Progression in Design Technology

Design Technology				
	Year 3	**Year 4**	**Year 5**	**Year 6**
Design	I can identify the function and construction of different products	I can identify and compare the function and construction of different products	I can identify and compare the function, aesthetics, construction of different products	I can identify and compare the function, aesthetics, construction and impact on the environment of different products
	I can design a functional product based on a criteria and explain my ideas to someone else	I can design a functional product based on a criteria and communicate my ideas using annotates sketches	I can design a functional and innovative product and communicate my ideas using cross-sectional or exploded diagrams. I can develop my own design criteria.	I can design a functional and innovative product and communicate my ideas using computer-aided design. I can develop my own design criteria.
	I can produce a step by step pictorial plan	I can produce a step by step pictorial plan, using ideas from other people to help me make improvements	I can produce a step by step plan, using market research to inform my decisions	I can produce and present a detailed step by step plan using, using market research to inform and justify my decisions
	I understand who my target audience is	I can select and explain my target audience	I can explain how my product will appeal to my target audience	I can explain how my product will appeal to my target audience, using market research to justify my design choices
	I can select from given appropriate tools and materials	I can select from given appropriate tools, materials and techniques for a task	I can select the most appropriate tools, materials and techniques for a task	I can select the most appropriate tools, materials and techniques for a task, and justify my choices
Make	I can follow my plans correctly	I can follow and refine my plans, having explored different materials	I can follow and refine my plans, having explored different materials and techniques	I can follow and refine my plans using prototypes to inform any changes
	I can use tools and equipment correctly and safely to perform a task (e.g. cutting, shaping, joining and finishing)	I can use different tools and equipment correctly and safely to perform a task (e.g. cutting, shaping, joining and finishing)	I can use a wide range of tools and equipment safely and confidently (e.g. cutting, shaping, joining and finishing)	I can use a wide range of different tools and equipment safely and confidently (e.g. cutting, shaping, joining and finishing)
	I understand that learning new skills may be hard and require perseverance and resilience	I can persevere and show resilience if my original ideas do not work	I can persevere and adapt my plan should I need to	I can persevere and adapt my plan should I need to, and support others to do the same
Evaluate	I can reflect on my skills and evaluate my design against a criteria, through discussion	I can reflect on my skills and evaluate my design against a criteria using a checklist	I can reflect on my skills and evaluate my product against a criteria, suggesting future improvements if needed	I can reflect on my skills and evaluate my product against a criteria, suggesting future improvements for my own and others' products, if needed
	I can identify key events and individuals in design and technology, related to this topic	I can identify key events and individuals in design and technology, related to this topic	I understand how key events and individuals in design and technology have helped shape the world	I understand how key events and individuals in design and technology have helped shape the world

Technical Knowledge				
Structures	I can apply my understanding of how to strengthen, stiffen and reinforce shell structures.			I can apply my understanding of how to strengthen, stiffen and reinforce frame structures.
Electrical Systems		I can understand and use electrical systems in my product [for example, series circuits incorporating switches, bulbs, buzzers and motors] based on control		I can understand and use electrical systems in my product [for example, series circuits incorporating switches, bulbs, buzzers and motors] based on control and monitoring. Apply their understanding of computing to program, monitor and control their products.
Textiles		I can cut, shape, join textiles.	I can cut, shape, join and finish textiles.	
Mechanisms	I can understand and use mechanical systems in my product [levers and linkages]		I can understand and use mechanical systems in my product [gears, pulleys, cams]	
Cooking and Nutrition				
Understand and apply the principles of a healthy and varied diet	I can apply my Scientific knowledge to explain why my ingredients are healthy and balanced.	I can select healthy ingredients from a range suggested by my teacher, and explain the health benefits of the ingredients I have chosen.	I can discuss different methods of cooking and how this can impact how healthy a food or meal is.	I can use the knowledge I have gained so far to make a healthy food or meal. For example: The health benefits of different foods and food groups, and different methods of cooking, and how ingredients are prepared and stored (e.g. fresh vs tinned, natural or processed).
Prepare and cook a variety of savoury dishes using a range of cooking techniques	I can prepare food safely and hygienically.	I can prepare food safely and hygienically.	I can prepare a wider range of food safely and hygienically, and use different cooking techniques.	I can prepare a wider range of food safely and hygienically, and use different cooking techniques.
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	I know where and how ingredients are grown, reared and caught.	I know that different food grows at different times of year (seasonality).	I know where and how ingredients are grown, reared, caught and processed.	I can identify what time of year different food grows (seasonality).