



## Design Technology Overview 2025/2026

Our goal for Design Technology education is for children to become resourceful, innovative, enterprising and capable citizens, developing their:

- knowledge and skills to design, make and evaluate high-quality prototypes and products;
- knowledge and understanding of newly emerging and rapidly developing technologies;
- knowledge and skills to design, make and evaluate a wide variety of dishes and take risks in their learning
- understanding of food sources and how to make healthy food choices and
- an understanding of nutrition and learning how to cook in meaningful contexts

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Right of the month</b>	September: Article 28 – the right to learn and go to school October: Article 12 – the right to be listened to	November: Article 19 – the right not to be harmed and to be looked after and kept safe December: Article 13 – the right to follow your own religion	January: Article 29 – the right to become the best you can be February: Article 42 – the right to learn about your rights	March: Article 7 – the right to a name and a nationality April: Article 24 – the right to food, water and medical care	April: Article 24 – the right to food, water and medical care May: Article 20 – the right to practice your own culture, language and religion	June: Article 22 – the right to special protection and help if you are a refugee July: Article 31 – the right to play and rest
<b>Skills Builder</b>	September: Listening October: Speaking	November: Teamwork December: GLOBAL GOALS	January: Problem Solving February: Staying Positive	March: Creativity April: GLOBAL GOALS	April: GLOBAL GOALS May: Aiming High	June: Leadership July: GLOBAL GOALS
<b>Nursery</b>	<p>In the Early Years, children will have the opportunity to develop; their ability to use a range of small tools, including scissors, paintbrushes and cutlery. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.</p> <p><b>Opportunities:</b>            Fruit Salad (Handa's Surprise).            Blend fruit smoothies and see how the texture changes.            Baking bread (Mathematical learning opportunities: counting cupfuls/ spoonfuls).</p>					

<b>Reception</b>	<p>In the Early Years, children will have the opportunity to develop; their ability to use a range of small tools, including scissors, paintbrushes and cutlery. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.</p> <p><b>Opportunities:</b>  Pitta Pockets (linked to Understanding the World: Celebrations topic)  Lantern making (linked to Understanding the World: Autumn learning)  Healthy Breakfasts (linked to Physical Development: Health and Self Care)</p>			
<b>Year 1</b>	<b>Cooking and nutrition</b> Make yogurt dipped fruits	<b>Structures</b> Stable Structures	<b>Mechanisms</b> Moving Book	
<b>Year 2</b>	<b>Mechanisms</b> Fairground Wheel	<b>Structures</b> Baby bear's chair	<b>Skillsbuilder / Cooking and nutrition</b> Cafe	
<b>Year 3</b>	<b>Textiles</b> Sewn landscapes (link to art)	<b>Structures</b> Canopic Jars	<b>Skills Builder / Cooking and nutrition</b> Making dips	<b>Mechanisms</b> STEM Project Shadow Puppets + Lever
<b>Year 4</b>	<b>Electrical Systems</b> Torches	<b>Textiles</b> Tudor purse	<b>Skills Builder / Cooking and Technology</b> Ice Cream Project	
<b>Year 5</b>	<b>Electrical Systems</b> Crumbles (computing link)	<b>Digital World</b> Monitoring Devices	<b>Cooking and nutrition</b> Developing a recipe	<b>Mechanisms</b> STEM Project Chain Reaction
<b>Year 6</b>	<b>Structures</b> Anderson Structures	<b>Electrical Systems</b> Steady Hand Game	<b>Cooking and nutrition</b> Come dine with me (FT week of afternoons after SATs) SATs 11th - 14th // End of Year play	

**Cooking and nutrition:** discovering where food comes from; creating a balanced diet; following kitchen hygiene and safety; developing preparation and cooking skills; following a recipe.

**Mechanisms:** using cams, followers, levers and sliders to mimic natural movements.

**Structures:** learning about the properties of materials; improving a structure's strength and stability; reinforcing structures.

**Textiles:** using fabric techniques to fasten, sew and decorate.

**Electrical systems:** creating electrical products using series circuits, circuit components, circuit diagrams and symbols.

**Digital world:** programming products to perform tasks; developing 2D and 3D designs and models using CAD software.

Each one done every ks1 lower ks2 upper ks2

Design and Technology Knowledge and Skills Progression		
<i>Our goal for Design Technology education is for children to become resourceful, innovative, enterprising and capable citizens, developing their:</i> <ul style="list-style-type: none"><li>• <i>knowledge and skills to design, make and evaluate high-quality prototypes and products;</i></li><li>• <i>knowledge and understanding of newly emerging and rapidly developing technologies; and</i></li><li>• <i>an understanding of nutrition and learning how to cook.</i></li></ul>		
EYFS Framework		
Three and Four-Year-Olds	Personal, Social and Emotional Development	<ul style="list-style-type: none"><li>• Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them.</li></ul>
	Physical Development	<ul style="list-style-type: none"><li>• Use large-muscle movements to wave flags and streamers,</li></ul>

		<p>paint and make marks.</p> <ul style="list-style-type: none"> <li>• Choose the right resources to carry out their own plan.</li> <li>• Use one-handed tools and equipment, for example, making snips in paper with scissors.</li> </ul>
	Understanding the World	<ul style="list-style-type: none"> <li>• Explore how things work.</li> </ul>
	Expressive Arts and Design	<ul style="list-style-type: none"> <li>• Make imaginative and complex ‘small worlds’ with blocks and construction kits, such as a city with different buildings and a park.</li> <li>• Explore different materials freely, in order to develop their ideas about how to use them and what to make.</li> <li>• Develop their own ideas and then decide which materials to use to express them.</li> <li>• Create closed shapes with continuous lines, and begin to use these shapes to represent objects.</li> </ul>
<b>Reception</b>	Physical Development	<ul style="list-style-type: none"> <li>• Progress towards a more fluent style of moving, with developing control and grace.</li> <li>• Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</li> <li>• Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor.</li> </ul>
	Expressive Arts and Design	<ul style="list-style-type: none"> <li>• Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> <li>• Return to and build on their previous learning, refining ideas and developing their ability to represent them.</li> <li>• Create collaboratively, sharing ideas, resources and skills.</li> </ul>
<b>ELG</b>	Physical Development: Fine Motor Skills	<ul style="list-style-type: none"> <li>• Use a range of small tools, including scissors, paintbrushes and cutlery.</li> </ul>
	Expressive Arts and Design: Creating with Materials	<ul style="list-style-type: none"> <li>• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> <li>• Share their creations, explaining the process they have used.</li> </ul>

KS1		
Technical Knowledge		<ul style="list-style-type: none"> <li>• build structures, exploring how they can be made stronger, stiffer and more stable.</li> <li>• explore and use mechanisms, such as levers, sliders, wheels and axles, in their products</li> </ul>
Designing		<ul style="list-style-type: none"> <li>• design purposeful, functional, appealing products for themselves and other users based on design criteria.</li> <li>• generate develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</li> </ul>
Making (mastering techniques)	Materials	<ul style="list-style-type: none"> <li>• Cut materials safely using tools provided.</li> <li>• Measure and mark out to the nearest centimetre.</li> <li>• Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</li> <li>• Demonstrate a range of joining techniques (such as glueing, hinges or combining materials to strengthen).</li> </ul>
	Textiles	<ul style="list-style-type: none"> <li>• Shape textiles using templates.</li> <li>• Join textiles using running stitch.</li> <li>• Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).</li> </ul>
	Computing	<ul style="list-style-type: none"> <li>• Model designs using software.</li> </ul>
	Construction	<ul style="list-style-type: none"> <li>• Use materials to practise drilling, screwing, glueing and nailing materials to make and strengthen products</li> </ul>
	Mechanics	<ul style="list-style-type: none"> <li>• Create products using levers, wheels and winding mechanisms.</li> </ul>
	Food Technology	Use the basic principles of a healthy and varied diet to prepare dishes and understand where food comes from.
	Evaluating and communicating	<ul style="list-style-type: none"> <li>• explore and evaluate a range of existing products.</li> <li>• evaluate their ideas and products against design criteria.</li> </ul>
LKS2		
Technical Knowledge		<ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li> <li>• understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages.</li> </ul>

<b>Designing</b>		<ul style="list-style-type: none"> <li>• 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.</li> <li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</li> </ul>
<b>Making (mastering techniques)</b>	<b>Materials</b>	<ul style="list-style-type: none"> <li>• Cut materials accurately and safely by selecting appropriate tools.</li> <li>• Measure and mark out to the nearest millimetre.</li> <li>• Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).</li> <li>• Select appropriate joining techniques.</li> </ul>
	<b>Textiles</b>	<ul style="list-style-type: none"> <li>• Understand the need for a seam allowance.</li> <li>• Join textiles with appropriate stitching.</li> <li>• Select the most appropriate techniques to decorate textiles.</li> </ul>
	<b>Electricals and Electronics</b>	<ul style="list-style-type: none"> <li>• Create series and parallel circuits</li> </ul>
	<b>Computing</b>	<ul style="list-style-type: none"> <li>• Control and monitor models using software designed for this purpose.</li> </ul>
	<b>Construction</b>	<ul style="list-style-type: none"> <li>• Choose suitable techniques to construct products or to repair items.</li> <li>• Strengthen materials using suitable techniques</li> </ul>
	<b>Mechanics</b>	<ul style="list-style-type: none"> <li>• Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).</li> </ul>
	<b>Food Technology</b>	<p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>Understand seasonality and know where and how a variety of ingredients are grown, rear</p>
	<b>Evaluating and communicating</b>	<ul style="list-style-type: none"> <li>• investigate and analyse a range of existing products.</li> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</li> <li>• understand how key events and individuals in design and technology have helped shape the world</li> </ul>
<b>UKS2</b>		
<b>Technical Knowledge</b>		<ul style="list-style-type: none"> <li>• understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors.</li> <li>• apply their understanding of computing to programme, monitor and control their products.</li> </ul>
<b>Designing</b>		<ul style="list-style-type: none"> <li>• 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.</li> </ul>

		<ul style="list-style-type: none"> <li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</li> </ul>
<b>Making (mastering techniques)</b>	<b>Materials</b>	<ul style="list-style-type: none"> <li>• Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).</li> <li>• Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).</li> </ul>
	<b>Textiles</b>	<ul style="list-style-type: none"> <li>• Create objects (such as a cushion) that employ a seam allowance.</li> <li>• Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration).</li> <li>• Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion).</li> </ul>
	<b>Electricals and Electronics</b>	<ul style="list-style-type: none"> <li>• Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).</li> </ul>
	<b>Computing</b>	<ul style="list-style-type: none"> <li>• Write code to control and monitor models or products.</li> </ul>
	<b>Construction</b>	<ul style="list-style-type: none"> <li>• Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).</li> </ul>
	<b>Mechanics</b>	<ul style="list-style-type: none"> <li>• Convert rotary motion to linear using cams.</li> <li>• Use innovative combinations of electronics (or computing) and mechanics in product design.</li> </ul>

	<b>DT Subject knowledge/content</b> <i>What technical knowledge, designing and mastering techniques will help them with their project?</i>		<b>Evaluating and communicating</b> <i>How do you want them to show their understanding? outcomes will they produce? What ICT can they use?</i>	
<b>Year 1</b>				

<p><b>Design</b> Generate, develop, model and communicate their ideas through talking, drawing or templates.</p> <p><b>Technical knowledge</b> build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p><b>Make</b> Cut materials safely using tools provided. Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p> <p><b>Evaluate</b> evaluate their ideas and products against design criteria.</p>		<p><b>D&amp;T STEM Project</b></p>	<p>Children will work in teams to design and build their ‘dream playground’. Carefully thinking about planning the materials they will use and thinking about what features to put in each area of the playground.</p>	
<p><b>Vocabulary</b> <i>What scientific and DT terminology will they need for this learning?</i></p>	<p>Hard, Soft, Bendy, Rough , Smooth, Elastic, Waterproof Cut, fold, join, fix, structure, wall, tower, weak, thinner, thicker, corner, point, straight, curved, metal, wood, plastic, circle, triangle, square, rectangle, cube, cylinder, design, make, evaluate, purpose, ideas, stable, strong</p> <p>Scissors, shears, felt, cotton, template, pattern pieces, mark out, join, decorate, finish, features, suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function, identical, front, back</p> <p>Design, Build, Construct, Material , Structure, Cut , Glue</p> <p>Slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards, design, make, evaluate, user, purpose, ideas, design criteria, product, function</p>			<p><b>Cross Curricular Links</b> Science: Links to Materials topic</p>
<p><b>Resources</b> <i>What sources and resources are you going to use? What trips/visitors will support learning? What texts can you use to support learning? What ICT can you use?</i></p>	<p>Bricks / cement? / lego, Straw, Paper straws , Glue, String, Foam bricks, Cardboard, Cutting tools</p>			
<p><b>Year 2</b></p>				



<p><b>Designing:</b> design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p><b>Technical knowledge:</b> explore and use mechanisms, such as levers, sliders, wheels and axles, in their products.</p> <p><b>Make:</b></p> <ul style="list-style-type: none"> <li>• Cut materials safely using tools provided.</li> <li>• Measure and mark out to the nearest centimetre.</li> <li>• Demonstrate a range of joining techniques (such as glueing, hinges or combining materials to strengthen).</li> <li>• Create products using levers, wheels and winding mechanisms.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• explore and evaluate a range of existing products.</li> </ul>	<p><b>Moving Vehicles</b></p>	<p>Children will work in teams to make a shoebox buggy. They will follow instructions on how to make the basic design and then be given the option of how to add extra parts to make their vehicle more appealing.</p> <p>Children can test their buggy on force ramps to see that they travel in a straight line, and how to make them go faster or more slowly.</p> <p>One team per class could represent their age category in the primary Engineer Celebration event</p> <p>Pupils could use iPads to stop motion the moving of their vehicles</p>	
<p><b>Vocabulary</b> <i>What scientific and DT terminology will they need for this learning?</i></p>	<p>design, function / functional, develop, product, construct, model, material, template, cut, build, structure, components, tools</p> <p>Engineer, Material, Wood, Gears, Axel, opaque, transparent and translucent, reflective, non-reflective, flexible, rigid</p> <p>Shape, push/pushing, pull/pulling, twist/twisting, squash/squashing. Bend/bending, stretch/stretching</p>		<p><b>Cross Curricular Links</b></p> <p>Science: links to materials topic</p>
<p><b>Resources</b> <i>What sources and resources are you going to use? What trips/visitors will support learning? What texts can you use to support learning? What ICT can you use?</i></p>	<p>Shoeboxes, Wheels, Dowling, Saws, Cutting blocks, Decorative card, paper, tissue, Testing ramps</p>		

Year 3			
<p><b>Design:</b></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</li> </ul> <p><b>Technical knowledge:</b></p> <ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li> <li>• understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages.</li> </ul> <p><b>Make:</b></p> <ul style="list-style-type: none"> <li>• <b>Select appropriate joining techniques.</b></li> <li>• Strengthen materials using suitable techniques.</li> <li>• Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as <u>levers</u>, winding mechanisms, pulleys and gears).</li> </ul> <p><b>Evaluate:</b></p> <ul style="list-style-type: none"> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</li> </ul>	<p>pneumatic toys</p>	<p>Children plan and make a puppet with a moving part</p> <p>Children can perform a puppet show at the end of the session</p> <p>Students can test transparent, opaque and translucent materials when making their puppet</p>	
<p><b>Vocabulary</b></p> <p><i>What scientific and DT terminology will they need for this learning?</i></p>	<p>Shadow, Torch, Light source, Transparent, Opaque, Reflection, Transparent, Translucent, Opaque, Design, Plan, Evaluate, Stick, Join, Lever, Material</p>		<p><b>Cross Curricular Links</b></p> <p><b>Science: Links to light topic</b></p>
<p><b>Resources</b></p>	<p>Card, Wooden sticks, Straws, Torches, Tracing paper, Tape, Cellophane, Drawing pins</p>		

*What sources and resources are you going to use? What trips/visitors will support learning? What texts can you use to support learning? What ICT can you use?*

## Year 4

### Design

- 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.

### Technical knowledge:

- understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages.
- understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors.

### Make:

- select and use a wide range of tools and equipment (for example, cutting, shaping, joining and finishing) accurately
  - Select and use a wide range of materials and components (construction materials, textiles)

### Evaluate:

- investigate and analyse a range of existing products.
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- understand how key events and individuals in design and technology have helped shape the world

torches

Children work in teams of 3-4 to follow the steps to build a Mars Rover. Children can first research and learn about the surface on Mars and think about the design criteria for their buggy.

Children test product and one team per class takes their design to the Primary Engineer Award Celebration Event

<b>Vocabulary</b> <i>What scientific and DT terminology will they need for this learning?</i>	Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol  design, function / functional, develop, product, construct, model, material, template, cut, build, mechanism, incorporate, structure, components, tools, gears	Cross Curricular Links <b>Science: Link to Electricity topic</b>
<b>Resources</b> <i>What sources and resources are you going to use? What trips/visitors will support learning? What texts can you use to support learning? What ICT can you use?</i>	Primary Engineer Packs: Toolboxes with kit for each group of 3 children (See separate planning in Year 4 folder) Saws Wire spinner Batteries	
<b>Year 5</b>		
<b>Design:</b> <ul style="list-style-type: none"><li>• 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.</li><li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</li></ul> <b>Technical knowledge:</b> <ul style="list-style-type: none"><li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li><li>• understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages.</li></ul> <b>Make:</b> Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).	Chain Reaction Project	Make a product that involves a lever, pulley or gear – See separate planning in the Science folder

<ul style="list-style-type: none"><li>• Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).</li></ul> <p><b>Evaluate:</b></p> <ul style="list-style-type: none"><li>• investigate and analyse a range of existing products.</li><li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</li><li>• understand how key events and individuals in design and technology have helped shape the world</li></ul>			
<p><b>Vocabulary</b> <i>What scientific and DT terminology will they need for this learning?</i></p>	<p>Force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears</p> <p>design, function / functional, develop, product, construct, model, material, template, cut, build, mechanism, incorporate, structure, components, tools</p> <p>Series circuit, fault, connection, toggle switch, push-to make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, input device, output device, copper track, user, purpose, function, prototype, design criteria, innovative, appealing, design brief</p> <p>Seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mock-up, prototype, aesthetics, function, constraints</p>		<p><b>Cross Curricular Links</b> Science: linked to forces</p>
<p><b>Resources</b> <i>What sources and resources are you going to use? What trips/visitors will support learning? What texts can you use to support learning? What ICT can you use?</i></p>	<p>Pully, gears, forces, timers ipads for stop motion</p>		
<p><b>Year 6</b></p>			

<p>Design:</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>Technical knowledge:</p> <ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li> <li>• understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages.</li> </ul> <p>Make:</p> <p>Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).</p> <ul style="list-style-type: none"> <li>• Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).</li> </ul> <p>Evaluate:</p> <ul style="list-style-type: none"> <li>• investigate and analyse a range of existing products.</li> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</li> <li>• understand how key events and individuals in design and technology have helped shape the world</li> </ul>	<p>Crest Discovery Project: Stop the Spread Linked to microorganisms</p>	<p>Children work as a team to design and build a water sanitation product linking to Global Goals</p>	<p>Children work as a team to design and build a water sanitation product linking to Global Goals</p>
<p><b>Vocabulary</b>  <i>What scientific and DT terminology will they need for this learning?</i></p>	<p>Bacteria, microorganisms, living, disease</p> <p>design, function / functional, develop, product, construct, model, material, template, cut, build, mechanism, incorporate, structure, components, tools, lever, pulley</p> <p>Computer-aided design, (CAD), Computer-aided manufacture (CAM) augmented reality, face, plane, extrude, view cube, dimension, radius, align, empathy, scale, modify, repeat, copy, flip design brief, design criteria, design decisions, innovative, prototype</p> <p>Mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, output, linear, rotary, oscillating, reciprocating, user, purpose, function, prototype, design criteria, innovative, appealing, design brief</p>		<p><b>Cross Curricular Links</b>  Science: Links to Micro-organisms and living things and their habitats</p>

## Resources

*What sources and resources are you going to use? What trips/visitors will support learning? What texts can you use to support learning? What ICT can you use?*

Resources outlined in separate planning saved in Science folder

## Food Technology Knowledge & Skills Progression 2024/2025

### EYFS Nursery

Links to C+L, EAD, UTW, PSED, Literacy, Maths.

#### Skills

Changing food by mixing and blending.

Comparing flavours.

Using tools to chop and mash.

Use basic equipment to combine prepared ingredients

#### Knowledge

To learn how eating food is needed for growth and to be healthy and how food can be enjoyed with others

Be aware that we need to eat more of some foods and less of others.

Understand that food that has been dropped on the floor, touched with dirty hands or has turned mouldy should not be eaten and can make people ill.

#### Vocabulary

taste  
smell  
strawberry  
fruit  
pineapple  
mango  
chocolate  
banana

#### **Spring term:**

Handle and compare types of fruit used in Handa's Surprise. Make fruit salad  
Blend fruit smoothies and see how the texture changes.



			<b>Summer Term:</b> Baking bread – counting cupfuls/ spoonfuls.
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## EYFS Reception

Links to C+L, EAD, UTW, PSED, Literacy, Maths.

### Skills

Using hands (with support) to shape dough into simple shapes (eg salt dough)

With physical guidance, spoon cold food on to a plate

Peel fruit using their hands

Are able to use cutlery to eat a meal

### Knowledge

To know that food can be grown or bought from shops

Identify foods that they like and dislike

Recognise some familiar ingredients (eg fruits)

### Vocabulary

smell

vegetable

plate

knife

fork

ingredient

recipe

### Autumn Term: Mini Pita Appetisers




### Summer: Healthy Breakfast








**Year 1****Links to:** Literacy, PSHE, Science, Geography

<u>Skills</u>	<u>Knowledge</u>	<u>Vocabulary</u>	<u>Autumn Term:</u> Pumpkin Soup
Chopping fruit and vegetables safely with adult supervision.	Understanding the difference between fruits and vegetables	fruit vegetable seed leaf root stem healthy carton design flavour peel slice	
Cutting and peeling fruit and vegetables safely with adult supervision.	To know that a blender is a machine which mixes ingredients together into a smooth liquid  To know that a fruit has seeds and a vegetable does not  To know that fruits grow on trees or vines  To know that vegetables can grow either above or below ground  To know that vegetables can come from different parts of the plant (e.g. roots: potatoes, leaves: lettuce, fruit: cucumber  To know that cooking instructions are known as a 'recipe'.		
			<u>Spring Term:</u> Fruit dipped chocolates related to PSHE Fun Times.

**Year 2****Links to:** Literacy PSHE Science Geography

<u>Skills</u>	<u>Knowledge</u>	<u>Vocabulary</u>	<b>Autumn: Tropical Rainbow Fruit Kebabs</b>
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<p>Cut, peel and grate ingredients safely and hygienically</p> <p>Mix, stir and sift ingredients with adult supervision</p> <p>Measure ingredients using different size measuring spoons e.g. liquids</p> <p>Slicing food safely using the claw grip technique</p> <p>Use simple fractions to refer to ingredients such as half/quarter</p> <p>Slicing food safely using the bridge or claw grip.</p>	<p>To know that 'diet' means the food and drink that a person or animal usually eats.</p> <p>To understand what makes a balanced diet.</p> <p>To know where to find the nutritional information on packaging.</p> <p>To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar.</p> <p>To understand that I should eat a range of different foods from each food group, and roughly how much of each food group.</p> <p>To know that nutrients are substances in food that all living things need to make energy, grow and develop.</p> <p>To know that 'ingredients' means the items in a mixture or recipe</p> <p>To know that I should only have a maximum of five teaspoons of sugar a day to stay healthy.</p>	<p>soft</p> <p>juicy</p> <p>crunchy</p> <p>sweet</p> <p>sticky</p> <p>smooth</p> <p>sharp</p> <p>crisp</p> <p>sour</p> <p>hard flesh</p> <p>skin</p> <p>pip</p> <p>core</p> <p>slicing</p> <p>peeling</p> <p>cutting</p> <p>squeezing</p> <p>healthy diet</p> <p>ingredients</p>	 <p><b>Spring: Porridge (Goldilocks) / Link to Ghanaian Goldilocks (Jollof / Fufu / Plantain)</b></p> <p><b>Summer: Cress Sandwiches</b></p>  
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**Links to: Literacy, PSHE, Science, Geography**

Skills

To be able to use a range of techniques such as peeling, chopping, slicing, cutting and grating.

Measure using a measuring jug with support from an adult.

Spoon a mixture using a spoon to transfer ingredients into a container (ice-cream).

Cut medium resistance foods with a vegetable knife and partly prepared foods using a bridge hold. e.g cut half a tomato into a quarter.

Knowledge

To know that vegetables and fruit grow in certain seasons.

To know that cooking instructions are known as a 'recipe'.

To know that exported food is food which has been sent to another country.

To understand that imported foods travel from far away and this can negatively impact the environment.

To know that each fruit and vegetable gives us nutritional benefits because they contain vitamins, minerals and fibre.

To understand that vitamins, minerals and fibre are important for energy, growth and maintaining health.



To know that similar coloured fruits and vegetables often have similar nutritional benefits.

Vocabulary

equipment  
utensils  
techniques  
texture  
taste  
sour  
hot  
spice  
appearance  
smell  
preference  
greasy  
moist  
cook  
fresh  
hygienic

**Summer: Couscous Kosovan Stuffed Whole Peppers and chopped cucumber**






<p><u>Skills</u></p> <p>To be able to use a range of techniques such as peeling, chopping, slicing, cutting and grating.</p> <p>Spoon a mixture using a spoon to transfer ingredients into different shapes and size containers (liquid foods into muffin case).</p> <p>Mix and Whisk food using a hand whisk</p>	<p><u>Knowledge</u></p> <p>To know that the amount of an ingredient in a recipe is known as the quantity.</p> <p>To know that it is important to use oven gloves when removing hot food from an oven.</p> <p>To know the following cooking techniques: sieving, creaming, rubbing method, cooling.</p> <p>To understand the importance of budgeting while planning ingredients</p>	<p><u>Vocabulary</u></p> <p>edible grown reared caught frozen tinned processed seasonal harvested varied diet</p>	<p><b>Autumn Term: Vegan Muffins</b></p>  <p><b>Spring Term: Ice cream (linked to Skills Builder)</b></p> 
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## Year 5

**Link to:** Literacy PSHE Science Geography History

<p><u>Skills</u></p> <p>To be able to develop skills Of peeling, chopping, mixing, kneading and baking.</p>	<p><u>Knowledge</u></p> <p>To understand where meat comes from - learning that bee is from cattle and how beef is reared and processed, including key welfare</p>	<p><u>Vocabulary</u></p> <p>yeast, dough, bran, flour, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, varied, gluten, dairy, allergy, intolerance,</p>	<p><b>Summer Term:</b> Rainbow layered Salad in a jar (linked to PSHE)</p>
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<p>Cut high resistant foods with a vegetable knife using the claw grip eg carrots.</p> <p>Grate firmer foods such as carrots</p>	<p>issues.</p> <p>To know that I can adapt a recipe to make it healthier by substituting ingredients.</p> <p>To know that I can use nutritional calculator to see how a healthy food option is.</p>	<p>savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble</p>	
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Year 6			
<p><u>Skills</u></p> <p>Cut high resistant foods from whole using the bridge hold eg halve an apple/ raw potato</p> <p>Grate using the zest part of a grater e.g. lemon, orange</p> <p>Measure using measuring jug independently and accurately</p>	<p><u>Knowledge</u></p> <p>To know that 'flavour' is how a food or drink tastes.</p> <p>To know that many countries have 'national dishes' which are recipes associated with that country.</p> <p>To know that 'processed food' means food that has been put through multiple changes in a factory.</p> <p>To understand that it is important to wash fruit and vegetables before eating to remove any dirt and insecticides.</p> <p>To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork).</p>	<p><u>Vocabulary</u></p> <p>processed Wholemeal, Unleavened, baking soda, gluten, dairy, Allergy, intolerance</p>	<p><b>Autumn Term:</b> Wartime Oaty Biscuits (linked to History WW2)</p>  <p><b>Summer Term:</b> Healthy Smoothie (Design my own healthy nutritious smoothie linked to PSHE)</p> 

	<p>To understand that 'cross-contamination' means bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects.</p>		
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