

# Dothill Progression Mapping



## Design Technology

Respect Happiness Responsibility Creativity HONESTY Enthusiasm Confidence Kindness Cooperation fairness

	Year Three	Year Four
<b>Design</b>	<p><b>Moving books</b> <b>Free standing photo frame</b></p> <ul style="list-style-type: none"> <li>✓ Begin to research what is available on the market and who might purchase these items</li> <li>✓ Describe the purpose of product</li> <li>✓ Have at least one idea about how to create a moving book and a free-standing photo frame</li> <li>✓ Create a plan which shows order, equipment and tools</li> <li>✓ Describe design using an accurately labelled sketch and words</li> <li>✓ Show how your design meets a range of requirements</li> <li>✓ Follow a given design criteria</li> <li>✓ Make design decisions</li> <li>✓ Explain how product will work</li> <li>✓ Make a prototype</li> <li>✓ Begin to use computers to show design</li> </ul>	<p><b>Pasta - the history of pasta (Healthy)</b> <b>Torches - Conrad Hubert</b></p> <ul style="list-style-type: none"> <li>✓ Research the history of pasta and torches to help develop design ideas</li> <li>✓ Describe the purpose of torches and describe which foods are healthy and why</li> <li>✓ Have at least one idea about how to create a healthy dish using pasta and the components of a torch</li> <li>✓ Suggest improvements for my design</li> <li>✓ Show how my design meets a range of requirements and is fit for purpose</li> <li>✓ Begin to create my design criteria</li> <li>✓ Produce a plan and explain it to others in my class including my peers and my teacher</li> <li>✓ Say how realistic plan is</li> <li>✓ Include an annotated sketch of my design</li> <li>✓ Make and explain design decisions considering availability of resources</li> <li>✓ Explain how my product will work and how it might taste</li> <li>✓ Make a prototype of my design</li> <li>✓ Begin to use computers to show design</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>✓ Select suitable tools/equipment I will use to make my moving book and free-standing photo frame</li> <li>✓ Explain my choices</li> <li>✓ Begin to use the tools/equipment chosen accurately</li> <li>✓ Select appropriate materials that are fit for purpose.</li> <li>✓ Work through my plan in order</li> <li>✓ Consider how good I think my product will be</li> <li>✓ Begin to measure, mark out, cut and shape materials/components with some accuracy</li> <li>✓ Begin to assemble, join and combine materials and components with some accuracy</li> <li>✓ Begin to apply a range of finishing techniques with some accuracy</li> </ul>	<ul style="list-style-type: none"> <li>✓ Select suitable tools and equipment I will use to make Pasta and a torch</li> <li>✓ Explain my choices in relation to required techniques and use the equipment and techniques accurately</li> <li>✓ Select appropriate materials that are fit for purpose and explain my choices</li> <li>✓ Work through my plan in order</li> <li>✓ Realise if my product is going to be good quality and why this might be</li> <li>✓ 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>

<p><b>Evaluate</b></p>	<ul style="list-style-type: none"> <li>✓ Look at design criteria while designing and making my moving book and free-standing photo frame</li> <li>✓ Use design criteria to evaluate finished product</li> <li>✓ Say what I would change to make my design better</li> <li>✓ Begin to evaluate existing products, considering how well they have been made, materials, whether they work, how they have been made and whether they are fit for purpose</li> <li>✓ Begin to understand by whom, when and where products were designed</li> <li>✓ Learn about some inventors/designers/engineers/chefs/manufacturers of ground-breaking products</li> </ul>			<ul style="list-style-type: none"> <li>✓ Refer to design criteria while designing and making</li> <li>✓ Use criteria to evaluate my product</li> <li>✓ Begin to explain how I could improve the original design</li> <li>✓ Evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made fit for purpose</li> <li>✓ Discuss by whom, when and where products were designed</li> <li>✓ Research whether products can be recycled or reused</li> <li>✓ Know about some inventors/designers/engineers/chefs/manufacturers of ground-breaking products</li> </ul>				
<p><b>Technical Knowledge</b></p>	<p><b><u>Technical Knowledge-Materials/structures (Free standing photo frame)</u></b></p> <ul style="list-style-type: none"> <li>✓ Use appropriate materials</li> <li>✓ Work accurately to make cuts and holes</li> <li>✓ Join materials together to build product</li> <li>✓ Begin to make strong structures</li> </ul> <p><b><u>Technical Knowledge-Mechanisms (Moving books)</u></b></p> <ul style="list-style-type: none"> <li>✓ Select appropriate tools/techniques</li> <li>✓ Alter product after checking, to make it better</li> <li>✓ Begin to try new/different ideas</li> <li>✓ Use simple lever and linkages to create movement</li> </ul>			<p><b><u>Technical Knowledge- Electrical systems (Torches)</u></b></p> <ul style="list-style-type: none"> <li>✓ Use several components in a circuit</li> <li>✓ Program a computer to control product</li> </ul> <p><b><u>Technical Knowledge-Food and Nutrition (Pasta)</u></b></p> <ul style="list-style-type: none"> <li>✓ Explain how to be safe and hygienic when preparing/making food</li> <li>✓ Think about presenting product in interesting/attractive ways</li> <li>✓ Understand ingredients can be fresh, pre-cooked or processed</li> <li>✓ Begin to understand about food being grown, reared or caught in the UK or wider world</li> <li>✓ Describe eat well plate and how a healthy diet=variety / balance of food and drinks</li> <li>✓ Explain importance of food and drink for active, healthy bodies</li> <li>✓ Prepare and cook a dish safely and hygienically</li> <li>✓ Use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</li> </ul>				
<p><b>Vocabulary</b></p>	<p><b><u>Design vocabulary</u></b></p> <p>Plan Organise Prototype Initial ideas Criteria Product Target audience Purpose Application Constraints</p>	<p><b><u>Technical Knowledge and Making</u></b></p> <p>Materials Adhesive Lattice Hand-made Presentation Machine made Dimensions Durable</p>	<p><b><u>Evaluate</u></b></p> <p>Assess Edit Improve Alter Outcome Develop Test Effective Fit for purpose Design criteria Models Quality Function</p>		<p><b><u>Design vocabulary</u></b></p> <p>Plan Organise Prototype Diagram label Initial ideas Criteria Product Target audience Consumer Purpose Application Constraints</p>	<p><b><u>Technical Knowledge and Making</u></b></p> <p>Materials Hand-made Machine-made Dimensions Durable Shape Packaging Presentation</p>	<p><b><u>Cooking and Nutrition</u></b></p> <p>Healthy Unhealthy Balanced Vitamins Nutrition Hygiene Diet Cross contamination Grams Storage Presentation Taste Texture Flavour Disinfect Bacteria</p>	<p><b><u>Evaluate</u></b></p> <p>Assess Edit Improve Alter Outcome Develop Test Effective Fit for purpose Design criteria Models Quality Function</p>

