

Design and Technology long term plan

All projects will be carried out in half term blocks (identified on the long term plan). For years 1-6 the blocks will consist of 6 or 7 lessons per project.

Years N-Y2

Autumn			
Nursery (Aut 2)	Reception (Aut 1)	Year 1 (Aut 2)	Year 2 (Aut 1)
<p>Topic - Food: Cutting fruit</p> <p>Enquiry Question: What can you use to cut fruit to make a fruit salad?</p> <p>Local links: Local shops</p> <p>Curriculum Enrichment: Visit from local shop linked with fruit.</p>	<p>Topic - Mechanisms: Wheels</p> <p>Enquiry Question: What vehicle will help you get to a shop?</p> <p>Local Links: Transport in Eastwood.</p> <p>Curriculum enrichment: To go on a bus journey.</p>	<p>Topic - Textiles: Patterns</p> <p>Enquiry Question: What pattern can you sew for a Christmas card?</p> <p>Local Links: Nottingham lace - patterns in lace</p> <p>Curriculum enrichment: To explore different materials and how patterns are made, e.g. lace, tapestry and needlework.</p>	<p>Topic - Mechanisms: sliders and levers</p> <p>Enquiry Question: What is the purpose of moving pictures?</p> <p>Local Links: N/A</p> <p>Curriculum enrichment: Put on a show using moving pictures.</p>
Spring			
Nursery (Spr 2)	Reception (Spr 1)	Year 1 (Spr 2)	Year 2 (Spr 1)

<p>Mechanisms How do things move?</p> <p>Enquiry Question: What helps cars/bikes/prams to move?</p> <p>Local Links: To look at moving objects around school.</p> <p>Curriculum enrichment: To explore vehicles on a local walk/in the outdoor area.</p>	<p>Topic - Food: Preparing simple healthy food (without a heat source)</p> <p>Enquiry Question: What can you use to make a healthy snack?</p> <p>Local links: Visit a local shop.</p> <p>Curriculum enrichment: Make a shopping list and buy your own ingredients.</p>	<p>Topic - Structures: Stability of freestanding structures</p> <p>Enquiry Question: How does playground equipment work?</p> <p>Local Links: Parks in the local area.</p> <p>Curriculum enrichment: Visit a local park/explore schools playground equipment.</p>	<p>Topic - Textiles: Templates and joining techniques</p> <p>Enquiry Question: How are puppets made?</p> <p>Local Links: To work alongside younger children within school.</p> <p>Curriculum enrichment: To use their puppet to tell a story to the EYFS children.</p>
Summer			
Nursery (Sum 2)	Reception (Sum 1)	Year 1 (Sum 2)	Year 2 (Sum 1)
<p>Topic - Structures: Making simple structures</p> <p>Enquiry Question: What can you use to make a house?</p> <p>Local Links:</p>	<p>Topic - Textiles: Weaving</p> <p>Enquiry Question: How can you create a woven pattern?</p> <p>Local Links:</p>	<p>Topic - Mechanisms: Wheels and axels</p> <p>Enquiry Question: How are shopping trolleys made?</p> <p>Local Links:</p>	<p>Topic - Food: Preparing fruit and vegetables (including cooking and nutrition requirements for KS1)</p> <p>Enquiry Question: What ingredients can be used to make a healthy smoothie?</p>

<p>The houses that we live in.</p> <p>Curriculum enrichment: To go on a short walk in the local area to look at houses.</p>	<p>Nottingham lace - weaving process.</p> <p>Curriculum enrichment: To explore different materials (E.g. natural resources, paper, ribbons or wool.) How the materials can be used in different ways, pictures, patterns, fences, structures, sculptures.</p>	<p>What do shopping trolley's looks like?</p> <p>Curriculum enrichment: Visit a local shop to research shopping trolleys.</p>	<p>Local Links: N/A</p> <p>Curriculum enrichment: To plant and grow vegetables.</p>
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Years 3-6

Autumn			
Year 3 (Aut 2)	Year 4 (Aut 1)	Year 5 (Aut 2)	Year 6 (Aut 1)
<p>Topic - Food: Healthy and varied diet (including cooking and nutrition requirements for KS2)</p> <p>Enquiry Question: What can be put into a pita pocket to make it healthy?</p> <p>Local Links: Research local sources of ingredients and products that will be needed.</p> <p>Curriculum enrichment: Meet with the school Kitchen Staff.</p>	<p>Topic - Electrical systems: Simple circuits (including switches)</p> <p>Enquiry Question: How do torches work?</p> <p>Local Links: N/A</p> <p>Curriculum enrichment: Electricity hunt: how many things can you find around school that use electricity?</p>	<p>Topic - Textiles: Combining different fabric shapes</p> <p>Enquiry Question: What do builders use to carry their tools?</p> <p>Local Links: Secondary school links?</p> <p>Curriculum enrichment: Link with local secondary school?</p>	<p>Topic - Structures: Frame Structures (including computer aided design)</p> <p>Enquiry Question: What type of building is used to watch birds in a woodland?</p> <p>Local Links: N/A</p> <p>Curriculum enrichment: Complete a bird watch.</p>
Spring			
Year 3 (Spr 2)	Year 4 (Spr 1)	Year 5 (Spr 2)	Year 6 (Spr 1)

<p>Topic - Structures: Shell structures (including computer aided design)</p> <p>Enquiry Question: What can be used to transport food from the factory to the shop?</p> <p>Local Links: N/A</p> <p>Curriculum enrichment: To experiment with materials to improve strength/rigidity.</p>	<p>Topic - Food: Healthy and varied diet (including cooking and nutrition requirements for KS2)</p> <p>Enquiry Question: What food can you make to promote healthy eating?</p> <p>Local Links: To research ingredients and products that can be: farmed/grown/caught locally.</p> <p>Curriculum enrichment: Healthy food tasting/workshop.</p>	<p>Topic - Electrical systems: Complex circuits (including programming and control)</p> <p>Enquiry Question: How do warning alarms work?</p> <p>Local Links: Local police force</p> <p>Curriculum enrichment: Alarm hunt - how many different types of alarms can be found in school/in the school grounds?</p>	<p>Topic - Mechanisms: Cams, gears or pulleys</p> <p>Enquiry Question: How are sports cars manufactured?</p> <p>Local Links: Great British Sports Cars Ltd. Factory based in Ollerton, Nottinghamshire</p> <p>Curriculum enrichment: Car workshop/research into environmentally friendly materials.</p>
Summer			
Year 3 (Sum 2)	Year 4 (Sum 1)	Year 5 (Sum 2)	Year 6 (Sum 1)
<p>Topic - Textiles: 2D shape to 3D product</p> <p>Enquiry Question: How are pencil cases made?</p>	<p>Topic - Mechanisms: Lever and linkages</p> <p>Enquiry Question: What materials can be recycled?</p>	<p>Topic - Food: Culture and seasonality- Spain (including cooking and nutrition requirements for KS2)</p> <p>Enquiry Question:</p>	<p>Topic - Food: Culture and seasonality- China (including cooking and nutrition requirements for KS2)</p> <p>Enquiry Question:</p>

<p>Local Links: Nottingham lace</p> <p>Curriculum enrichment: Experiment with different materials, testing for strength, waterproofness and flexibility.</p>	<p>Local Links: Recycling in the local area.</p> <p>Curriculum enrichment: Lever and linkage search around school to find examples from their own environment.</p>	<p>What ingredients are used in traditional Spanish food?</p> <p>Local Links: N/A</p> <p>Curriculum enrichment: Tasting of traditional Spanish food.</p>	<p>What are the key ingredients in Chinese food?</p> <p>Local Links: N/A</p> <p>Curriculum enrichment: Family event to taste the food that has been made.</p>
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