Progression of Skills: Design and Technology

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Designing	• I am beginning to design purposeful, functional, appealing products for themselves and other users based on design criteria. • I am beginning to generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. • I can describe how something works. • I can make a simple plan before making products.	• I can design purposeful, functional, appealing products for themselves and other users based on design criteria. • I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. • I can explain why I have chosen specific textiles. • I can think of an idea and plan what I want to do next.	• I am beginning to 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 am beginning to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. • I can design a product and make sure that it looks attractive.	• I can 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 with growing confidence. • I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design with growing confidence. • I can use ideas from other people when I am designing. • I can produce a plan and explain it.	• I can 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 to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. • I can come up with a range of ideas after collecting information from different sources. • I can produce a detailed step-by-step plan. • I can make a prototype before making a final version.	• I can confidently 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 confidently generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. • I can use market research to inform my plans and ideas.
Making	• I am beginning to select from and use a range of tools and	• I can select from and use a range of tools and equipment to	• I am beginning to select from and use a wider range of tools	• I can select from and use a wider range of tools and equipment	• I can select from and use a wider range of tools and equipment	• I can confidently select from and use a wider range of tools

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	equipment to perform practical tasks with prompts e.g. cutting, shaping, joining and finishing, accurately. • I am beginning to select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. • I can use my own ideas to make something. • I can cut food safely. • I can choose appropriate resources and tools.	perform practical tasks with prompts e.g. cutting, shaping, joining and finishing, accurately. • I can select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. • I can choose tools and materials and explain why I have chosen them. • I can join materials and components in different ways.	and equipment to perform practical tasks e.g. cutting, shaping, joining, and finishing, accurately. • I am beginning to select from and use a wider range of materials and components including construction materials and ingredients, according to their functional properties and aesthetic qualities. • I can follow a step-by-step plan choosing the right equipment and materials. • I can choose a textile for both its suitability and it's appearance.	to perform practical tasks with growing confidence e.g. cutting, shaping, joining, and finishing, accurately. • I can select from and use a wider range of materials and components including construction materials and ingredients, according to their functional properties and aesthetic qualities with growing confidence.	to perform practical tasks e.g. cutting, shaping, joining, and finishing, accurately. • I can select from and use a wider range of materials and components including construction materials and ingredients, according to their functional properties and aesthetic qualities. • I can use a range of tools and equipment competently.	and equipment to perform practical tasks e.g. cutting, shaping, joining, and finishing, accurately. • I can confidently select from and use a wider range of materials and components including construction materials and ingredients, according to their functional properties and aesthetic qualities. • I can work within a budget.
Evaluating	• I am beginning to explore and evaluate a range of existing products. • I am beginning to evaluate my ideas and products against design criteria. • I can explain to someone else how I	• I can explore and evaluate a range of existing products. • I can evaluate my ideas and products against design criteria. • I can explain what went well with my work.	• I am beginning to investigate and analyse a range of existing products. • I am beginning to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work.	• I can investigate and analyse a range of existing products with growing confidence. • I can evaluate my ideas and products against my own design criteria and consider the views of others to improve	• I can investigate and analyse a range of existing products. • I can evaluate my ideas and products against my own design criteria and consider the views of others to improve my work. • I am beginning to understand how key	• I can confidently investigate and analyse a range of existing products. • I can confidently evaluate my ideas and products against my own design criteria and consider the views of others to improve my work.

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	want to make a product.		• I am beginning to understand how key events in design and technology have helped shape the world. • I can prove that my design meets some set criteria.	my work with growing confidence. • I understand how key events in design and technology have helped shape the world. • I can evaluate and suggest improvements for my design. • I can evaluate products for both their purpose and appearance. • I can explain how I have improved my original design. • I can present a product in an interesting way.	events and individuals in design and technology have helped shape the world. • I can suggest alternative plans outlining the positive features and draw backs. • I can explain how a product will appeal to a specific audience. • I can evaluate appearance and function against original criteria.	• I understand how key events and individuals in design and technology have helped shape the world. • I can follow and refine my plans. • I can justify my plans in a convincing way. • I can show that I consider culture and society in my plans and designs. • I can evaluate my product against clear criteria.
Technical knowledge	• I am beginning to build structures, exploring how they can be made stronger, stiffer and more stable. • I am beginning to explore and use mechanisms e.g. levers, sliders, wheels and axles, in my products. • I can make a product which moves. • I can make my model stronger.	• I can build structures, exploring how they can be made stronger, stiffer and more stable. • I can explore and use mechanisms e.g. levers, sliders, wheels and axles, in their products. • I can measure materials to use in a model or structure.	• I am beginning to apply my own understanding of how to strengthen, stiffen and reinforce more complex structures. • I am beginning to understand and can use, with support, mechanical systems in my products e.g. example, gears, pulleys, cams, levers and linkages. • I am beginning to understand and, with	• I can apply my own understanding of how to strengthen, stiffen and reinforce more complex structures with growing confidence. • I understand and am beginning to use mechanical systems in my products e.g. example, gears, pulleys, cams, levers and linkages. • I understand and am beginning to use electrical systems in	• I am can apply my own understanding of how to strengthen, stiffen and reinforce more complex structures. • I am beginning to understand and can use mechanical systems in my products e.g. example, gears, pulleys, cams, levers and linkages. • I understand and can use electrical systems in my	• I can confidently apply my own understanding of how to strengthen, stiffen and reinforce more complex structures. • I understand and can confidently use mechanical systems in my products e.g. gears, pulleys, cams, levers and linkages. • I understand and can confidently use electrical systems in my products e.g.

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			support, use electrical systems in my products e.g. series circuits including switches, bulbs, buzzers and motors. • I am beginning to, with support, apply my understanding of computing to program, monitor and control my products. • I can make a product which uses both electrical and mechanical components. • I can work accurately to measure make cuts and make holes.	my products e.g. series circuits including switches, bulbs, buzzers and motors. • I am beginning to, independently, apply my understanding of computing to program, monitor and control my products. • I can measure accurately. • I can persevere and adapt my work when my original idea does not work.	products e.g. series circuits including switches, bulbs, buzzers and motors. • I can apply my understanding of computing to program, monitor and control my products. • I can suggest alternative plans outlining the positive features and draw backs.	series circuits including switches, bulbs, buzzers and motors. • I can confidently apply my understanding of computing to program, monitor and control my products. • I can explain how products should be stored and give a reason.
Food and nutrition	• I am beginning to use the basic principles of a healthy and varied diet to prepare dishes. • I am beginning to understand where food comes from. • I can cut food safely.	• I can use the basic principles of a healthy and varied diet to prepare dishes. • I understand where food comes from. • I can describe the ingredients I am using	• I am beginning to understand and apply, with support, the principles of a healthy and varied diet. • I am beginning to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques, with support. • I am beginning to understand	• I understand and am beginning to apply the principles of a healthy and varied diet. • I am beginning to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques, independently. • I have a growing understanding of seasonality, and	• I can apply the principles of a healthy and varied diet. • I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. • I understand seasonality, and know where and how a variety of ingredients are grown, reared,	• I confidently apply the principles of a healthy and varied diet. • I can confidently prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. • I have a good understanding of seasonality, and know where and how a variety of

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			seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. • I can describe how food ingredients come together.	know where and how a variety of ingredients are grown, reared, caught and processed. • I know how to be both hygienic and safe when using food.	caught and processed. • I show that I can be both hygienic and safe in the kitchen.	ingredients are grown, reared, caught and processed. • I can work within a budget
Key Vocabulary	Tool technique and equipment names, food group names, cut, peel, grate.	Improve, measuring vocabulary, food group vocabulary, axles.	Prototype, inventors, designers, engineer, chef, circuit, levers, slicing, spreading, kneading, processed .	Program, annotate, levers, pneumatics.	Sustainable materials, cams, gears and pulleys,	Aesthetics, hydraulics, pneumatics. budget