

Buckstones Primary School							
Progression of Design and Technology Skills							
Area of Study	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	<p>Create collaboratively, sharing ideas, resources and skills. (EAD)</p>	<p>Think of your own ideas for design.</p> <p>Use pictures and words to plan.</p> <p>Design a product for myself, following design criteria.</p> <p>Work in a range of contexts (imaginary, home, story and topic-based).</p>	<p>Think of your own ideas and plan what to do next.</p> <p>Describe designs using pictures, diagrams, models, mock-ups, words.</p> <p>Design a product for myself and others, following design criteria.</p> <p>Work confidently in a range of contexts (imaginary, home, school, story and topic-based etc).</p>	<p>Create a design that meets a range of requirements.</p> <p>Consider the equipment and tools needed when planning.</p> <p>Describe a design using an accurately labelled diagram, in words and step-by-step guide.</p>	<p>Generate more than one idea for how to create a product.</p> <p>Gather information to help design a successful product.</p> <p>Produce a detailed plan with labelled diagrams and a written explanation.</p> <p>Suggest improvements to develop and refine a planned idea.</p>	<p>Generate a range of ideas after collating relevant information (i.e. users' views).</p> <p>Produce a detailed plan, with step-by-step instructions, pattern pieces, cross-sectional diagrams and prototypes.</p> <p>Suggest alternative plans, considering the positive aspects and drawbacks of each.</p>	<p>Use a range of information to inform a design (web-based resources).</p> <p>Produce a detailed plan, with different views).</p> <p>Work within constraints, refining and justifying plans as necessary.</p>
Make	<p>Develop their small motor skills so that they can use a range of tools competently, safely and confidently. (PD)</p> <p>Use a range of small tools, including</p>	<p>Explain what is being made and why.</p> <p>Select and use appropriate tools and equipment and materials for the purpose with increasing accuracy.</p>	<p>Explain what is being made and why the audience will like it.</p> <p>Choose appropriate tools and equipment, describing and explaining why they are being used.</p>	<p>Use a range of tools and equipment accurately.</p> <p>Measure, mark out, assemble and join materials and components with some accuracy.</p>	<p>Use a range of tools and equipment with accuracy.</p> <p>Measure, mark out, join, assemble materials and components with accuracy.</p>	<p>Use a range of tools and equipment expertly.</p> <p>Consider the aesthetic qualities and functionality of my work when making.</p>	<p>Use a range of tools and equipment precisely.</p> <p>Consider the aesthetic qualities and functionality of my product as making it, refining details as</p>

	<p>scissors, paintbrushes and cutlery (PD)</p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. (EAD)</p> <p>Salt dough Mr Men characters & Christmas decorations</p> <p>Chinese dragons</p> <p>Rainbow fish</p> <p>Forest School natural resources</p> <p>Clay hedgehogs</p>	<p>Structures (a home for teddy) -building, estimating, joining and finishing)</p> <p>Moving London postcards (mechanisms) - cutting, joining, finishing and making changes</p>	<p>Puppets - cutting, joining, decorating</p> <p>Winding mechanisms - measuring, joining, finishing</p>	<p>Gift boxes (structures) - cutting, shaping, joining, finishing, measuring, decorating</p> <p>Mechanism - Levers and linkages (recycling) cutting, shaping, joining, finishing, measuring, decorating</p>	<p>Christmas decorations (textiles) cutting, shaping, joining, finishing, measuring, decorating</p> <p>Torches - (electrical components) cutting, joining, finishing, measuring, decorating</p>	<p>Toys (cam mechanisms) cutting, shaping, joining, finishing, measuring, decorating</p> <p>Lego WeDo - Earthquakes building, joining, evaluating different variables</p>	<p>necessary.</p> <p>Christmas calendar (textiles) - cutting, shaping, joining, finishing, measuring, decorating</p> <p>Moving vehicle - prototype pre-Lego WeDo cutting, joining, finishing, measuring, decorating, creating electrical circuits</p> <p>Lego WeDo - Racing Cars building, joining, evaluating different variables</p>
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<p>Evaluate</p>	<p>Return to and build on their previous learning, refining ideas and developing their ability to represent them. (EAD)</p> <p>Share their creations, explaining the process they have used (EAD)</p>	<p>Consider whether the product is fit for purpose, what went well, describe the product, how it works and what could be changed next time</p>	<p>Describe how their own and pre-existing products work, evaluating what went well and what could be done differently when evaluating their own product.</p>	<p>Evaluate own and pre-existing products.</p> <p>Suggest what could be changed to improve a design, beginning to link this to the design brief.</p>	<p>Evaluate the appearance and usability of own and pre-existing products.</p> <p>Explain how the original design could be improved, considering the appearance and usability and linking this to the design brief.</p>	<p>Evaluate the appearance and function of product (own and pre-existing) against the original criteria, saying whether it is fit for purpose and how much a product costs to make.</p> <p>Suggest improvements that could be made, considering materials and methods that have been used.</p>	<p>Evaluate the appearance and test the function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose.</p> <p>Suggest improvements that could be made, considering materials, methods.</p>
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Technical Knowledge		<p>Build structures, exploring how they can be made stronger and more stable.</p> <p>Explore and use mechanisms [e.g. sliders] in their products and ensure the parts move freely.</p>	<p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Explore and use mechanisms [for example, wheels and axles], in their products.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Understand and use mechanical systems in their products [for example, levers and linkages]</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <p>Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs].</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Understand and use mechanical systems in their products [for example, cams].</p> <p>Apply their understanding of computing to program, monitor and control their products</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Understand and use mechanical systems in their products [for example, gears and pulleys].</p> <p>Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].</p> <p>Apply their understanding of computing to program, monitor and control their products.</p>
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Cooking and Nutrition	<p>Supervised weighing, mixing, baking and decorating</p> <p>Easter nests</p> <p>Gingerbread people</p>	<p>Begin to understand that all food comes from plants.</p> <p>Begin to understand that everyone should eat fruit and vegetables every day.</p>	<p>Understand that all food comes from plants.</p> <p>Know that food has to be farmed, grown elsewhere (e.g. home).</p> <p>Understand how to</p>	<p>Start to know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens</p>	<p>Understand that food is grown (such as tomatoes, wheat and potatoes) in the UK, Europe and the wider world.</p> <p>Looking at</p>	<p>Understand that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens</p>	
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