join different materials and explore different textures.</p>	<p>Create closed shapes with continuous lines, and begin to use these shapes to represent objects.</p> <p>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</p> <p>Return to and build on their previous learning, refining ideas and developing their ability to represent them.</p> <p>Create collaboratively, sharing ideas, resources and skills.</p>		
<b>Progression of skills</b>	<b>Progression of skills</b>	<ul style="list-style-type: none"> <li>-with help measure, mark out, cut and shape a range of materials</li> <li>· Use basic food handling</li> <li>-understand basic hygienic practices</li> <li>-sustain concentration and control when experimenting with tools and materials</li> <li>-to show skill in making things work by pressing parts or lifting flaps to achieve effects</li> </ul>	<ul style="list-style-type: none"> <li>-to manipulate materials to achieve a planned effect.</li> <li>-to understand that design and craft is made by artists from around the world.</li> <li>-to use simple finishing techniques to improve the appearance of their product</li> </ul>	<ul style="list-style-type: none"> <li>-Model their ideas in card and paper</li> <li>-evaluate their product by discussing how well it works</li> <li>-to show an interest in technological toys with knobs or pulleys or real objects.</li> </ul>	<ul style="list-style-type: none"> <li>-Select and use appropriate fruit and vegetables processes and tools</li> <li>-to practise simple food hygiene measures</li> <li>to handle tools, objects, construction and malleable materials safely and with increasing control.</li> <li>-join materials and components together using a variety of temporary methods e.g. glues or masking tape</li> <li>-Evaluate their product by discussing how it was made</li> </ul>	<ul style="list-style-type: none"> <li>-Use tools eg scissors and a hole punch safely</li> <li>-join materials together using glue or masking tape.</li> <li>-to show skill in making things work by pressing parts or lifting flaps to achieve effects</li> </ul>
<p><b>ELG:</b>            Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function            Share their creations, explaining the processes they have used.            Make props and materials when role playing characters in narratives and stories.            Use a range of tools, including scissors and paint brushes and cut</p>						

Nursery/ Reception	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	SUPERHEROES/SUPER ME	TIME FOR TOYS	TRANSPORT AND TRAVEL	HOW DOES YOUR GARDEN GROW?	5, 4, 3, 2, 1 BLAST OFF!	ON THE FARM
<b>Development Matters</b>	<p>Begin to develop complex stories using small world equipment like animal sets, dolls and dolls houses etc.</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>Explore different materials freely, in order to develop their ideas about how to use them and what to make.</p> <p>Develop their own ideas and then decide which materials to use to express them.</p> <p>Join different materials and explore different textures.</p>	<p>Create closed shapes with continuous lines, and begin to use these shapes to represent objects.</p> <p>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</p> <p>Return to and build on their previous learning, refining ideas and developing their ability to represent them.</p> <p>Create collaboratively, sharing ideas, resources and skills.</p>			
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Year 1 & 2	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Class Topic	Paddington	Scientists and Inventors	Tin Forest	Grow, Grow, Grow	Through the Window	Under the Sea
Teaching ideas	See Art	Mini Green houses	See Art	- Gardening / Moving mini beasts	Clay model houses	See Art
National Curriculum objectives		-build structures, exploring how they can be made stronger, stiffer and more stable		-explore and use mechanisms (levers, sliders) in their products.	-model and communicate their ideas through clay	
Progression of skills		-build structures, exploring how they can be made stronger, stiffer and more stable  -develop, model and communicate their ideas through talking, drawing, templates, mock-ups  - select from and use a range of tools and equipment to perform practical tasks (cutting, shaping, joining)  -assemble, join and combine materials		-select from and use a range of tools and equipment to perform practical tasks [digging]  - understand where food comes from - explore and use mechanisms [for example, levers, sliders], in their products - Model their ideas in card/paper	- manipulate clay in a variety of ways (rolling, kneading, shaping)  -explore sculpture with a range of malleable media	

**Cycle B**

<b>Year 1 &amp; 2</b>	<b>Term 1</b>	<b>Term 2</b>	<b>Term 3</b>	<b>Term 4</b>	<b>Term 5</b>	<b>Term 6</b>
<b>Class Topic</b>	<b>When I grow up</b>	<b>Explorers</b>	<b>Great Fire of London</b>	<b>The Little Gardener</b>	<b>Chocolate (Aztecs)</b>	<b>Wild and wonderful creatures</b>
<b>Teaching Ideas</b>	See Art	See Art	Fire engines	Healthy Eating/ Gardening	Design & Make a chocolate bar	See Art
<b>National Curriculum objectives</b>			-explore and use mechanisms [ wheels and axles], in their products.	-understand where food comes from	-use the basic principles of a healthy and varied diet to prepare dishes	
<b>Progression of skills</b>			<ul style="list-style-type: none"> <li>- select from and use a range of tools and equipment to perform practical tasks (cutting, shaping, joining and finishing)</li> <li>- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products</li> <li>- assemble, join and combine materials using a variety of temporary methods</li> </ul>	<ul style="list-style-type: none"> <li>-select from and use a range of tools and equipment to perform practical tasks</li> <li>- follow and understand basic food and safety hygiene</li> <li>-generate ideas by drawing on their own and other people's experiences</li> <li>- use the basic principles of a healthy and varied diet to prepare dishes</li> <li>- understand where food comes from</li> </ul>	<ul style="list-style-type: none"> <li>-follow basic food and safety hygiene</li> <li>-generate ideas by drawing on their own and other people's experiences</li> <li>-evaluate their ideas and products against design criteria</li> <li>- understand where food comes from</li> <li>-select from and use a range of ingredients</li> </ul>	

**Cycle A**

<b>Year 3 &amp; 4</b>	<b>Term 1</b>	<b>Term 2</b>	<b>Term 3</b>	<b>Term 4</b>	<b>Term 5</b>	<b>Term 6</b>
<b>Class Topic</b>	<b>Groovy Greeks</b>	<b>The Fiery Earth</b>	<b>Frozen Planet</b>	<b>Anglo-Saxons</b>	<b>Egyptians</b>	<b>Local Area Study</b>
<b>Teaching ideas</b>	See Art	Volcanoes	Explorer biscuits	Shields / Patterns	Papyrus/ Jewellery	See Art
<b>National Curriculum objectives</b>		-select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities	-prepare and cook dishes using a range of cooking techniques	-apply their understanding of how to strengthen a structure	-use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose	
<b>Progression of skills</b>		- Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques	-Plan the order of their work before starting  -Demonstrate hygienic food preparation and storage	-Measure, mark out, cut, score and assemble components with more accuracy  -Develop a clear idea of what has to be done, planning how to use materials, equipment and processes,	-Make drawings with labels when designing  - Evaluate their product against original design criteria <i>e.g., how well it meets its intended purpose</i>	

Year 3 & 4	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Class Topic	Planet Earth	Flintstones	Romans	Europe	Baghdad	Rainforests
Teaching ideas	See Art	See Art	Roman purses	See Art	See Art	See Art
National Curriculum objectives			-use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose			
Progression of skills			- Measure, tape or pin, cut and join fabric with some accuracy  · Sew using a range of different stitches			

Year 5 & 6	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>Class Topic</b>	Crime and Punishment	World War II	Is Britain Still Great?	River Low, Mountain High	Amazing Mayans	Lands End to John O'Groats
<b>Teaching Ideas</b>	See Art	See Art	Talking Textiles: Bayeaux Tapestry sewing / Viking Helmet/ Armour	See Art	See Art	Birdhouses/ Recycling
<b>National Curriculum objectives</b>			-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			-apply their understanding of how to strengthen, stiffen and reinforce more complex structures
<b>Progression of skills</b>			-Use results of information sources, including ICT when developing design ideas  -Pin, sew and stitch materials together to achieve a quality product			· Use skills in using different tools and equipment safely and accurately to ensure a good-quality finish to the product  -Communicate their ideas through detailed labelled drawings from different views showing specific features



Year 5 & 6	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Class Topic	Adventures in Space	Blood, Bones and Body	Saxons and Vikings	Shang Dynasty	Natural Resources	Think Global. Act Local.
Teaching Ideas	See Art	Tanks	British Inventors	See Art	Headdresses/ chocolate	See Art
National Curriculum objectives		-understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]  - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer- aided design	-understand how key events and individuals in design and technology have helped shape the world		-understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.	
Progression of skills		-Assemble components make working models  - Evaluate against their original criteria and suggest ways that their product could be improved	-Measure and mark out accurately  -Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests		-Construct products using permanent joining techniques, making modifications as they go along -Weigh and measure accurately (time, dry ingredients, liquids)  -Apply the rules for basic food hygiene and other safe practices <i>e.g.</i> , hazards relating to the use of ovens	