Braeburn DT Knowledge Progression
I can statements are the lesson objectives for the statements above.

EYFS	Year 1/2	Year 3/4	Year 5/6
Design ▪Experimenting with colour, design, texture, form and function (I can show what I have made) ▪children have and develop their own ideas, make links between ideas, and develop strategies for doing things (I can say why I did what I did)	**Design** l;l ▪Design purposeful, functional, appealing products for themselves and other users based on design criteria generate, (I can design products that are useful and look good.) ▪Develop, model and communicate their ideas through talking, drawing, templates. (I can think of ideas and explain them in different ways, including drawing and talking about them.) ▪Design products that have a clear product and intended user. (I can say who and what it is for) ▪Explore objects and designs to identify likes and dislikes of the design. (I can say what is I like and don't like about it)	**Design** ▪Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. (I can research and design a range of interesting, useful and appealing products that are aimed at certain people or groups.) ▪Apply appropriate cutting and shaping techniques. (I can select from and use tools and equipment to perform tasks (for example cutting, shaping, joining and finishing). ▪Understand the need for a seam allowance. (I know why we need a seam allowance)	**Design** ▪Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. (I can research and design a range of interesting, useful and appealing products that are aimed at certain people or groups.) ▪ Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design (I can develop and communicate my ideas through discussion.)

		▪Design with purpose by identifying opportunities to design (I know why and what is important in my design)	▪Measure accurately and calculate ratios of ingredients to scale up or down from a recipe. (I can work out how to make a recipe for more people) ▪Create and refine recipes including ingredients, methods, cooking times and temperatures. (I know how to alter a recipe)
Make ▪Safely use and explore a variety of materials, tools and techniques. (I can safely experiment with tools) ▪Children investigate and experience things, and 'have a go. (I can explore and experiment with how items can be used)	**Make** ▪Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] (I can select the right kind of tools and materials based on what the materials are like.) ▪Cut peel or grate ingredients safely and hygienically (I can use a peeler and grater) ▪Measure or weigh using measuring cups or electronic scales. (I can use a scales) ▪Assemble or cook ingredients.	**Make** ▪Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately (I can select from and use tools and equipment to perform tasks (for example cutting, shaping, joining and finishing).) ▪Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities world (I can select from and use a wider range of materials, including	**Make** ▪ Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately (I can select from and use tools and equipment to perform tasks (for example cutting, shaping, joining and finishing).) ▪ Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities .

	(I can make food by thinking about how I prepare the ingredients) ▪Cut materials safely using tools provided. (I can use the right kind of tools based on what the materials are like.) ▪Measure and mark out to the nearest cm. (I can use a ruler to measure accurately) ▪Join textiles using a running stitch. (I can choose the right tools to make something with.)	construction materials, textiles and ingredients, according to how useful and attractive they are.) ▪Prepare ingredients hygienically using appropriate utensils. (I can select the correct tool to prepare an ingredient) ▪Measure ingredients to the nearest gram accurately. (I can use a scale to measure grams) ▪Follow a recipe. (I can prepare and cook a variety of dishes using a range of cooking techniques.) ▪Cut materials accurately and safely by selecting appropriate tools. (I can select and use the correct tool for the task) ▪Measure and mark out to the nearest millimetre. (I can use a ruler to measure accurately) ▪Join textiles with appropriate stitching.	(I can select from and use a wider range of materials, including construction materials, textiles and ingredients, according to how useful and attractive they are.) ▪Demonstrate a range of baking and cooking techniques. (I can prepare and cook a variety of dishes using a range of cooking techniques.) ▪Cut materials with precision and refine the finish with appropriate tools (I can select and use the correct tool for the task) ▪Create objects that employ a seam allowance. (I know how and why we need to leave a seam allowance) ▪Join textiles with a combination of stitching techniques. (I know and can use more than one stitching technique)

		(I can join material using stitching)	▪Develop a range of practical skills to create products. (I can develop skills such as cutting, drilling,and screwing, nailing and sanding) ▪Make products through stages of prototypes, making and continual refinements. (I can make a prototype and use it to improve it)
Evaluate ▪Share their creations, explaining the process they have used. (I can talk about what I have made)	**Evaluate** ▪Explore and evaluate a range of existing products (I can explore products, say how good they are and explain how they could be better) ▪Evaluate their ideas and products against design criteria (I can explore products, say how good they are and explain how they could be better) ▪Suggest improvements to existing designs. (I can explain how good my own product is and explain ways I could make it better)	**Evaluate** ▪ Investigate and analyse a range of existing products e.g Picture book with movement mechanisms evaluate their ideas and products against their own design criteria and consider the views of others to improve their work and understand how key events and individuals in design and technology have helped shape the world. (I understand how people in design and technology have helped shape the world.)	**Evaluate** ▪ Investigate and analyse a range of existing products (I can investigate products and discuss strengths and weaknesses.) ▪ Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work (I can give examples of how my design fits the original brief and can suggest how i could improve it) ▪ Understand how key events and

	▪Explore how products have been created. (I can explain how good my own product is and explain ways I could make it better)	▪Improve upon existing designs giving reasons for choices. (I can explain how good my own product is, listen to the views of others and explain ways I could make it better.) ▪Identify some of the great designers in all areas to generate ideas for design. (I understand how people in design and technology have helped shape the world.) ▪Disassemble products to understand how they work. (I can explore products, say how good they work)	individuals in design and technology have helped shape the world. (I can discuss how design and technology has and continues to change)
	Technical knowledge ▪Build structures, exploring how they can be made stronger, stiffer and more stable ▪Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	**Technical knowledge** ▪Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. (I can build structures and explore how they can be made stronger, stiffer and steadier.)	**Technical knowledge** ▪ Apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ Understand and use mechanical systems in their products [for example, gears, pulleys, cams,

	▪Demonstrate a range of cutting and shaping techniques. Such as glueing, hinges or combining materials to strengthen. ▪Model designs using software. ▪Create products using levers, wheels and winding mechanisms	. ▪Use software to design and represent product designs. (I can use computing to design, program, monitor or control my product.)	levers and linkages] (I can explore and use things like gears, pulleys, cams, levers and linkages in my product.) ▪ Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] (I understand and can use electrical systems, such as series circuits incorporating switches, bulbs, buzzers and motors in my product.) ▪ Apply their understanding of computing to program, monitor and control their products (I can use computing to design, program, monitor or control my product.) ▪Understand the importance of correct storage and handling of ingredients.

			(I understand that foods need to be stored and handled correctly and why) ▪Use prototypes,cross sectional diagrams and CAD to represent design. (I can use technology to support my design)