




Curriculum Map For Design and Technology (D&T) – Becoming Designers



<div>Design and Technology (D&T) Curriculum Intent at Ghost Hill</div> <div></div>	<div>“Design is not just what it looks like. Design is how it works” – Steve Jobs</div> <div>At Ghost Hill our intent is to ensure our Design & Technology curriculum provides children with progressive skills, understanding, knowledge and vocabulary to enable them to be resourceful problem solvers. Children at Ghost Hill make real products or prototypes of real products designed to solve problems in ways, which are relevant to the children’s ages and stages of development. Children are encouraged to use their imagination and creativity but also to consider the needs of the product user - be it themselves or another individual or group. Children learn that designing and making is a repetitive process through which they will need to continually evaluate their product by testing their ideas and making improvements. They will also use these important critical thinking skills to critique existing products, their own work and that of others. This is supported by the revisiting of design, make, evaluate throughout each unit.</div>			
<div>Composite <i>(From National Curriculum)</i></div>	<div>Progression Components (The building blocks to National Curriculum Composites)</div>			
<div>By the End of KS1 (Y2)</div>	<div>The Building Blocks of Knowledge in the Early Years Foundation Stage</div>			
	<div>In Early Years these building blocks will be observed and provided through rich opportunities in the environment for children to access independently. Design and Technology is predominantly observed within physical development and expressive art and design.</div>	<div>Year 1</div>	<div>Year 2</div>	
<div>1.1 DESIGN Design purposeful, functional, appealing products for themselves and other users based on design criteria</div>	<div>Nursery</div> <div><ul style="list-style-type: none">Explain what they are making and which materials they are using.</div>	<div>Reception (inc ELG)</div> <div><ul style="list-style-type: none">Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. <i>(Character Virtue – Curiosity)</i>Select materials from a limited range that will meet simple design criteria e.g. shiny.Select and name the tools needed to work the materials e.g. scissors for paper.</div>	<div><ul style="list-style-type: none">Begin to draw on their own experience to help generate ideas and research.Begin to understand the development of existing products: What are they for, how they work and materials used.<i>(Character Virtue – Curiosity)</i>To be introduced to simple design briefs and the target groups for their intended product based on a design</div>	<div><ul style="list-style-type: none">Start to generate ideas by drawing on their own and other people’s experiences.Understand the development of existing products and talk with increased confidence: What are they for, how they work, and materials used. <i>(Character Virtue – Curiosity)</i>Understand and talk more confidently about the design briefs for their intended products based on design criteria.</div>

		<ul style="list-style-type: none"> Share their creations explaining the process they have used. (Character Virtue – Curiosity) 	<p>criteria. (Character Virtue – Curiosity)</p>	
1.2 DESIGN Generate, develop, model and communicate their ideas through talking, drawing templates, mock ups and, where appropriate, information and communication technology			<ul style="list-style-type: none"> Start to suggest ideas and explain what they are going to do. Begin to develop their ideas through talk, drawings and labels. 	<ul style="list-style-type: none"> Begin to develop their design ideas through discussion, observation, drawing and modelling. (Character Virtues – Curiosity / Teamwork) Show increased confidence when developing their ideas through talk, drawings and labels.
2.1 MAKE Select from and use a range of tools and equipment to perform practical tasks [for example cutting, shaping, joining and finishing]	<ul style="list-style-type: none"> Choose the right resources to carry out their own plan. Use one-handed tools and equipment, for example, making snips in paper with scissors. Use a comfortable grip with good control when holding pens and pencils. 	<ul style="list-style-type: none"> Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils, chalk, felt-tips, wax crayons for drawing and writing along with other tools such as paintbrushes, scissors, knives, forks and spoons. (Character Virtue – Curiosity) 	<ul style="list-style-type: none"> Begin to make their design using appropriate techniques. With help measure, mark out, cut and shape a range of materials. Cut and shape fabric and use basic running stitch. Explore using tools e.g., scissors, hole punchers, peelers and knives safely. (Character Virtue – Curiosity) 	<ul style="list-style-type: none"> Begin to select tools and materials and use correct vocabulary to name and describe them. With help measure, mark out and cut with some accuracy. Use tools safely and appropriately e.g., scissors, peelers, knives and graters.
2.2 MAKE Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	<ul style="list-style-type: none"> Make imaginative and complex ‘small worlds’ with blocks and construction kits, such as a city with different buildings and a park. (Character Virtue – Curiosity / Teamwork) Explore different materials freely, to develop their ideas about how to use them and 	<ul style="list-style-type: none"> Explore, use and refine a variety of artistic effects to express their interests and ideas. (Character Virtue – Curiosity) Create collaboratively, sharing ideas, resources and skills. (Character Virtue – Teamwork) 	<ul style="list-style-type: none"> Begin to assemble, join and combine materials and components together using a variety of temporary method e.g. glues or masking tapes. 	<ul style="list-style-type: none"> Start to assemble, join and combine materials in order to make a product. (Character Virtues – Curiosity / Teamwork) Start to choose and use appropriate finishing techniques based on own ideas.

	what to make. (Character Virtue – Curiosity) <ul style="list-style-type: none"> Develop their own ideas and then decide which materials to use to express them. (Character Virtue – Curiosity) 			
3.1 EVALUATE Explore and evaluate a range of existing products	<ul style="list-style-type: none"> Talk about what they see, using a wide vocabulary (C&L) 	<ul style="list-style-type: none"> Return to and build on their previous learning, refining ideas and developing their ability to represent them. (Character Virtue – Curiosity) Say what they like and do not like about items they have made and attempt to say why. Begin to talk about their designs as they develop and identify good and bad points. 	<ul style="list-style-type: none"> When looking at existing products explain what they like and dislike about products and why. Begin to collaboratively rate existing products / prototypes against a given design criteria. (Character Virtue – Teamwork) 	<ul style="list-style-type: none"> Look at a range of existing products, explaining what they like and why. (Character Virtue – Curiosity) Collaboratively rate existing products / prototypes against a given design criteria. (Character Virtue – Teamwork)
3.2 EVALUATE Evaluate their ideas and products against design criteria			<ul style="list-style-type: none"> When product is complete evaluate it against the design criteria by completing simple 'tests' with a colour code response. (Character Virtue – Curiosity) Begin to evaluate their products as they are developed, identifying strengths and possible changes they might make. (Character Virtue – Curiosity) 	<ul style="list-style-type: none"> Evaluate their products as they are developed, identifying strengths and possible changes they might make. (Character Virtue – Curiosity) With confidence, talk about their ideas, saying what they like and dislike about them. When product is complete evaluate it against the design criteria by completing simple 'tests' with a sliding scale response from 1-10. (Character Virtue – Curiosity) Develop growing confidence in identifying changes they would make for improvement. (Character Virtue – Curiosity)
4.1 TECHNICAL KNOWLEDGE Build structures, exploring how they can be made	<ul style="list-style-type: none"> Explore how things work. (Character Virtue – Curiosity) Explore and talk about different forces they can feel. 	<ul style="list-style-type: none"> Start to build structures, joining components together. Join materials in different ways e.g. using tape to attach 		<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. (Character Virtues – Curiosity / Teamwork)

stronger, stiffer and more stable		materials, making simple joins when modelling with play dough. (Character Virtue – Curiosity)		
4.2 TECHNICAL KNOWLEDGE Explore and use mechanisms [for example levers, sliders, wheels and axles], in their products		<ul style="list-style-type: none"> Begin to use scissors to cut straight and curved edges and hole punchers to punch holes. Explore using/holding basic tools safely and confidently e.g., scissors, hole punchers. (Character Virtue – Curiosity) Use adhesives to join materials. 	<ul style="list-style-type: none"> Explore and use mechanisms, e.g. sliders in their products. (Character Virtue – Curiosity) 	<ul style="list-style-type: none"> Explore and use mechanisms, e.g., wheels and axles in their products. (Character Virtue – Curiosity)
5.1 COOKING AND NUTRITION Use the basic principles of a healthy and varied diet	<ul style="list-style-type: none"> Explore and try fruits and vegetables at snack time. (Character Virtue – Curiosity) Begin to talk about why fruits and vegetables come from e.g., trees, brushes, the ground. 	<ul style="list-style-type: none"> Eat fruits and vegetables at snack time. Talk about where certain fruits and vegetables come from e.g., trees, brushes, the ground. (Character Virtue – Curiosity) 	<ul style="list-style-type: none"> Discuss food in terms of a varied diet. 	<ul style="list-style-type: none"> Discuss food in terms of how healthy dishes are. Refer to how dishes can be consumed as part of a varied diet.
5.2 COOKING AND NUTRITION Understand where food comes from	<ul style="list-style-type: none"> Know that they need food and drink to stay healthy. 	<ul style="list-style-type: none"> Begin through discussions to understand why it is important to eat a variety of foods to keep healthy. (Character Virtue – Curiosity) 	<ul style="list-style-type: none"> Discuss where ingredients of chosen dish come from. (Character Virtue – Curiosity) 	<ul style="list-style-type: none"> Discuss with increased confidence where ingredients from chosen dish come from.

