DT progression

	Designing	Making	Technical Knowledge	Evaluate	Cooking and Nutrition
EYFS 	• Consider their final outcome before making. • Choose own resources and materials • Begin to use the language of designing and making, e.g. join, build and shape. • Learning about planning and adapting initial ideas to make them better.	• **PRACTICAL TASKS** • To know the names of tools • Cut shapes using scissors and other modelling tools. • Use tools such as scissors, staplers, clay tools, split pins and shape cutters competently and appropriately. • Build a construction/ sculpture using a variety of objects from observation or imagination e.g. recycled, natural and manmade materials. •	• To learn how to use a range of tools, e.g. scissors, hole punch, stapler, woodworking tools, rolling pins, pastry cutters • Learn how everyday objects work by dismantling things	**EXISTING PRODUCTS** • Play with and explore a range of existing products • Explore/Talk about how they work • To share their creations • Begin to talk about changes made during the making process, e.g. making a decision to use a different joining method	• To know how to work safely and hygienically • To use non- statutory measures (spoons, cups) • To use some cooking techniques (spreading, cutting) – Sandwiches
Year 1 	• Suggest ideas and explain what they are going to do • Identify a target group for what they intend to design and make • Draw simple designs for products •	• Select tools and use them with control to perform tasks e.g. cutting or joining • Apply the language of measures/comparisons when making	• Explore how materials can be made stiffer and stronger (layering, shaping) • Explore how shape, height and materials can change the stability of structures (e.g. bridge) • Explore how to make wheels and axles •	• Talk about the materials used • Suggest what the product is for (purpose) and how well it works (function) • Can describe how their product works (function), what it is made of (material) and what it is used for (purpose)	• Use basic food handling, hygienic practices and personal hygiene • Cut, grate, spread and hand peel ingredients safely and hygienically. • Say where food comes from and know which food is grown
Year 2 	• **Make simple drawings and label parts** • Identify a purpose for what they intend to design and make • Collaboratively identify simple design criteria	**PRACTICAL TASKS** • Select tools and describe why they are using them • Cut, join or shape in different ways to make a product successfully	• Explore how materials can be made stiffer and stronger • **Explores ways to make pictures move in different directions (sliders, wheels, tabs, flaps)**	• **Play with and explore a range of existing products:** • Notice and describe why some materials are better suited for products than others • Evaluate their ideas against design criteria, thinking about what is working well and what might need to be done differently	• Follow safe procedures for food safety and hygiene • Measure or weigh using measuring cups or electronic scales. • Understand where food comes from. • Chop, slice and peel food with a variety of equipment

Year 3 	• Identify a purpose and establish criteria for a successful product. • Make a technical drawing with labels when designing	**PRACTICAL TASKS** • Select tools and techniques specific to the purpose of making their product • Measure, mark out, cut, score and assemble components with more accuracy	• Recognise the role a base play in keeping a structure stable • Apply understanding of how squares, triangle and arches to help strengthen or reinforce taller structures. •	**EXISTING PRODUCTS** • Know what makes the product 'good/fit for purpose' and think about how that could help with their own ideas **THEIR IDEAS AND PRODUCTS** • Identify what is going well and could be improved against the design criteria	
Year 4 	• Make labelled technical drawing from different views showing specific features • Plan the methods that they will be using, trial them and then evaluate their effectiveness e.g., types of joins • Use Exploded diagrams when designing	**PRACTICAL TASKS** • Measure, mark out, cut, join shape a range of materials • Select tools needed to cut harder materials. • Join with a variety of materials and techniques	• Understand how a structure with moving parts can be strengthened and stiffened by use of a base, shape reinforcements and materials choice (e.g. chassis base, for a car) • Understand and use electrical systems in their product [simple series circuits and motors]	**EXISTING PRODUCTS** • Make suggestions about the types of products they could explore linked to the problem they want to solve • Disassemble products to understand how they work or fit together **THEIR IDEAS AND PRODUCTS** • Evaluate their ideas and products against the design criteria.	• Follow a recipe with several stages and processes • Understand seasonality and the advantages of eating seasonally • Prepare ingredients hygienically using appropriate utensils. • Measure ingredients to the nearest gram accurately
Year 5 	• Identify a purpose for their product • Draw up a specification for their design • Identify great designers and their work and use research of designers to influence work • Create prototypes to show ideas	**PRACTICAL TASKS** • Select tools needed to cut harder materials. • Use a range of measurements • Use tools to hold materials in place	• Understand how tall structures can be stiffened and strengthened by use of a base, shapes and materials choices • To combine mechanisms – pulleys and cams to create movement	**EXISTING PRODUCTS** • Disassemble products to understand and compare which parts make it function and which parts make it look appealing. **THEIR IDEAS AND PRODUCTS** • Evaluate their ideas and products against the design criteria. • Becomes more able to ask questions to themselves to self-reflect and help others reflect	• Follow a recipe with several stages and processes • Understand seasonality and the advantages of eating seasonally • Use the information of food labels • Apply the rules for basic food hygiene and other safe practices *e.g. hazards relating to the use of ovens*

Year 6 	• Test aspects of the design by modelling in a variety of ways • Identify great designers and their work and use research of designers to influence work	**PRACTICAL TASKS** • Select tools needed to cut and join	• Build on understanding of a base, use of shape and materials to stiffen and strengthen and reinforce • Understand and use mechanical systems in their products - gears, pulleys, cams, levers and linkages • Understand and use electrical systems in their product that employ a number of components (different types of circuits, switches and bulbs)	• Use simple market research to help suggest the types of products to investigate and analyse • Research products and their functionality • Evaluate against their design criteria and notice when it might be helpful to alter the criteria for a better outcome • Reviews 'how things are going' and change tack if necessary • Change plans when they have had a better idea	• Follow a recipe with several stages and processes and restrictive ingredients available • Understand seasonality and the advantages of eating seasonally • Apply the rules for basic food hygiene and other safe practices *e.g. hazards relating to the use of ovens*