DT Pathway

	Nursery	Reception	Year 1	Year 1/Year 2	Year 2	Expectation
DESIGN **Thinking** **Planning** **Talking** **Observing** **Sketching**	Explore different materials freely, to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them	Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills.	Can I think of some ideas of my own? Can I use pictures and words to plan? Can I design a product for myself following design criteria? Can I explain what I am making? To explore characteristics of everyday objects & shapes and to use mathematical language to describe them when engaged in design process	Can I think of some ideas of my own? Can I explain what I want to do? Can I describe my design by using pictures, model mock-ups and words? Can I design a product for others and myself following design criteria? Can I explain what I am making and why?	Can I think of ideas and plan what to do next? Can I describe my design by using pictures, diagrams, model mock-ups, words and ICT? Can I design a product for others following design criteria Can I explain what I am making and why my audience will like it?	**DESIGN** Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through an appropriate medium, e.g. talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
MAKE **Selecting** (materials) **Processing** (cutting / folding)	Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.	Select, rotate and manipulate shapes to develop spatial reasoning skills.	Can I select tools and equipment to cut, shape, join and finish? Can I choose the right materials?	Can I select tools and equipment to cut, shape, join and finish? Can I describe which tools I am using and why?	Can I choose the best tools and materials? Can I give a reason why these are best tools or materials?	**MAKE** Select from and use a range of tools and equipment to perform practical tasks such as cutting,

DT Pathway

Using **Assembling**	Join different materials and explore different textures. Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc. Combine shapes to make new ones – an arch, a bigger triangle, etc. Choose the right resources to carry out their own plan.		Can I think of interesting ways of decorating food I have made, e.g. cakes?	Can I choose materials and explain why they are being used?	Can I join things (materials/ components) together in different ways? Can I choose materials and explain why they are being used depending on their characteristics?	shaping, joining and finishing Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
<u>EVALUATE</u> **Reflecting** **Comparing** **Judging** **Critiquing**	Can I talk about my own work?	Can I talk about my own work?	Can I talk about my own work? Can I talk about existing products and say what is good and not so good about them?	Can I describe how existing products work? (when linking to quality) Can I talk about my own work linked to what I was asked to do? Can I talk about my own work and things that other people	Can I give a reason why the materials / tools I used are best? Can I describe what went well with my work? Can I evaluate what I would do differently if I did it again and why?	**EVALUATE** Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria

DT Pathway

				have done? (peer evaluation)	Can I judge my work against the design criteria?	
<u>TECHNICAL KNOWLEDGE</u> **Applying (knowledge)** **Demonstrating (understanding)** **Sequencing – (identifying the sequence of logical steps in order to build structure)** **Recognising / identifying (properties)**			**Construction:** Can I say how to make products stronger? Can I use levers or slides in my work? **Cooking and nutrition**: Can I cut food safely? *(linked with health and safety awareness during making process)* Can I use technical vocabulary – e.g. describe the texture of foods? Can I wash their hands and make sure that surfaces are clean? Can I think of interesting ways of decorating food I	**Use of materials:** Can I measure materials to use in a model or structure? Can I join material in different ways? Can I use joining, folding or rolling to make it stronger? Can I use levers or slides in my work? **Cooking and nutrition:** Can I describe the properties of the ingredients I am using and why it is important to be varied in my diet? Can I explain what it means to be hygienic? Can I keep a hygienic kitchen?	**Mechanisms:** Can I join materials together as part of a moving product? Can I add a specific design to my product? Can I use axels and wheels in my work? **Textiles:** Can I measure textiles? Can I join textiles together to make something? Can I cut textiles? Can I explain why they chose a certain textile?	**Technical knowledge:** Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms, such as levers, sliders, wheels and axles, in their products. **Cooking and Nutrition:** Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from

DT Pathway

			have made, e.g. cakes? Can I say what healthy foods are? Can I say where some food comes from?	Can I say where food comes from i.e. animals, underground, over ground etc?		
Key vocab	**Nursery** **Food** Fruit Vegetable Taste Nutrients Texture Appearance Healthy Chop Claw Bridge Spread Weigh **Structures** Freestanding structure Stability Buttress **Mechanisms** Wheel Body Joining	**Reception** **Food** Fruit Vegetable Nutrients Taste Texture Appearance Healthy Chop Claw Bridge Spread Weigh **Structures** Freestanding structure Stability Buttress **Mechanisms** Axle Wheel Body	**Year 1** **Food** Hygiene Healthy and safety Eatwell plate Dough Knead Prove Unleavened Yeast Weigh **Structures** Freestanding structure Stability Joining Buttress Strengthen Support Rigidity Brick bonding Prototype **Mechanisms – sliders and levers** Card strip		**Year 2** **Mechanisms – wheels and axles** Axle Wheel Body Chassis Fixed/free mechanism **Food** Hygiene Health and safety Eatwell plate Balanced/healthy diet Five food groups – fruit and veg, carbohydrate, protein, dairy, fat and sugar Topping Chop Grate Spread Claw Bridge **Textiles – templates and joining techniques** Joining Techniques Template	

DT Pathway

	Winding	Joining	Slot Slider Pivot Movement	Pattern pieces Sew Running stitch Back stitch Over stitch

End of KS Expectations: Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts, such as the home and school, gardens and playgrounds, the local community, industry and the wider environment.