

Wheldrake with Thorganby CE Primary School Progression of Skills in SUBJECT
Coverage of skills – Working together to be the best we can be



To be updated to align with the Kapow scheme

	<u>Reception</u>	<u>Year</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
National curriculum Technological Knowledge / Mechanisms	EYFS: “To select tools and techniques needed to shape, assemble and join materials they are using.”	DT1/1.4a build structures, exploring how they can be made stronger, stiffer and more stable DT1/1.4b explore and use mechanisms , in their products. KS1: “To explore and use mechanisms e.g. levers, wheels and axels in their products.”		DT2/1.4a apply their understanding of how to strengthen, stiffen and reinforce more complex structures DT2/1.4b understand and use mechanical systems in their products DT2/1.4c understand and use electrical systems in their products DT2/1.4d apply their understanding of computing to programme, monitor and control their products KS2: “To understand and use mechanical systems e.g. gears, pulleys and linkages in their products.”			
Technological Knowledge / Mechanisms Progression		Year 1: With some support, begin to explore and use simple mechanisms. For example, use sliders in moving pictures, hinges into models etc	Year 2: With some independence explore and use winding mechanisms. Begin to incorporate wheels and axles into their products.	Year 3: Begin to develop an understanding that mechanical systems such as levers and linkages or pneumatic systems can create movement. Begin to incorporate levers and linkages into their products.	Year 4: With increasing independence produce models that incorporate mechanical systems such as levers, linkages or pneumatic systems to create movement.	Year 5: Begin to understand how mechanical systems such as cams create movement. Design and make a product that incorporates a cam mechanism.	Year 6: Develop a greater understanding of how cams, pulleys or gears create movement. Create and use prototypes. Design and make products with greater independence.

<u>Ongoing</u>		<p>Work on their own and collaboratively with others on projects in 2 and 3 dimensions</p> <p>Use ICT</p> <p>Investigate different kinds of art, craft and design.</p>	<p>Work on their own and collaboratively with others on projects in 2 and 3 dimensions</p> <p>Use ICT</p> <p>Investigate different kinds of art, craft and design.</p>	<p>Work on their own and collaboratively with others on projects in 2 and 3 dimensions and on different scales.</p> <p>Use ICT</p> <p>-Investigate art, craft and design in the locality and in a variety of genres, styles and traditions.</p>	<p>-Work on their own and collaboratively with others on projects in 2 and 3 dimensions and on different scales.</p> <p>-Use ICT</p> <p>-Investigate art, craft and design in the locality and in a variety of genres, styles and traditions.</p>	<p>-Work on their own and collaboratively with others on projects in 2 and 3 dimensions and on different scales.</p> <p>-Use ICT</p> <p>-Investigate art, craft and design in the locality and in a variety of genres, styles and traditions.</p>	<p>-Work on their own and collaboratively with others on projects in 2 and 3 dimensions and on different scales.</p> <p>-Use ICT</p> <p>-Investigate art, craft and design in the locality and in a variety of genres, styles and traditions.</p>
<u>Autumn 1</u>		<p><u>Y1-Pirates</u></p> <p><u>Food focus</u></p> <p>Developing, planning and communicating ideas.</p> <p>Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make</p> <p>Working with tools, equipment, materials and components to make quality products (incfood)</p> <p>Select and use appropriate fruit and vegetables, processes and tools Use basic food handling, hygienic practices and personal hygiene Use simple</p>	<p><u>Y2-Pirates</u></p> <p>Paddy's lunch box</p> <p>Developing, planning and communicating ideas.</p> <p>Generate ideas by drawing on their own and other people's experiences Develop their design ideas through discussion, observation , drawing and modelling Identify a purpose for what they intend to design and make Identify simple</p>	<p><u>Y3-Anglo Saxons and Vikings-Britain until 1066</u></p>	<p><u>Y4- Anglo Saxons and Vikings-Britain until 1066</u></p>	<p><u>Y5-Brazil</u></p>	<p><u>Y6-Brazil</u></p>

		<p>finishing techniques to improve the appearance of their product</p> <p>Evaluating processes and products</p> <p>Evaluate their product by discussing how well it works in relation to the purpose Evaluate their products as they are developed, identifying strengths and possible changes they might make Evaluate their product by asking questions about what they have made and how they have gone about it</p>	<p>design criteria</p> <p>Make simple drawings and label parts</p> <p>Working with tools, equipment, materials and components to make quality products</p> <p>Begin to select tools and materials; use vocab' to name and describe them Measure, cut and score with some accuracy Use hand tools safely and appropriately Assemble, join and combine materials in order to make a product Choose and use appropriate finishing techniques</p> <p>Evaluating processes and products</p> <p>Evaluate against their design criteria Evaluate their products as they are developed, identifying strengths and possible changes they might</p>				
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			make Talk about their ideas, saying what they like and dislike about them				
<u>Autumn 2</u>		<u>Y1-Space & Beyond/ Celebrate</u> Make a Christmas decoration. Learn to thread a needle. Sew a pre- punched felt decoration	<u>Y2-Space & Beyond/ Celebrate</u> Make a Christmas decoration. Practise threading a needle. Sew a felt decoration	<u>Y3- Christmas</u> Investigate art, craft and design in the locality and in a variety of genres, styles and traditions. Sew using a range of different stitches, weave and knit Measure, tape or pin, cut and join fabric with some accuracy	<u>Y4-Christmas</u> Investigate art, craft and design in the locality and in a variety of genres, styles and traditions. Sew using a range of different stitches, weave and knit Measure, tape or pin, cut and join fabric with some accuracy	<u>Y5-Tudors</u> Money pouch? Developing, planning and communicating ideas. Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when	<u>Y6-Tudors</u> Money Pouch Developing, planning and communicating ideas. Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas

						<p>developing design ideas</p> <p>Working with tools, equipment, materials and components to make quality products</p> <p>Select appropriate materials, tools and techniques</p> <p>Measure and mark out accurately Use skills in using different tools and equipment safely and accurately Cut and join with accuracy to ensure a good-quality finish to the product</p> <p>Evaluating processes and products</p> <p>Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others</p>	<p>Working with tools, equipment, materials and components to make quality products</p> <p>Select appropriate materials, tools and techniques</p> <p>Evaluating processes and products</p> <p>Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others</p>
<u>Spring 1</u>	<u>R-Recycling/ Chinese New Year</u>	<p><u>Y1-GF of L</u></p> <p>Structures: Windmill for Thomas Fariner’s flour.</p> <p>Developing, planning and communicating ideas.</p> <p>Draw on their own experience to help generate ideas Suggest</p>	<p><u>Y2-GF of L</u></p> <p>Structures: Windmill for Thomas Fariner’s flour.</p> <p>Developing, planning and communicating ideas.</p>	<u>Y3- Animals and Living Things</u>	<u>Y4-Animals and living things</u>	<u>Y5-Journeys</u>	<u>Y6-Journeys</u>

		<p>ideas and explain what they are going to do Identify a target group for what they intend to design and make Model their ideas in card and paper Develop their design ideas applying findings from their earlier research</p> <p>Working with tools, equipment, materials and components to make quality products (incfood) Make their design using appropriate techniques With help measure, mark out, cut and shape a range of materials Use tools eg scissors and a hole punch safely Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Use simple finishing techniques to improve the appearance of their product</p> <p>Evaluating processes and products Evaluate their product by discussing how well it works in relation to the purpose Evaluate their products as they are</p>	<p>Generate ideas by drawing on their own and other people's experiences Develop their design ideas through discussion, observation , drawing and modelling Identify a purpose for what they intend to design and make Identify simple design criteria Make simple drawings and label parts</p> <p>Working with tools, equipment, materials and components to make quality products Begin to select tools and materials; use vocab' to name and describe them</p> <p>Evaluating processes and products Evaluate against their design criteria Evaluate their products as they are</p>				
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		developed, identifying strengths and possible changes they might make Evaluate their product by asking questions about what they have made and how they have gone about it	developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them				
<u>Spring 2</u>	<u>R-Animals hot and cold (the world's habitats)/Easter</u>	<u>Y1-Ponds, Bogs & Woods</u>	<u>Y2-Ponds, Bogs & Woods</u>	<u>Y3-Mountains, Rivers and Coasts</u>	<u>Y4-Mountains, Rivers and Coasts</u>	<u>Y5-Natural Disasters</u>	<u>Y6-Natural Disaster</u>
<u>Summer 1</u>	<u>R-Farming Planting</u>	<u>Y1-Plants</u>	<u>Y2-Plants</u>	<u>Y3- Living things and habitats</u>	<u>Y4-Living things and habitats</u> Animal shelters Developing, planning and communicating ideas Generate ideas, considering the purposes for which they are designing Make labelled drawings from different views showing specific features Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and	<u>Y5-Ancient Greece and Olympics</u> Olympic Food for Athletes Developing, planning and communicating ideas. Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use	<u>Y6- Ancient Greece and Olympics</u> Olympic Food for Athletes Developing, planning and communicating ideas. Communicate their ideas through detailed labelled drawings Develop a design specification Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways Plan the order of their work, choosing appropriate

					<p>suggesting alternative methods of making, if the first attempts fail Evaluate products and identify criteria that can be used for their own designs</p> <p>Working with tools, equipment, materials and components to make quality products (incfood products) Select appropriate tools and techniques for making their product Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques Join and combine materials and components accurately in temporary and permanent ways</p> <p>Use simple graphical communication techniques</p> <p>Evaluating processes and products Evaluate their work both during and at the end of the assignment Evaluate</p>	<p>materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas</p> <p>Working with tools, equipment, materials and components to make quality products Select appropriate materials, tools and techniques Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens</p> <p>Evaluating processes and products Evaluate a product against the original design specification Evaluate it personally</p>	<p>materials, tools and techniques</p> <p>Working with tools, equipment, materials and components to make quality products Select appropriate tools and techniques Use tools safely and accurately. (Y5objectives): Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens</p> <p>Evaluating processes and products Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests Record their evaluations using drawings with labels Evaluate against their original criteria and suggest ways that their product could be improved</p>
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					their products carrying out appropriate tests	and seek evaluation from others	
<u>Summer 2</u>	<u>R-Ourselfs/ People who help us</u>	<u>Y1- Where in the World</u> Moving picture - sliders and levers Make their design using appropriate techniques With help measure, mark out, cut and shape a range of materials Use tools eg scissors and a hole punch safely Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape	<u>Y2-Where in the World</u> Moving picture - sliders and levers Make their design using appropriate techniques With help measure, mark out, cut and shape a range of materials Use tools eg scissors and a hole punch safely Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape	<u>Y3- Ancient Egypt</u>	<u>Y4- Ancient Egypt</u>	<u>As above</u>	<u>As above</u>