Design Technology Progression Map

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design						
Developing, planning and communicating ideas	Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.	Design purposeful, functional, appealing products for themselves and other users based on design criteria. Suggest ideas and explain what they are going to do. Identify a target group for what they intent on designing and making. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.	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. Identify which parts support and strengthen simple structures. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Consider its purpose and the user/s.	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. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Evaluate products and identify criteria that can be used for their own designs. Understand how key events and individuals in design and	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. Investigate existing products, pop-up books, toys with cams and fabric toys and how the different pieces are joined. Understand how key events and individuals in design and technology have helped to shape the world. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-	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. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Examined a range of electrically powered products linked to their design and understands the features within the product to help them

				technology have helped to shape the world.	sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.	finalise their design criteria.
Make						
Working with tools, equipment, materials and components to make quality products	Select from and use a range of tools and equipment to perform practical tasks (or example, cutting, shaping, joining and finishing). Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape. Be able to cut and join at least 2 different materials safely, using appropriate techniques/tools with some accuracy. Select from and use a wide range of materials and components,	Select from and use a range of tools and equipment to perform practical tasks (or example, cutting, shaping, joining and finishing). Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape. Look at a range of sources to identify the features of their product. Select from and use a wide range of materials and components, including construction materials, textiles and	Select from and use a wider range of tools and equipment to perform practical tasks (or example, cutting, shaping, joining and finishing), accurately. Use temporary and permanent joining techniques and a range of framework and textile materials to build structures. 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.	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. 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. Construct a simple circuit, switch and bulb that lights up. Make their own switch and know how to place it in a	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. 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. Have made models using a construction kit to understand movement of cam, know terms cam and follower.	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. 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. Use CAD software to design a net of a car body which will be laser cut from card. Understand and use electrical systems in their products (for

				circuit to control the bulb, using battery safely.		example, series circuits, motors etc).
	including construction materials, textiles and ingredients, according to their characteristics. Use simple finishing techniques to improve the appearance of their product.	ingredients, according to their characteristics. Use finishing techniques to improve the appearance of their product.				

Evaluate						
Evaluating processes and products	Explore and evaluate a range of existing products. Evaluate their ideas and products against design criteria and discuss how well it works in relation to its purpose.	Evaluate against their design criteria. Evaluate their products as they are developed, identifying strengths and possible changes they might make. Talk about their ideas, saying what they like and dislike about them.	Investigate and analyse a range of existing products and use this to evaluate their own. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Dissemble and evaluate similar products.	Investigate and analyse a range of existing products and use this to evaluate their own. Evaluate their ideas and products against their own design criteria and consider ways of improving their work. Evaluate their own and each other's products, carrying out simple tests.	Investigate and analyse a range of existing products and use this to evaluate their own. Evaluate their ideas and products against their own design criteria and consider ways of improving their work. Evaluate their own and seek evaluation from others.	Investigate and analyse a range of existing products and use this to evaluate their own. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work (include diagrams and drawings).

Technical Knowledge						
Making products work	Build structures, exploring how they can be made stronger, stiffer and more stable.	Research, discuss and build structures, exploring how they can be made stronger,	Apply their understanding of how to strengthen, stiffen and reinforce structures.	Apply their understanding of how to strengthen, stiffen and reinforce complex structures.	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

	They should know the correct technical vocabulary for the products they are making. Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products.	stiffer and more stable. They should know the correct technical vocabulary for the products they are making. Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products.	Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages).	Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages). Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors).	Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages).	Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages). Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors). Apply their understanding of computing to program, monitor and control their products.
Cooking and Nutrition						
Where food comes from, food preparation, cooking and nutrition	That all food comes from plants or animals. How to name and sort foods into the five groups in the eat well plate. That everyone should eat at least five	That all food comes from plants or animals. That food has to be farmed, grown elsewhere (e.g. home) or caught. How to name and sort foods into the five	That food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.	That food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.	That food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.	N/A

portions of fruit and vegetables every day. How to prepare simple dishes safely and hygienically, without using a heat source. How to use techniques such as cutting, peeling and grating.	groups in the eat well plate. That everyone should eat at least five portions of fruit and vegetables every day. How to prepare simple dishes safely and hygienically, without using a heat source. How to use techniques such as cutting, peeling and grating.	Prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. That a healthy diet is made up from a variety and balance of different food and drink, as depicted in the eat well plate. That to be active and healthy, food and drink are needed to provide energy for the body	Prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. That a healthy diet is made up from a variety and balance of different food and drink, as depicted in the eat well plate. That to be active and healthy, food and drink are needed to provide energy for the body	That seasons may affect the food available. How food is processed into ingredients that can be eaten or used in cooking. How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. That recipes can be adapted to change the appearance,

					taste, texture and aroma. That different food and drink contain different substances – nutrients, water and fibre – that are needed for health.	