



## Progress in Design & Technology: Key Stage 2

At Ashton St Peter’s Primary School it is our intent to provide children with a real life context for learning in our rapidly changing technological world and one which helps to prepare them for living in a world in which sustainability and the environment must be given increasing priority.

Our curriculum is structured specifically to inspire and foster creativity in designing and making and is combined with the progressive acquisition of knowledge, skills and understanding in order to design for a defined purpose and tangible outcome.

Through our high quality Programme of Studies pupils study past and present technologies which helps them to develop a critical understanding of the impact of innovations on daily life. Where possible they are given opportunities to: meet industry workers, execute product research, disassemble and build and make prototypes, represent ideas, explore and investigate, innovate and risk-take to help develop ideas, before making and evaluating their products.

A range of tools, resources and materials are used, including ICT, to create effectively constructed and aesthetically pleasing results. We encourage children to work both independently and in teams, to consider differing needs and to be resourceful and enterprising; building resilience in their problem solving, all of which helps to equip children for life beyond our primary school.

Skill	Year 3	Year 4	Year 5	Year 6
<b>Developing, planning and communicating</b>	<ul style="list-style-type: none"> <li>● show that their design meets a range of requirements</li> <li>● put together a step-by-step plan which shows the order and also what equipment and tools they need</li> <li>● describe their design using an accurately labelled sketch and words</li> <li>● explain how realistic their plan is</li> </ul>	<ul style="list-style-type: none"> <li>● come up with at least one idea about how to create their product</li> <li>● take account of the ideas of others when designing</li> <li>● produce a plan and explain it to others</li> <li>● suggest some improvements and say what was good and not so good about their original design</li> <li>● use computer-aided design to develop and communicate their ideas</li> </ul>	<ul style="list-style-type: none"> <li>● come up with a range of ideas after they have collected information</li> <li>● take a user’s view into account when designing</li> <li>● produce a detailed step-by-step plan</li> <li>● suggest some alternative plans and say what the good points and drawbacks are about each</li> </ul>	<ul style="list-style-type: none"> <li>● use a range of information to inform their design</li> <li>● use market research to inform plans – consider the target market</li> <li>● work within constraints</li> <li>● follow and refine their plan if necessary</li> <li>● justify their plan to someone else</li> <li>● consider culture and society in their designs</li> </ul>

<b>Working with tools, equipment, materials and components to make quality products</b>	<ul style="list-style-type: none"> <li>● use equipment, tools and utensils accurately e.g stapler, glue guns</li> </ul>	<ul style="list-style-type: none"> <li>● explain if their finished product is going to be good quality</li> <li>● show an awareness of the need to produce something that will be liked by others</li> <li>● show a good level of expertise when using a range of tools and equipment e.g scissors, craft knives, pencils, rulers</li> </ul>	<ul style="list-style-type: none"> <li>● explain why their finished product is going to be of good quality</li> <li>● explain how their product will appeal to the audience</li> <li>● use a range of tools and equipment expertly e.g staple gun, wire cutters</li> <li>● use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking</li> </ul>	<ul style="list-style-type: none"> <li>● use tools and materials precisely e.g drills, saw plane, clamps, handsaws</li> <li>● change the way they are working if needed</li> <li>● make exact measurements and mark out, to within 1 millimetre</li> </ul>
<b>Evaluating processes and products</b>	<ul style="list-style-type: none"> <li>● explain what changes were made to make their design even better</li> </ul>	<ul style="list-style-type: none"> <li>● consider how they will check if their design is successful</li> <li>● begin to explain how they can improve their original design</li> <li>● evaluate their product, thinking of both appearance and the way it works</li> </ul>	<ul style="list-style-type: none"> <li>● keep checking that their design is the best it can be</li> <li>● check whether anything could be improved</li> <li>● evaluate appearance and function against the original criteria</li> </ul>	<ul style="list-style-type: none"> <li>● explain how well they tested and evaluated their final product</li> <li>● explain how a product is fit for purpose</li> <li>● explain how they would improve their product</li> <li>● explain how different resources would have improved their product</li> <li>● explain if they would need more, or different, information to make their product even better</li> </ul>
<b>Food technology</b>		<ul style="list-style-type: none"> <li>● know what to do to be hygienic and safe</li> <li>● consider what they can do to present their product in an interesting way</li> <li>● start to independently follow a recipe</li> </ul>		<ul style="list-style-type: none"> <li>● explain how their product should be stored, with reasons</li> <li>● set out to grow their own products with a view to making a salad, taking account of time required to grow different foods</li> <li>● explain that foods contain different substances, such as protein</li> <li>● independently follow a recipe</li> </ul>