YEAR 3

Cookery *Designing \ healthy cous cous salad and packaging*	**Construction** *Clay trinket pots*	**Textiles** *Woven bracelets*	
-Generate ideas for an item, considering its purpose and the user/s. -To order the main stages of making a product. -Identify a purpose and establish design criteria for a successful product. -Explain how well a product has been designed, what materials have been used and different construction techniques. -Make drawings with labels when designing. -Prepare and cook savoury dishes using a range of cooking techniques -To select a range of tools and techniques for making my product safely.	-Generate ideas for an item, considering its purpose and the user/s. -To order the main stages of making a product. -Identify a purpose and establish design criteria for a successful product. -Explain how well a product has been designed, what materials have been used and different construction techniques. -Make drawings with labels when designing. -To select a range of tools and techniques for making my product safely. -To explain choice of equipment and materials in relation to techniques and skills that will be used.	-Generate ideas for an item, considering its purpose and the user/s. -To order the main stages of making a product. -Identify a purpose and establish design criteria for a successful product. -Explain how well a product has been designed, what materials have been used and different construction techniques. -Make drawings with labels when designing -To select a range of tools and techniques for making my product safely.	Design Make Evaluate Technical Knowledge

-To explain choice of equipment and materials in relation to techniques and skills that will be used. -Select from and use finishing techniques suitable for the product they are creating. -Investigate a range, ingredients relevant to their project. -Test/taste their product against the original design criteria. -Evaluate the ongoing work and the final product with reference to the design criteria and the views of others. - To prepare and cook a variety of dishes safely and hygienically. -To begin to explore what a healthy diet is made up from. - Know about a range of fresh and processed ingredients appropriate for their product. -To begin to understand that drink and food provided energy needed for the body.	-Select from and use finishing techniques suitable for the product they are creating. -Investigate a range, ingredients relevant to their project. -Test/taste their product against the original design criteria and with the intended user. -Evaluate the ongoing work and the final product with reference to the design criteria and the views of others. -Apply his/her understanding of how to strengthen, stiffen and reinforce more complex structures - Identify basic equipment, materials, components and techniques.	-To explain choice of equipment and materials in relation to techniques and skills that will be used. -Select from and use finishing techniques suitable for the product they are creating. -Investigate a range, ingredients relevant to their project. -Test/taste their product against the original design criteria and with the intended user. -Evaluate the ongoing work and the final product with reference to the design criteria and the views of others. -Know how to strengthen, stiffen and reinforce existing fabrics. -Understand how to securely join two pieces of fabric together. -Understand the need for patterns and seam allowances.	

YEAR 4

In addition to previous learning, pupils should learn to…

Cookery *Afternoon Tea*	Electronics *Wire loop game*	Mechanisms *Levers and linkages*	
-Generate ideas, considering the purposes and user/s for which they are designing. - To order the main stages of making a product and develop a clear idea of what has to be done. -To establish a design criteria and plan how to use equipment, materials and processes. -To identify strengths of your design and an area for development. -Make labelled drawings from different views showing specific features -To explain my choice ingredients according to aesthetic. -Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products.	-Generate ideas, considering the purposes and user/s for which they are designing. - To order the main stages of making a product and develop a clear idea of what has to be done. -To establish a design criteria and plan how to use equipment, materials and processes. -To identify strengths of your design and an area for development. -Make labelled drawings from different views showing specific features -To explain my choice of materials and components according to aesthetic and function. -Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products.	-Generate ideas, considering the purposes and user/s for which they are designing. - To order the main stages of making a product and develop a clear idea of what has to be done. -To establish a design criteria and plan how to use equipment, materials and processes. -To identify strengths of your design and an area for development. -Make labelled drawings from different views showing specific features -To explain my choice of materials and components according to aesthetic and function.	Design Make Evaluate Technical Knowledge

-Explain their choice of materials according to functional properties and aesthetic qualities. -Select from and use materials and components, including ingredients, construction and electrical components according to their function and properties. -Investigate and evaluate a range of products including the ingredients, materials, components and techniques that are used. -Test and evaluate their own products against design criteria and the intended user and purpose. -Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work. - To prepare and cook a variety of dishes safely and hygienically, using a heat source where appropriate.	-Explain their choice of materials according to functional properties and aesthetic qualities. -Select from and use materials and components, including ingredients, construction and electrical components according to their function and properties. -Investigate and evaluate a range of products including the ingredients, materials, components and techniques that are used. -Test and evaluate their own products against design criteria and the intended user and purpose. -Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work. -Understand and use electrical systems in their products linked to science coverage. -Apply their understanding of omputing to program and control their products.	-Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products. -Explain their choice of materials according to functional properties and aesthetic qualities. -Select from and use materials and components, including ingredients, construction and electrical components according to their function and properties. -Investigate and evaluate a range of products including the ingredients, materials, components and techniques that are used. -Test and evaluate their own products against design criteria and the intended user and purpose. -Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.	

- To begin to explain how a healthy diet is made up from a variety and balance of different foods. -Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. -To explain which foods and drink assist us in maintaining an active lifestyle.	- Understand and use electrical systems in his/her products e.g. series circuits incorporating switches, bulbs, buzzers and motors	-Explore and use wheels, axles and axle holders. -Distinguish between fixed and freely moving axles. - Understand and use mechanical structures in his/her products using levers and linkages	

YEAR 5

In addition to previous learning, pupils should learn to…

Cookery *Pizza tasting, design and making (European link)*	**Mechanisms** *Toys using cams*	**Textiles** *Making pencil case*	
-Generate, model, develop and communicate ideas through annotated sketches and discussions. -Develop a clear idea of what has to be done, planning how to use materials. - To establish a design criteria and confidently select appropriate materials, tools and techniques. - To identify strengths of your design and areas for development. -Use results of investigations, information sources, when developing design ideas. -To start understanding how much products cost and how sustainable they are.	-Generate, model, develop and communicate ideas through annotated sketches and discussions. -Develop a clear idea of what has to be done, planning how to use materials. - To establish a design criteria and confidently select appropriate materials, tools and techniques. - To identify strengths of your design and areas for development. -Use results of investigations, information sources, when developing design ideas. -To start understanding how much products cost and how sustainable they are.	-Generate, model, develop and communicate ideas through annotated sketches and discussions. -Develop a clear idea of what has to be done, planning how to use materials. - To establish a design criteria and confidently select appropriate materials, tools and techniques. - To identify strengths of your design and areas for development. -Use results of investigations, information sources, when developing design ideas.	Design Make Evaluate Technical Knowledge

-Produce detailed lists of equipment and fabrics relevant to their tasks. -Write a step-by-step plan, including a list of resources required. -Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources. -Investigate and analyse products linked to their final product. -Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. -Compare the final product to the original design specification and record the evaluations. -Consider the views of others to improve their work. - To prepare and cook a variety of dishes safely and hygienically, using a heat source where appropriate.	-Produce detailed lists of equipment and fabrics relevant to their tasks. -Write a step-by-step plan, including a list of resources required. -Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources. -Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. -Compare the final product to the original design specification and record the evaluations. -Consider the views of others to improve their work. -Identify and describe appropriate, equipment, materials, components and techniques Recognise that products/designs have to meet a range of different needs	-To start understanding how much products cost and how sustainable they are. -Produce detailed lists of equipment and fabrics relevant to their tasks. -Write a step-by-step plan, including a list of resources required. -Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources. -Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. -Compare the final product to the original design specification and record the evaluations.	

-To begin to understand about seasonality in relation to food products and the source of different food products. -To use a variety of techniques such as slicing, chopping, grating, mixing and kneading. - To explain which foods and drink assist us in maintaining a healthy, balanced lifestyle.	-Understand and use mechanical structures in his/her products using cams and linkages -Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. -Understand how fabrics can be strengthened, stiffened and reinforced where appropriate.	-Consider the views of others to improve their work. -Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. -Understand how fabrics can be strengthened, stiffened and reinforced where appropriate.	

YEAR 6

In addition to previous learning, pupils should learn to…

Cookery *Banana bread (Fairtrade link)*	**Construction** *Bird house (woodwork)*	**Electronics** *Night light* http://code-it.co.uk/crumble/crumble	
-Generate, model, develop and communicate my ideas through prototypes and pattern pieces. -Develop a clear idea of what has to be done, planning how to use materials, equipment and processes. - To use research to inform and develop the design of innovative, functional, appealing product that is fit for purpose. -To identify strengths and weaknesses and suggest alternative methods of making, if first attempt fails. -Use results of investigations, information sources, including ICT when developing design ideas.	-Generate, model, develop and communicate my ideas through prototypes and pattern pieces. -Develop a clear idea of what has to be done, planning how to use materials, equipment and processes. - To use research to inform and develop the design of innovative, functional, appealing product that is fit for purpose. -To identify strengths and weaknesses and suggest alternative methods of making, if first attempt fails. -Use results of investigations, information sources, including ICT when developing design ideas.	-Generate, model, develop and communicate my ideas through prototypes and pattern pieces. -Develop a clear idea of what has to be done, planning how to use materials, equipment and processes. - To use research to inform and develop the design of innovative, functional, appealing product that is fit for purpose. -To identify strengths and weaknesses and suggest alternative methods of making, if first attempt fails. -Use results of investigations, information sources, including	Design Make Evaluate Technical

-To explain the impact the product will have beyond their intended purpose. -Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components. -Competently select from and use appropriate tools to accurately measure, mark, cut and assemble materials, and securely connect electrical components to produce reliable, functional products. -Use finishing and decorative techniques suitable for the product they are designing and making. -Continually evaluate and modify the working features of the product to match the initial design specification. -Test the product and systems system to demonstrate its effectiveness for the intended user and purpose - Critically evaluate their products against their design specification,	-To explain the impact the product will have beyond their intended purpose. -Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components. -Competently select from and use appropriate tools to accurately measure, mark, cut and assemble materials, and securely connect electrical components to produce reliable, functional products. -Use finishing and decorative techniques suitable for the product they are designing and making. -Continually evaluate and modify the working features of the product to match the initial design specification. -Test the product and systems system to demonstrate its effectiveness for the intended user and purpose	ICT when developing design ideas. -To explain the impact the product will have beyond their intended purpose. -Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components. -Competently select from and use appropriate tools to accurately measure, mark, cut and assemble materials, and securely connect electrical components to produce reliable, functional products. -Use finishing and decorative techniques suitable for the product they are designing and making. -Continually evaluate and modify the working features of the product to match the initial design specification.	

intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. -Test the system to demonstrate its effectiveness for the intended user and purpose. -Consider views of others to improve work and implement changes. - To prepare and cook a variety of dishes safely and hygienically, using a heat source where appropriate. -To explain how seasons affect food availability source of different food products. -To use a variety of techniques such as slicing, chopping, grating, mixing, kneading and baking. -To explain substances within different types of foods that are required to lead a healthy, balanced lifestyle.	- Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. -Test the system to demonstrate its effectiveness for the intended user and purpose. -Consider views of others to improve work and implement changes. -Apply his/her understanding of how to strengthen, stiffen and reinforce more complex structures and understand how to strengthen, stiffen and reinforce 3-D frameworks. - Understand the characteristics of different materials, components and processes -Understand a range of advanced/specialist techniques	-Test the product and systems system to demonstrate its effectiveness for the intended user and purpose - Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. -Test the system to demonstrate its effectiveness for the intended user and purpose. -Consider views of others to improve work and implement changes. -Understand and use electrical systems in their products linked to science coverage. -Understand the characteristics of different materials, components, ingredients and processes -Understand a range of advanced/specialist techniques	

		-Apply his/her understanding of computing to program, monitor and control his/her products – ICT link Understand and use electrical systems in his/her products e.g. series circuits incorporating switches, bulbs, buzzers and motors Apply his/her understanding of computing to program, monitor and control his/her products – ICT link Understand and use electrical systems in his/her products e.g. series circuits incorporating switches, bulbs, buzzers and motors	