

DT Knowledge and Skills Progression Document

Key Areas	EYFS	Year 1 and 2	Year 3 and 4	Year 5 and 6
Designing	 work independently or in groups to create ideas begin to talk about these ideas begin to record pictorially 	 use own ideas to design something describe how own idea works design a product which moves explain to someone else how they want to make their product make a simple plan before making think of an idea and plan what to do next explain why they have chosen specific textiles 	 prove that a design meets a set criteria. design a product and make sure that it looks attractive choose a material for both its suitability and its appearance use ideas from other people when designing produce a plan and explain it persevere and adapt work when original ideas do not work communicate ideas in a range of ways, including by sketches and drawings which are annotated 	 come up with a range of ideas after collecting information from different sources produce a detailed, step-by-step plan explain how a product will appeal to a specific audience design a product that requires pulleys or gears use market research to inform plans and ideas. follow and refine original plans justify planning in a convincing way show that culture and society is considered in plans and designs

Making	learning to join materials using tape and glue learning to do this independently or in a small group begin to record pictorially experience working with a wide range of construction materials	 use own ideas to make something make a product which moves choose tools and materials and explain why they have chosen them join materials and components in different ways measure materials to use in a model or structure 	 follow a step-by-step plan, choosing the right equipment and materials select the most appropriate tools and techniques for a given task make a product which uses both electrical and mechanical components work accurately to measure, make cuts and make holes know which tools to use for a particular task and show knowledge of handling the tool know which material is likely to give the best outcome measure accurately 	 use a range of tools and equipment competently make a prototype before making a final version make a product that relies on pulleys or gears know which tool to use for a specific practical task know how to use any tool correctly and safely know what each tool is used for explain why a specific tool is best for a specific action
Evaluating	describe how something works have the opportunity to build on previous learning to refine ideas	describe how something works explain what works well and not so well in the model they have made	 explain how to improve a finished model know why a model has or has not been successful evaluate and suggest improvements for design evaluate products for both their purpose and appearance explain how the original design has been improved present a product in an interesting way 	 suggest alternative plans; outlining the positive features and draw backs evaluate appearance and function against original criteria know how to test and evaluate designed products explain how products should be stored and give reasons
Technical knowledge	• knowing how different construction pieces fit together (push, pull, twist)	 make a model stronger and more stable use wheels and axles, when appropriate to do so 	 know how to strengthen a product by stiffening a given part or reinforce a part of the structure use a simple IT program within the design 	 links scientific knowledge to design by using pulleys or gears uses more complex IT program to help enhance the quality of the product produced

			 links scientific knowledge by using lights, switches or buzzers use electrical systems to enhance the quality of the product use IT where appropriate to add to the quality of the product 	use electrical systems correctly and accurately to enhance a given product • know which IT product would further enhance a specific product • use knowledge to improve a made product by strengthening, stiffening or reinforcing
Food technology	begin to know healthy/unhealthy food choices use the simple tools needed for working with food	cut food safely weigh ingredients to use in a recipe describe the ingredients used when making a dish or cake	 describe how food ingredients come together weigh out ingredients and follow a given recipe to create a dish can talk about which food is healthy and which food is not • know when food is ready for harvesting know how to be both hygienic and safe when using food bring a creative element to the food product being designed 	be both hygienic and safe in the kitchen know how to prepare a meal by collecting the ingredients in the first place know which season various foods are available for harvesting explain how food ingredients should be stored and give reasons work within a budget to create a meal • understand the difference between a savoury and sweet dish