

Excalibur Primary School

Design and Technology Curriculum Map

Autumn Term

Spring Term

Summer Term

Year Group	Subject Domains/Strands					
	Mechanisms	Structures	Textiles	Food	Mechanical Systems	Electrical Systems
Reception	Continuous provision and child-initiated learning throughout the following areas: textiles, food, construction, materials, computing, mechanics.					
	<ul style="list-style-type: none"> To know objects on wheels can be moved by pushing or pulling 	<ul style="list-style-type: none"> To know how to make a free standing structure from simple blocks/boxes To know how to make a structure taller 	<ul style="list-style-type: none"> To know how to join two pieces of material using one joining technique (e.g. gluing) 	<ul style="list-style-type: none"> To know how to mix ingredients To know how to follow simple health and safety procedures 		
Subject Domains/Strands	Mechanisms	Structures	Textiles	Food	Mechanical Systems	Electrical Systems
Year 1	<p>Focus: Wheels and Axels</p> <ul style="list-style-type: none"> Explore and use wheels, axels and axel holders Distinguish between fixed and freely moving axels Know and use technical vocabulary relevant to the project. 		<p>Focus: Templates and Joining Techniques</p> <ul style="list-style-type: none"> Design a functional, appealing product for a chosen user and purpose. Generate, develop, and communicate ideas. Use a range of textiles, tools and equipment to perform practical tasks. Explore and evaluate existing textile products and their own ideas and products. Understand how 3-D textile products are made, using joining, templates 	<p>Focus: Preparing Fruits and Vegetables</p> <ul style="list-style-type: none"> Know and understand where a range of fruit and vegetables come from e.g. farmed or grown at home. Understand and use basic principles of healthy and varied diet to prepare dishes, including how fruit and vegetables are part of the eat well plate. Know and use technical and sensory vocabulary 		

			and finishing to create two identical shapes	relevant to the project.		
Subject Domains/Strands	Mechanisms	Structures	Textiles	Food	Mechanical Systems	Electrical Systems
Year 2	<p>Focus: Sliders and Leavers</p> <ul style="list-style-type: none"> Explore and use sliders and leavers Understand that different mechanisms produce different types of movement Know and use technical vocabulary relevant to the project 	<p>Focus: Free Standing Structures</p> <ul style="list-style-type: none"> Know how to make freestanding structures stronger, stiffer and more stable Know and use technical vocabulary to the project 		<p>Focus: Preparing Fruits and Vegetables</p> <ul style="list-style-type: none"> Know and understand where a range of fruit and vegetables come from e.g. farmed or grown at home. Understand and use basic principles of healthy and varied diet to prepare dishes, including how fruit and vegetables are part of the eat well plate. Know and use technical and sensory vocabulary relevant to the project. 		
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Year 3		<p>Focus: Shell Structures using Computer Aided Design</p> <ul style="list-style-type: none"> Develop and use knowledge of how to construct strong, stiff shell structures Develop and use knowledge of nets and cuboids and 		<p>Focus: Healthy and Varied Diet</p> <ul style="list-style-type: none"> Know how to use appropriate equipment and utensils to prepare and combine food. Know about a range of fresh and processed 	<p>Focus: Leavers and Linkages</p> <ul style="list-style-type: none"> Understand and use lever and linkage mechanisms Distinguish between fixed and loose pivots Know and use technical vocabulary 	

		<p>where appropriate more complex 3D shapes</p> <ul style="list-style-type: none"> • Know and use technical vocabulary relevant to the project 		<p>ingredients appropriate for their product, and whether they are grown, reared or caught.</p> <ul style="list-style-type: none"> • Know and use relevant technical and sensory vocabulary appropriately. 	<p>relevant to the project.</p>	
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Year 4			<p>Focus: 2D Shape to 3D Product</p> <ul style="list-style-type: none"> • Know how to strengthen, stiffen and reinforce existing fabrics • Understand how to securely join two pieces of fabric together • Understand the need for patterns and seam allowances • Know and use technical vocabulary relevant to the project. 	<p>Focus: Healthy and Varied Diet</p> <ul style="list-style-type: none"> • Know how to use appropriate equipment and utensils to prepare and combine food. • Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. • Know and use relevant technical and sensory vocabulary appropriately. 		<p>Focus: Simple Circuits and Switches</p> <ul style="list-style-type: none"> • Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs and buzzers • Apply their understanding of computing to program and control their products • Know and use technical vocabulary relevant to the project.
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Year 5			<p>Focus: Combining Different Fabric Shapes</p> <ul style="list-style-type: none"> • A 3D textile product can be made from a combination of accurately made pattern pieces, 	<p>Focus: Celebrating Culture and Seasonality</p> <ul style="list-style-type: none"> • Know how to use utensils and equipment including heat sources to prepare and cook food. 	<p>Focus: Pulleys or Gears</p> <ul style="list-style-type: none"> • Understand that mechanical and electrical systems have an input, process and an output. 	

			<p>fabric shapes and different fabrics.</p> <ul style="list-style-type: none"> Fabrics can be strengthened, stiffened and reinforced where appropriate Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> Understand about seasonality in relation to food products and the source of different food products Know and use relevant technical and sensory vocabulary. 	<ul style="list-style-type: none"> Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. Know and use technical vocabulary relevant to the project. 	
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Year 6		<p>Focus: Frame Structures</p> <ul style="list-style-type: none"> Understand how to strengthen, stiffen and reinforce 3D frameworks. Know and use technical vocabulary relevant to the project. 		<p>Focus: Celebrating Culture and Seasonality</p> <ul style="list-style-type: none"> Know how to use utensils and equipment including heat sources to prepare and cook food. Understand about seasonality in relation to food products and the source of different food products Know and use relevant technical and sensory vocabulary. 		<p>Focus: Monitoring and Control</p> <ul style="list-style-type: none">