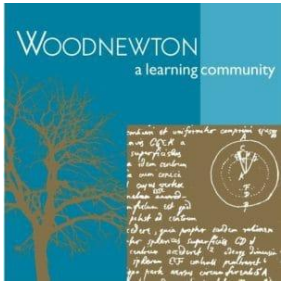

Design & Technology Knowledge and Skills Progression Map

Design & Technology programme of study: National Curriculum Aims
The National Curriculum for Design & Technology aims to ensure that all children: • develop the creative, technical and practical expertise needed to perform everyday • tasks confidently and to participate successfully in an increasingly technological world • build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users • critique, evaluate and test their ideas and products and the work of others • understand and apply the principles of nutrition and learn how to cook.

	Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	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 [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].						
Design	I can use what I have learnt about media and materials in original ways, thinking about uses and purposes. I can represent my own ideas, thoughts and feelings through design.	I can design purposeful, functional, appealing products for myself and other users based on a design criteria I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and, where appropriate,	I can design purposeful, functional, appealing products for myself and other users based on a design criteria I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and, where appropriate,	I can use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, and aimed at particular individuals or groups. I can generate, develop, model and communicate my ideas through discussion, annotated sketches,	I can use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, and aimed at particular individuals or groups. I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-	I can use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, and aimed at particular individuals or groups. I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-	I can use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, and aimed at particular individuals or groups. I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-

		information and communication technology	information and communication technology	cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
Make	I can safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	I can select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. I can select from and use a wide range of materials and components, including construction materials, textiles and ingredients,	I can select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. I can select from and use a wide range of materials and components, including construction materials, textiles and ingredients,	I can 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 a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional	I can 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 a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional	I can 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 a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional	I can 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 a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional

		according to their characteristics	according to their characteristics	properties and aesthetic qualities	properties and aesthetic qualities	properties and aesthetic qualities	properties and aesthetic qualities
Evaluate		I can explore and evaluate a range of existing products. I can evaluate my ideas and products against a design criteria	I can explore and evaluate a range of existing products. I can evaluate my ideas and products against a design criteria	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 understand how key events and individuals in design and technology have helped shape the world	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 understand how key events and individuals in design and technology have helped shape the world	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 understand how key events and individuals in design and technology have helped shape the world	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 understand how key events and individuals in design and technology have helped shape the world
Technical Knowledge		I can build structures, exploring how they can be made stronger, stiffer and more stable.	I can build structures, exploring how they can be made stronger, stiffer and more stable.	I know how to strengthen, stiffen and reinforce more complex structures. I understand and can use mechanical systems in my	I know how to strengthen, stiffen and reinforce more complex structures. I understand and can use	I know how to strengthen, stiffen and reinforce more complex structures. I understand and can use	I know how to strengthen, stiffen and reinforce more complex structures. I understand and can use

		I can explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	I can explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	products [for example, gears, pulleys, cams, levers and linkages]. I understand and can use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. I can apply my understanding of computing to program, monitor and control my products.	mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages]. I understand and can use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. I can apply my understanding of computing to program, monitor and control my products.	mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages]. I understand and can use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. I can apply my understanding of computing to program, monitor and control my products.	mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages]. I understand and can use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. I can apply my understanding of computing to program, monitor and control my products.
Cooking and Nutrition	I know the importance of a healthy diet,	I can use the basic principles of a healthy and varied diet	I can use the basic principles of a healthy and varied diet	I understand and can apply the principles of a	I understand and can apply the principles of a	I understand and can apply the principles of a	I understand and can apply the principles of a

		to prepare dishes. I understand where food comes from.	to prepare dishes. I understand where food comes from.	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, caught and processed.	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, caught and processed.	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, caught and processed.	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, caught and processed.