



## Design and Technology – skills progression

	EYFS	KS1	LKS2	UKS2
<b>Design</b>	<ul style="list-style-type: none"><li>*Select appropriate resources</li><li>*Use gestures, talking and arrangements of materials and components to show design</li></ul>	<ul style="list-style-type: none"><li>*Know the importance of a clear design criteria</li><li>*Use knowledge of existing products to produce ideas</li><li>*Describe the design using pictures, words, models, diagrams</li><li>*Design products for myself and others following a given design criteria</li><li>*Explain the purpose of the product, how it will work and how it will be suitable for the user</li><li>*Choose the best tools and materials and explain my choices</li></ul>	<ul style="list-style-type: none"><li>*Research similar existing products</li><li>*Identify a target audience and begin to create a design criterion</li><li>*Use research for design ideas</li><li>*Make design decisions that take account of the availability of resources</li><li>*Describe design using a sketch with annotations</li><li>*Label with material and tools needed</li><li>*Describe purpose of product</li><li>*Explain how product will work</li><li>*Show design meets a range of requirements</li></ul>	<ul style="list-style-type: none"><li>*Carry out research using surveys, interviews, questionnaires and web-based resources to gather information about the needs and wants of a user</li><li>*Identify the needs, wants, preferences and values of a user (write a design criteria)</li><li>*Consider the needs/wants of the user when designing and ensure product is fit for purpose</li><li>*Generate realistic ideas, focusing on the needs of the user</li><li>*Make design decisions considering time and resources</li><li>*Create detailed sketches with thorough annotations</li><li>*Clearly explain how parts of design will work, and how they are fit for purpose</li><li>*Indicate the design features of their products that will appeal to intended users</li></ul>
<b>Make</b>	<ul style="list-style-type: none"><li>*Construct with a purpose, using a variety of resources</li><li>*Use simple tools and techniques</li><li>*Build/construct with a wide range of objects</li><li>*Select tools &amp; techniques to shape, assemble and join</li><li>*Discuss how to make an activity safe and hygienic</li><li>*Understand different media can be combined for a purpose</li></ul>	<ul style="list-style-type: none"><li>*Make a product according to a design criterion</li><li>*Beginning to select tools/equipment to measure, mark out, cut, shape, join, finish</li><li>*Choose suitable materials and explain choices</li><li>*Try to use finishing techniques to make product look good</li><li>*Join materials/components together in different ways</li><li>*Work safely and hygienically</li></ul>	<ul style="list-style-type: none"><li>*Use a wider range of materials and equipment safely</li><li>*Select suitable tools/equipment, explain choices</li><li>*Begin to measure, mark out, cut and shape materials/components with some accuracy</li><li>*Assemble, join and combine materials and components with some accuracy</li><li>*Apply a range of finishing techniques with some accuracy</li></ul>	<ul style="list-style-type: none"><li>*Use selected tools/equipment with good level of precision</li><li>*Accurately measure, mark out, cut and shape materials/components</li><li>*Accurately assemble, join and combine materials/components</li><li>*Accurately apply a range of finishing techniques</li></ul>



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<b>Evaluate</b>	<ul style="list-style-type: none"><li>*Adapt work if necessary</li><li>*Look at similarities and differences between existing objects / materials / tools</li></ul>	<ul style="list-style-type: none"><li>*Talk about existing products considering use, materials, how they work, audience, where they might be used; express personal opinion</li><li>*Evaluate a product according to the design criteria</li><li>*Suggest points for improvement</li><li>*Review the success of a product by testing it with its intended audience</li></ul>	<ul style="list-style-type: none"><li>*Begin to understand by whom, when and where products were designed</li><li>*Begin to evaluate existing products, considering how well they have been made, materials, whether they work, how they have been made, fit for purpose</li><li>*Decide how many of the criteria should be met for the product to be considered successful</li><li>*Use design criteria to evaluate finished product; justify opinions</li><li>*Suggest points for modification of the individual design</li></ul>	<ul style="list-style-type: none"><li>*Do thorough evaluations of existing products considering how well they've been made, materials, whether they work, how they've been made, fit for purpose</li><li>*Evaluate final product considering purpose and appearance; explain what would improve it and the effect different resources may have had</li><li>*Look at modifications that could be made</li><li>*Evaluate quality of design</li></ul>
<b>Technical knowledge – materials and structures</b>	<ul style="list-style-type: none"><li>*Experiment with making structures</li></ul>	<ul style="list-style-type: none"><li>*Describe some different characteristics of materials</li><li>*Use own ideas to try to make product stronger</li></ul>	<ul style="list-style-type: none"><li>*Select appropriate materials to build a strong structure</li><li>*Reinforce weaker areas of a structure</li></ul>	<ul style="list-style-type: none"><li>*Reinforce and strengthen a 3D frame</li><li>*Identify where a structure needs reinforcement</li></ul>
<b>Technical knowledge – mechanisms</b>		<ul style="list-style-type: none"><li>*Use levers or slides</li><li>*Use wheels and axles</li></ul>	<ul style="list-style-type: none"><li>*Use cams to create movement</li></ul>	<ul style="list-style-type: none"><li>*Use pulleys and gears to create movement</li></ul>
<b>Technical knowledge – textiles</b>	<ul style="list-style-type: none"><li>*Experiment with Binca</li></ul>	<ul style="list-style-type: none"><li>*Have a go at threading a needle</li><li>*Basic sewing – running stitch</li></ul>	<ul style="list-style-type: none"><li>*Thread a needle</li><li>*Start to explore other simple stitches – backstitch, cross stitch</li></ul>	<ul style="list-style-type: none"><li>*Thread a needle</li><li>*Use a variety of stitches – backstitch, cross stitch, running stitch, zig zag stitch</li></ul>
<b>Technical knowledge – cooking and nutrition</b>	<ul style="list-style-type: none"><li>*Practise stirring, mixing, pouring, blending</li><li>*Discuss how to make an activity safe and hygienic</li><li>*Understand need for variety in food</li></ul>	<ul style="list-style-type: none"><li>*Measure or weigh using measuring cups or electronic scales</li><li>*Cut, peel and grate with increasing confidence</li><li>*Follow basic hygiene rules</li></ul>	<ul style="list-style-type: none"><li>*Measure ingredients to the nearest gram</li><li>*Grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading and kneading</li></ul>	<ul style="list-style-type: none"><li>*Measure ingredients to the nearest gram accurately</li><li>*Use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</li><li>*Use a heat source safely</li></ul>



A Small School with a BIG Heart

Ellingham C of E  
Primary School

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	<ul style="list-style-type: none"><li>*Begin to understand that eating well contributes to good health</li></ul>	<ul style="list-style-type: none"><li>*Know that foods give us nutritional benefits</li><li>*Understand the need for a balanced diet</li><li>*Learn where and how fruits and vegetables grow</li><li>*Say where some foods come from (plant or animal)</li></ul>	<ul style="list-style-type: none"><li>*Consider taste, texture, smell and appearance of a dish</li><li>*Know how to prepare themselves and their workspace</li><li>*Know the basic rules to avoid food contamination</li><li>*Explain importance of food and drink for active, healthy bodies</li><li>*Know that fruit and vegetables grow in certain seasons</li><li>*Learn that imported foods can negatively impact the environment</li></ul>	<ul style="list-style-type: none"><li>*Explain how to be safe/hygienic and follow own guidelines</li><li>*Know how to avoid cross contamination</li><li>*Present product well - interesting, attractive, fit for purpose</li><li>*Identify the health benefits of food groups</li><li>*Adapt a recipe based on research</li><li>*Adapt recipes to change appearance, taste, texture or aroma</li><li>*Compare nutritional value of 2 dishes and identify the healthier option</li></ul>
<b>Technical knowledge - electrical systems</b>			<ul style="list-style-type: none"><li>*Use a simple circuit in a product</li></ul>	<ul style="list-style-type: none"><li>*Incorporate a switch into a product</li><li>*Use number of components in a circuit</li></ul>