Curriculum Overview **Years FS2-6** **Subject: Design Technology**

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
FS2 coverage based on child initiated learning opportunities and opportunities in continuous provision						
Knowledge and skills Skills	Cutting, joining, fixing Weaving, lacing, modelling, construction, recycled materials,		Construction using kits, natural materials, large materials, recycled materials, pop-up book, shadow puppets,		Various celebrations, Traditional stories, Farm to fork ,Snack preparation ,Exploring tools ,Mud kitchen	
	Constructs with a purpose in mind, using a variety of resources. Represent their own ideas, thoughts and feelings through design Select and use technology for a particular purpose Answer how and why questions and develop their own narrative and explanations by connecting experiences and events Confident to speak to others about their own opinions Talk about how things happen and work Children know about similarities and differences in relation to objects and materials Answer how and why questions and confidently talk about their own ideas Talk about past and present events/experiences in their own lives Realise tools can be used for a purpose Use tools to effect change on materials Choose materials and resources needed for the chosen activity Understand that different media can be combined to create new effects Say when they do and do not need help Handle tools safely and effectively Talk about ways to keep safe Safely use and explore a variety of technique and materials with increasing control Cut accurately and safely with scissors and other tools		Constructs with a purpose in mind, using a variety of resources. Represent their own ideas, thoughts and feelings through design Select and use technology for a particular purpose Answer how and why questions and develop their own narrative and explanations by connecting experiences and events Confident to speak to others about their own opinions Talk about how things happen and work Children know about similarities and differences in relation to objects and materials Answer how and why questions and confidently talk about their own ideas Talk about past and present events/experiences in their own lives Realise tools can be used for a purpose Use tools to effect change on materials Choose materials and resources needed for the chosen activity Understand that different media can be combined to create new effects Say when they do and do not need help Handle tools safely and effectively Talk about ways to keep safe Safely use and explore a variety of technique & materials with increasing control Cut accurately & safely with scissors & other tools T3- Join accurately, using various joining materials.		Constructs with a purpose in mind, using a variety of resources. Represent their own ideas, thoughts and feelings through design Select and use technology for a particular purpose Answer how and why questions and develop their own narrative and explanations by connecting experiences and events Confident to speak to others about their own opinions Talk about how things happen and work Children know about similarities and differences in relation to objects and materials Answer how and why questions and confidently talk about their own ideas Talk about past and present events/experiences in their own lives Realise tools can be used for a purpose Use tools to effect change on materials Choose materials and resources needed for the chosen activity Understand that different media can be combined to create new effects Say when they do and do not need help Handle tools safely and effectively Talk about ways to keep safe Use different tools & equipment safely Know the importance of a healthy diet and show awareness of different kinds of food Talk about the features of the environment Identify the source for common foods.	

	Join accurately, using various joining materials.		Build with purpose in mind. Play & explore various toys with levers & sliders Explore technological toys			
Key Vocabulary	Fabric, paper, hole punch, string, tape, glue, stick, hold, join, strong, weak		Pop-up, construct, stacking, enclosure, build, model, strong, mathematical vocabulary		Tools – masher, knife, grater etc Food names – peel the orange skin Health and safety – washing hands etc Healthy/ unhealthy	
Enquiry Title Y1	**Who is the magic toymaker?**		**What can we find in the past?**		**What will we find in the deep blue sea?**	
Items Designed / Made	Textiles: Templates & joining techniques **Puppets**	Cookery- **Prepare a simple dish safely**… Design own **Sandwich** or **wrap based Pizzas** & garnish		Cookery- **Prepare a simple dish safely**… **Fruit kebabs on cocktail sticks** (using soft fruit)	Cookery: **Prepare a simple dish safely**… **Salad with simple dressing**	Mechanisms: Levers and sliders **Toys with moving parts**
Knowledge	D1- Draw a simple picture of an intended design with basic labelling. D3-With help put ideas into practice E2- Talk about their own & others' work identifying strengths and/or weaknesses E3- Order products or designs chronologically and begin to explain reasons why they are ordered in that way. T1- Cut out shapes from a range of fabrics & papers. Join fabrics using running stitch, glue, staples, over-sewing & tape. T2- Cut accurately & safely with scissors T3- Join accurately, using glue/ tape. M1- Select & explain why they have chosen a particular tool for the task.	M1- Select and explain why they have chosen a particular tool for the task. M2- Select and explain their choice of materials, sometimes with help. M3- Explain how to keep safe during a practical task. D1- Draw a simple picture of an intended design with basic labelling. D3-With help put ideas into practice E1- Describe how an existing product works) E2-Talk about their own and others' work identifying strengths and/or weaknesses T2- Cut accurately and safely with blunt knife F2- Identify the main food groups, including fruit and vegetables F3- Identify the source for common foods.		M1- Select and explain why they have chosen a particular tool for the task. M2- Select and explain their choice of materials, sometimes with help. M3- Explain how to keep safe during a practical task. D1- Draw a simple picture of an intended design with basic labelling. D3-With help put ideas into practice E2-Talk about their own and others' work identifying strengths and/or weaknesses T2- Cut/thread accurately and safely with scissors/ using cocktail stick F2- Identify various types of fruit. F3- Identify the source of various fruits.	M1- Select and explain why they have chosen a particular tool for the task. M2- Select and explain their choice of materials, sometimes with help. M3- Explain how to keep safe during a practical task. D1- Draw a simple picture of an intended design with basic labelling. D3-With help put ideas into practice E2-Talk about their own and others' work identifying strengths and/or weaknesses T2- Cut accurately and safely with scissors F2- Identify the main food groups, including fruit and vegetables F3- Identify the source for common foods.	T3- Join accurately, using glue or tape. T5- Create and use levers and sliders. D1- Draw a simple picture of an intended design with basic labelling. D3- With help put ideas into practice E1- Describe how an existing product works (e.g. the toy moves when I turn the handle') E2-Talk about their own and others' work identifying strengths and/or weaknesses E3- Order products or designs chronologically and begin to explain reasons why they are ordered in that way. M1- Select and explain why they have chosen a particular tool for the task. M2- Select and explain their choice of materials, sometimes with help. M3- Explain how to keep safe

	M2- Select & explain their choice of materials, sometimes with help. M3- Explain how to keep safe during a practical task.					
Skills	*Talk about existing products and say what is good or not so good about them * Explain what they want to do. *Design following design criteria with support. * Use simple pictures/ words/ diagrams to describe design. * Select tools and equipment needed for purpose. *Use appropriate materials *Talk about own work with support *follow procedures for safety * use a range of materials & components materials & textiles * measure, mark out, cut & shape materials & components *assemble, join and combine materials and components *use finishing techniques, including those from Art & Design.	*chopping/snip using a blunt knife/scissors safely *Grate soft food with adult support *Follow a simple recipe supported by an adult and carry out instructions with a little support *follow safety and hygiene procedures *Spoon ingredients into different containers with increasing accuracy and minimal spillage *Spread soft ingredients e.g. Hummus, butter *Snip fresh herbs, spring onions. *With help and supervision, assemble and arrange cold ingredients.		*Follow a simple recipe supported by an adult and carry out instructions with a little support *follow procedures for safety and hygiene *Use bridge cut hold to cut soft food using a blunt knife e.g. Cut strawberries / bananas with close adult supervision. * Thread soft foods onto cocktail sticks e.g. Fruit kebabs using strawberries, satsumas, grapes	*Follow a simple recipe supported by an adult and carry out instructions with a little support *follow procedures for safety and hygiene * Use bridge cut hold to cut soft food using a blunt knife e.g. Lettuce with close adult supervision. *Grate soft food e.g. Cucumber with adult support. *Snip herbs using scissors safely for garnish. *Use a juicer to extract juice *Mix, stir and combine liquid ingredients (oil and fruit juice) to make dressing *With Guidance pour or drizzle dressing on to salads and lightly sprinkle garnish on cold food.	*Talk about existing products and say what is good or not so good about them * Explain intentions *Design following design criteria with support. * Use simple pictures/ words/ diagrams to describe design. * Select tools & equipment needed for purpose. *Use appropriate materials *Talk about own work with support *Use a simple lever *Follow safety procedures * use a range of materials and components, including construction materials or kits & mechanical components *measure, mark out, cut and shape materials & components *assemble, join & combine materials and components *use finishing techniques, including those from Art & Design.
Key Vocabulary	Names of equipment, felt, running stitch, needle, thread, fabric	Technical language- cutting, grating, slicing, names of tools.		Technical language- bridge cut hold, names of equipment & various fruit.	Names of various salad ingredients. Technical language- bridge cut hold, grating, juicing and names of equipment.	Levers, sliders, push pull, directional language
Enquiry Title Y2	Is anybody out there?		What makes our World great?		How can we entertain you?	
Items Designed/ Made	Cookery- **Prepare a healthy balance meal… Rock buns or muffins with fruit** garnish	Freestanding Structures: Castle with moving Drawbridge	Cookery- **Prepare a healthy balance meal… Savoury biscuits or cheese straws with dip**	Mechanisms: **Train with wheels and axels**		Food: **Prepare and serve a healthy/ balanced breakfast meal**

Knowledge	D1- Produce detailed, labelled drawings based on design criteria D3- Think of ideas and plan what to do next, based on experience of working with materials/tools. E1- Investigate a range of existing products and talk about them E2- Explain how closely finished products meet their design criteria and say what they could do better in the future. M1- Use tools safely for cutting components. M2- Choose appropriate ingredients and suggest ways to use them to achieve a desired effect. M3- Work safely & hygienically in cooking activities. F2- Recognise the need for a variety of foods in a diet. F3- Explain where the food they eat comes from (refer to countries, counties, animals and plants)	D1- Produce detailed, labelled drawings or models of products based on design criteria D2- Use ICT packages to create a labelled design or plan D3- Think of ideas and plan what to do next, based on experience of working with materials and components. D4- Compare and contrast great bridge/tower designs, explaining why a particular design is significant in engineering history. E1- Understanding of different mechanisms E2- Explain how closely finished products meet their design criteria and say what they could do better in the future. E3- Understanding of different designers (e.g. Isambard Brunel) M1- Use tools safely for cutting and joining M2 -Knowledge of material strength M3- know how to cut and join safely T2-cutting materials T3- joining and understanding of appropriateness of joining tools and links to materials. T4- Build simple structures & Understanding of language stiffer, stronger, more stable	D1- Produce detailed, labelled drawings based on design criteria D3- Think of ideas and plan what to do next, based on experience of working with materials/ tools. E1- Investigate a range of existing products and talk about them E2- Explain how closely finished products meet their design criteria and say what they could do better in the future. M1- Use equipment safely for cutting components. M2- Choose appropriate ingredients and suggest ways of use them to achieve a desired effect. M3- Work safely & hygienically. F1- Cut, peel, grate and chop a range of ingredients to make dishes from other countries. F2- Recognise the need for a variety of foods in a diet. F3- Explain where the food they eat comes from (e.g. by referring to countries, counties, animals & plants	D1- Produce detailed, labelled drawings or models of products based on design criteria D2- Use ICT packages to create a labelled design or plan D3- Think of ideas and plan what to do next, based on experience of working with materials and components. D4- Compare and contrast great designs, explaining why a particular design is significant in engineering history. M1- Use tools safely for cutting and joining materials and components. M2 -Knowledge of material strength M3- know how to cut and join safely E1 -Understanding of different mechanisms E2- Explain how closely finished products meet their design criteria and say what they could do better in the future. E3- Describe why a design, or a designer is important. T2 -cutting materials T3- joining and understanding of appropriateness of joining tools and links to materials T4- Understanding of language stiffer, stronger, more stable. T4 Evaluate and improve structure using criteria. - T5 knowledge of different wheels.		D1- Produce detailed, labelled drawings based on design criteria D3- Think of ideas & plan what to do next, based on experience of working with materials/tools. E1- Investigate a range of existing products and talk about them. E2- Explain how closely finished products meet their design criteria and say what they could do better in the future. M1- Use tools safely M2- Choose appropriate materials and suggest ways of manipulating them to achieve a desired effect. M3- Work safely and hygienically. F1- Cut, peel, grate and chop a range of ingredients to make dishes from other countries. F2- Recognise the need for a variety of foods in a diet. F3- Explain where the food they eat comes from (refer to countries, counties, animals and plants)
Skills	*follow safety & hygiene rules *Follow a simple recipe supported by an adult and	* follow procedures for safety	*follow safety/ hygiene rules	· follow procedures for safety		* follow safety & hygiene rules

	carry out instructions with a little support * Use measuring spoons & scales with adult help *Sift flour into bowl, rub in flour (with help), mix, stir & combine ingredients with increasing thoroughness & knead dough *With help, use hands to rub fat into flour, crack an egg & beat together using a fork *Spoon ingredients into different containers with increasing accuracy & minimal spillage	*use a range of materials and components, including construction materials and kits, and mechanical components *measure, mark out, cut and shape materials and components • assemble, join and combine materials and components • use finishing techniques, including those from art and design	*Follow a simple recipe supported by an adult & carry out instructions with a little support * Use measuring spoons scales & scales with adult help *Sift flour into bowl, rub in flour (with help), mix, stir & combine ingredients & knead dough *Cut out ingredients neatly with a cutter or table knife to cut dough into equal portions *Use bridge cut hold to cut soft food using a knife *Grate soft food with adult support	• use a range of materials and components, including construction materials and kits, textiles, mechanical components • measure, mark out, cut and shape materials and components *assemble, join and combine materials and components * use finishing techniques, including those from art and design		*Follow a simple recipe supported by an adult and carry out instructions with a little support * use a range of tools * Use measuring spoons & measuring scales with adult help *Sift flour into bowl, mix, stir & combine ingredients & knead dough *Use bridge cut hold to cut soft food using a blunt knife * Understand how hot food is cooked safely by observing adults using the hob, oven, toaster and/or microwave *Prepare food for cooking e.g. grease baking tins
Key Vocabulary	mix, combine, cut, knead, rub in, mix, recipe	Drawbridge, stiffer, stronger, more stable. Names of resource e.g. Glue types	mix, combine, cut, knead, rub in, recipe, roll out, equal portions	Wheels, axels, 'stopper', chassis, stiffer, stronger, more stable, balances, straight		chop, grate etc, Healthy, healthier, Safety vocabulary
Enquiry Title Y3	**Why did our ancestors need to scavenge and which factors made them into settlers?**		**What makes the Earth so active and what impact does it have on humans?**		**Why was the age of Ancient Greece described as Golden?**	
Items Designed/ Made	**Structures:** shell structure (History link) **element resistant ancient settlers' home**	**Cookery-** Prepare and cook a simple nutritional dish **Design a health lunch using homemade wrap/ tortilla**	**Mechanisms**: Levers/ pneumatics (Geography link) **Warning System for Earthquakes**	**Cookery-** Prepare and cook a simple nutritional dish **Kebabs using medium resistance foods** e.g. Canned potato, tomatoes, cucumber		**Cooking-** Prepare and cook a simple nutritional dish **e.g. Greek salad with dressing/ tzatziki and feta cheese, grilled bread with feta,**
Knowledge	D1- Share ideas through words, labelled sketches & models, recognising that designs have to meet a range of needs, including being fit for purpose D2-Use ICT packages to create a labelled design or plan, in detail D3- Make realistic plans, identifying processes, equipment & materials needed.	D1- Share ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose D3- Make realistic plans, identifying processes, equipment & ingredients needed. E1-Investigate the design features (including	D1- Share ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose D3- Make realistic plans, identifying processes, equipment and materials needed. E1-Investigate the design features of familiar existing products.	D1- Share ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose D3- Make realistic plans, identifying processes, equipment and materials needed. E1-Investigate the design features (including		D1- Share ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose D3- Make realistic plans, identifying processes, equipment and materials needed. E1-Investigate the design features (including identifying components or ingredients) of familiar existing products.

	E1-Investigate the design features of familiar existing products. E2- Suggest improvements to products made & describe how to implement them (taking the views of others into account) M1-Select the appropriate tools & explain choices. M2- Plan which materials are needed for a task & explain why. M3- Follow health & safety rules. T2- Measure & mark wood /dowel T3- Use a glue gun with close supervision T4- Create a shell structure using diagonal struts to strengthen	identifying ingredients) of familiar existing products. E2- Suggest improvements to products made and describe how to implement them (taking the views of others into account) M1- Select the appropriate tools and explain choices. M2- Plan which ingredients & equipment will be needed for a task & explain why. M3- Follow health & safety rules for cooking. F1- Combine a variety of ingredients using a range of cooking techniques F2- Describe what a balanced diet is. F3- Identify food which comes from the UK & other countries.	E2- Suggest improvements to products made and describe how to implement them (taking the views of others into account) E3- Explain the impact of a design or designer on design history and how this has helped to shape the world. M1- Select the appropriate tools/ explain choices. M2- Plan which materials will be needed for a task & explain why. M3- Follow health and safety rules activities. T2- Measure & mark wood/dowel T3-Use a glue gun with close supervision T5- Create & use levers and/or pneumatics in their products	identifying ingredients) of familiar existing products. E2- Suggest improvements to products made and describe how to implement them (taking the views of others into account) M1- Select the appropriate tools and explain choices. M2- Plan which materials will be needed for a task and explain why. M3- Follow health and safety rules for cooking activities. F1- Combine a variety of ingredients using a range of cooking techniques F2- Describe what a balanced diet is. F3- Identify food which comes from the UK and other countries.		E2- Suggest improvements to products made and describe how to implement them (taking the views of others into account) M1- Select the appropriate tools and explain choices. M2- Plan which materials will be needed for a task and explain why. M3- Follow health and safety rules for cooking and baking activities. F1- Combine a variety of ingredients using a range of cooking techniques F2- Describe what a balanced diet is. F3- Identify food which comes from the UK and other countries.
Skills **TEXTILES: Through ART** *Use simple decorative techniques * join fabric with some accuracy * apply a range of finishing techniques with some accuracy	*Research, evaluate different products & identify specific users *Make labelled diagrams showing specific features *Communicate ideas *Compare ideas & select best idea which meets design brief *follow procedures for safety *use a wider range of materials and components than they have in KS1; including construction materials and kits, textiles, mechanical/ electrical components *Make a design that meets arrange of requirements *Describe a design that shows specific features using accurately labelled sketches & words	*Create visually appealing product with support. *Follow a simple recipe with guidance from an adult & carry out instructions independently * Begin to use jug for measuring liquids/ to use digital weighing scales. *Knead and shape dough into evenly sized shapes *Use a rolling pin to flatten & roll out dough *Assemble & arrange ingredients for simple dishes, recognise appropriate ingredients to garnish *Sieve, mix, stir and combine ingredients form dough	*Research, evaluate different products & identify specific users *Make labelled diagrams showing specific features *Communicate ideas *Compare ideas & select best idea which meets design brief *follow procedures for safety *use a wider range of materials and components than they have in KS1; including construction materials and kits, textiles, mechanical/ electrical components *Make a design that meets arrange of requirements	*Create visually appealing product with support *Follow a simple recipe with guidance from an adult and carry out instructions independently *Assemble and arrange ingredients for simple dishes *Cut medium resistance food with a vegetable knife e.g. Cucumber, mushroom *Use a fork or a claw grip to secure food * Cut medium resistant or partly cooked food using a bridge hold e.g. cut half a tomato into quarter, halve canned potatoes, halve large grapes		*Follow a recipe with guidance from an adult *Carry out instructions with some independence *Use 2 spoons to transfer ingredients with support *Use a measuring jug/digital & analogue scales with support to obtain accuracy *Mix ingredients together *Whisk foods using a hand whisk *Grate firmer foods e.g. carrots *Snip to shred lettuce with greater control & with supervision * To use a vegetable knife to cut medium resistance food safely *Use bridge grip for cutting medium resistant or cooked food e.g. half tomatoes into quarters

	*Plan how to make product *Make pattern/ template *Measure/ cut from a pattern with some accuracy *Use simple decorative techniques * Select & use appropriate tools, equipment and materials & use them accurately *Evaluate own product identifying strengths & any areas for development against the original specification *Identify any improvements *With a partner evaluate each other's designs * follow procedures for safety * use a widening range of materials/components, including construction materials and kits, mechanical components *assemble, join & combine materials/ components with some accuracy * apply a range of finishing techniques with some accuracy	*Pupils should understand how to use hob/oven safely by observing adults cooking *Cut medium resistance food with a vegetable knife e.g. cucumber *Use a fork or a claw grip to secure food *Grate firmer food e.g. carrots *Use spoons or jugs to serve equal portions of food *Begin to understand types of food can be served together to make a balanced meal	*Describe a design that shows specific features using accurately labelled sketches & words *Plan how to make product *Make pattern/ template *Measure/ cut from a pattern with some accuracy *Use simple decorative techniques * Select & use appropriate tools, equipment and materials & use them accurately *Evaluate own product identifying strengths & any areas for development against the original specification *Identify any improvements *With a partner evaluate each other's designs * follow procedures for safety * use a widening range of materials/components, including construction materials and kits, mechanical components *assemble, join & combine materials/ components with some accuracy * apply a range of finishing techniques with some accuracy	*Thread and cut medium resistant food *Begin to understand appropriate portion size and what types of food can be served together to make a balanced meal		*Use fork claw grip to secure food when cutting using a vegetable knife *Begin to recognise appropriate ingredients to garnish hot and cold food *With supervision, sprinkle garnish *Use spoons or jugs to serve equal portions of food or drinks in to cups, plates or bowls *Begin to understand appropriate portion sizes & what types of food can be served together to make a balanced meal
Key Vocabulary	Glue gun, junior hacksaw, G clamp, bench hook, joint, attaching, joining, strengthen, jinks corner, prototype, modify, design brief/purpose	Knead, shape, claw grip, bridge hold, vegetable knife, assemble, combine, serve, portion, garnish	Lever, linkage, cogs, dowel, pneumatics, Adhesives, mechanism	peeling, thread, claw grip, bridge hold, vegetable knife, assemble, combine, serve, portion, garnish		claw grip, bridge hold, vegetable knife, assemble, combine, serve, portion, garnish
Enquiry Title Y4	How did the Romans make their mark in world history?		What were the wonders of the Ancient Egyptian temples, tombs and treasures?		Why does the world need rainforests?	

Items Made	**Cookery-** Healthy/ varied diet **Roman Recipes e.g.** Eggs with Honey, Honey cake, Roman inspired salad	**Moving Mechanisms:** Levers and Linkages -**Roman Catapult**	**Cookery-** Healthy & varied diet **Healthier Treat-** Muffins containing vegetables	**Electrical Systems:** Simple circuits & switches **Torches or Pressure pad for tomb Raider**		**Cooking-** Healthy & varied diet **Design & serve a Savoury scone afternoon tea**
Knowledge	D1- Collect information from a number of different sources M1- Analyse the potential of a range of tools and use them with accuracy. M2- Choose from a range of materials, showing an understanding of their different characteristics. M3-- Follow health and safety rules when working with materials and substances. E2- Identify what has worked well and what could be improved, evidencing and explain the results of the research. E3- Explain how the design of a product has changed over time. (HISTORY LINK) F1- Measure and weigh ingredients appropriately to prepare and cook a range of savoury dishes. F2- Make healthy eating choices and explain why. F3- Explain some of the processes that foods go through to preserve/make them more appealing.	D1-Collect information from a number of different sources and use this information to inform design ideas in words, labelled sketches, diagrams and models, keeping in mind fit for purpose and the end user D3- Make realistic, step by step plans, reflecting on designs as the product develops E1- Describe how an existing product is useful to the user. M1- Analyse the potential of a range of tools and use them with accuracy. E2- Identify what has worked well and what could be improved, evidencing and explain the results of the research. M2- Choose from a range of materials, showing an understanding of their different characteristics. M3- Follow health and safety rules when working with materials and substances. T3- (decorations) Use a glue gun with close supervision	D1- Collect information from a number of different sources M1- Analyse the potential of a range of tools and use them with accuracy. M2- Choose from a range of materials, showing an understanding of their different characteristics. M3-- Follow health and safety rules when working with materials and substances. E2- Identify what has worked well and what could be improved, evidencing and explain the results of the research. F1- Measure and weigh ingredients appropriately to prepare and cook a range of savoury dishes. F2- Make healthy eating choices and explain why. F3- Explain some of the processes that foods go through to preserve/make them more appealing.	D1-Collect information from a number of different sources and use this information to inform design ideas in words, labelled sketches, diagrams and models, keeping in mind fit for purpose and the end user D3- Make realistic, step by step plans, reflecting on designs as the product develops. E1- Describe how an existing product is useful to the user. E2- Identify what has worked well and what could be improved, evidencing and explain the results of the research. E3- Explain how the design of a product has changed over time. M1- Analyse the potential of a range of tools & use them with accuracy. M2- Choose from a range of materials, showing an understanding of their different characteristics. M3- Follow health and safety rules when working with materials and substances. T2- Cut internal shapes T3- Use a glue gun with close supervision		D1- Collect information from a number of different sources and use this information to inform design ideas in words, labelled sketches, diagrams and models, keeping in mind fit for purpose and the end user D3- Make realistic, step by step plans, reflecting on designs as the product develops E1- Describe how an existing product is useful to the user. E2- Identify what has worked well and what could be improved, evidencing and explain the results of the research. M1- Analyse the potential of a range of tools and use them with accuracy. M2- Choose from a range of materials, showing an understanding of their different characteristics. M3-- Follow health & safety rules. F1- Measure & weigh ingredients appropriately to prepare & cook a range of savoury dishes. F2- Make healthy eating choices and explain why. F3- Explain some of the processes that foods go through /make them more appealing.

				T5- Create and use levers/or linkages in their products. T6- Identify and talk about products that use electricity to make them work. Create working circuits to a light bulb or buzzer. Design products incorporating switches.		
Skills **Textiles: through ART** *Join and combine materials and components accurately in temporary and permanent ways *Sew using a range of different stitches, weave and knit *Measure, tape or pin, cut and join fabric with some accuracy	*Know and can follow basic food safety rules ***F**ollow a recipe with guidance from an adult *Carry out instructions independently *Create visually appealing product with support *Use 2 spoons to transfer ingredients *Use a measuring jug/digital & analogue scales with support to obtain accuracy *Sieve flour, raising agents and spices together in to a bowl *Cream fat and sugar together using a mixing spoon. *Crack an egg and beat with balloon whisk *Mix & stir ingredients together combining ingredients uniformly *Snip to shred lettuce with greater control and with supervision * Cut medium resistance food safely using a vegetable knife with claw/bridge grip. *Begin to recognise appropriate ingredients to garnish hot and cold food *With supervision, sprinkle garnish on hot dishes	*Generate ideas, considering the purposes for which they are designing *Make labelled drawings from different views showing specific features *Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail *Evaluate products and identify criteria that can be used for their own designs *Select appropriate tools and techniques for making their product *Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques *Join and combine materials and components accurately in temporary and permanent ways * Use simple graphical communication techniques *Evaluate their work both during and at the end of the assignment	*Generate ideas, considering the purposes for which they are designing *Know and can follow basic food safety rules *Follow a recipe with guidance from an adult *Carry out instructions independently *Create visually appealing product with support *Use 2 spoons to transfer ingredients *Use a measuring jug/digital & analogue scales with support to obtain accuracy *Sieve flour, raising agents and spices together in to a bowl *Mix & stir ingredients together combining ingredients uniformly -Crack an egg and beat with balloon whisk -Cream fat and sugar together using a mixing spoon. *Mix ingredients together *whisk foods using a hand whisk *Grate firmer foods e.g. carrots	* Generate ideas, considering the purposes for which they are designing *Make labelled drawings from different views showing specific features *Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail *Select appropriate tools and techniques for making their product * Make simple electrical circuits, including switch/buzzer or light *Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques *Join and combine materials and components accurately in temporary and permanent ways * Use simple graphical communication techniques *Evaluate their work both during and at the end of the assignment		*Generate ideas, considering the purposes for which they are designing *Develop a clear idea of what has to be done, planning how to use materials, equipment and processes & suggesting alternative methods of making, if the first attempts fail *Select appropriate tools and techniques for making their product *Know & follow basic food safety rules ***F**ollow a recipe with guidance from an adult & carry out instructions independently *Create visually appealing product with support *Use a measuring jug/digital & analogue scales with support to obtain accuracy *Sieve flour, raising agents and spices together in to a bowl *Mix & stir ingredients together combining ingredients uniformly *Use hands to rub fat into flour *Knead & shape dough into evenly sized shapes, use a rolling pin dough to flatten/roll out dough *With supervision, use cutters, making good use of material available & not wastage

	*Use spoons or jugs to serve equal portions of food or drinks in to cups, plates or bowls *Evaluate products and identify criteria that can be used for their own designs	*Evaluate their products carrying out appropriate tests	* Cut medium resistance food safely using a vegetable knife with claw/bridge grip. *Evaluate products and identify criteria that can be used for their own designs			*Coat food with egg as a glaze *Grate firmer foods e.g. carrots *Snip to shred lettuce with greater control & with supervision * Cut medium resistance food safely using a vegetable knife with claw/bridge grip. *Begin to recognise appropriate ingredients to garnish hot and cold food *Begin to understand appropriate portion sizes when serving food and what types of food can be served together to make a balanced meal *Evaluate products and identify criteria that can be used for their own designs
Vocabulary	Savoury, sweet, preserve, carbohydrates, proteins, fibre, fat, minerals, blending, juicing, combine, techniques, names of various foods used by Romans	Levers, linkages, mechanism, cogs, dowel, pneumatics, Adhesives, pulley system	Savoury, sweet, additives, carbohydrates, proteins, fibre, fat, medium resistant food, minerals, blending, juicing, combine, techniques	Circuit, bulb, bulb holder, buzzer, switches, simple circuit, current, pressure pad, electricity, crocodile clips		Savoury, sweet, additives, carbohydrates, proteins, fibre, fat, medium resistant food, hydrated, minerals, blending, juicing, combine, techniques, variety
Enquiry Title Y5	Why is WW1 known as the Great War?		What made the Vikings the ultimate warriors of the sea?		Where does the river flow?	
Items Made	**Structures: Frame structures:** Container to keep items safe/ dry in trenches	**Cookery- Celebrating Seasonality (**History Link**)** E.g. Potato scones, Potato/ seasonal vegetable soup or other seasonal recipes		**Cookery- Celebrating Seasonality (Possible History Link)** Recipes using seasonal fruit and veg	**Mechanisms: Gears and Pulleys**: Lock system or… Water turbine/ water wheel	**Cooking-** Design a Summer healthy meal with- Bread, Ribbon salad & mackerel pate/ hummus etc
Knowledge	D1- Use various sources of information, clarifying/sharing ideas through discussion, labelled sketches, cross-sectional diagrams & modelling, recognising that ideas have to meet a range of needs. D3- Work form own detailed plans, modifying where appropriate.	D1- Use various sources of information, clarifying/sharing ideas through discussion, labelled sketches, cross-sectional diagrams and modelling, recognising that ideas have to meet a range of needs.		D1- Use various sources of information, clarifying/sharing ideas through discussion, labelled sketches, cross-sectional diagrams and modelling, recognising that ideas have to meet a range of needs.	D1- Use various sources of information, clarifying/sharing ideas through discussion, labelled sketches, cross-sectional diagrams and modelling, recognising that ideas have to meet a range of needs. D2- Use computer aided designs to represent designs.	D1- Use various sources of information, clarifying/sharing ideas through discussion, labelled sketches, cross-sectional diagrams and modelling, recognising that ideas have to meet a range of needs. D3- Work form own detailed plans, modifying where appropriate.

	E1- Investigate the design features (including identifying components and ingredients) of a familiar existing product in the context of culture or society in which it was designed or made E2- Test and evaluate products against a detailed design specification and make adaptations as they develop their product. E3- Create a timeline to sequence the development of a design over time and describe how technology has influenced it. M1- Name and select the appropriate tools for a task and use them with precision. M2- Select and combine materials with precision M3- Select and name appropriate tools for specific jobs and demonstrate how to use them safely. T2- Cut safely & accurately to a marked line. T3- Use a glue gun with close supervision T4- Build a framework using a range of materials (e.g. wood, card & corrugated plastic) to support mechanisms.	D3- Work form own detailed plans, modifying where appropriate. E1- Investigate the design features of the recipe in context of culture or society in which it was designed or made E3- Create a timeline to sequence the development of a design over time and describe how technology has influenced it. M1- Name and select the appropriate tools for a task and use them with precision. M2- Select and combine materials with precision M3- Select and name appropriate tools for specific jobs and demonstrate how to use them safely. F1- Combine food ingredients appropriately (e.g. kneading, rubbing in and mixing). F2- Evaluate meals and consider if they contribute towards a balanced diet. F3- Explain what times of year particular foods are in Season.		D3- Work form own detailed plans, modifying where appropriate. E1- Investigate the design features of the recipe in context of culture or society in which it was designed or made E3- Create a timeline to sequence the development of a design over time and describe how technology has influenced it. M1- Name and select the appropriate tools for a task and use them with precision. M2- Select and combine materials with precision M3- Select and name appropriate tools for specific jobs and demonstrate how to use them safely. F1- Combine food ingredients appropriately (e.g. kneading, rubbing in and mixing). F2- Evaluate meals and consider if they contribute towards a balanced diet. F3- Explain what times of year particular foods are in Season.	D3- Work form own detailed plans, modifying where appropriate. E1- Investigate the design features (including identifying components and ingredients) of a familiar existing product in the context of culture or society in which it was designed or made E2- Test and evaluate products against a detailed design specification and make adaptations as they develop their product. E3- Create a timeline to sequence the development of a design over time and describe how technology has influenced it. M1- Name and select the appropriate tools for a task and use them with precision. M2- Select and combine materials with precision M3- Select and name appropriate tools for specific job & demonstrate using them safely. T2- Cut safely & accurately to a marked line. T3- Use a glue gun with close supervision T4- Build a framework using a range of materials (e.g. wood, card & corrugated plastic) to support mechanisms. T5- Create cams, gears or pulleys in their products.	E1- Investigate the design features (including identifying ingredients) of a familiar existing product in the context of culture or society in which it was designed or made E2- Test and evaluate products against a detailed design specification and make adaptations as they develop their product. E3- Create a timeline to sequence the development of a design over time and describe how technology has influenced it. M1- Name and select the appropriate tools for a task and use them with precision. M2- Select and combine materials with precision M3- Select and name appropriate tools for specific jobs and demonstrate how to use them safely. F1- Combine food ingredients appropriately (e.g. kneading, rubbing in and mixing). F2- Evaluate meals and consider if they contribute towards a balanced diet. F3- Explain what times of year particular foods are in Season.
Skills	*Generate ideas through brainstorming and identify a purpose for their product *Draw up a specification for their design	*Generate ideas through brainstorming and identify a purpose for their product *Draw up a specification for their design		*Generate ideas through brainstorming and identify a purpose for their product *Draw up a specification for their design	*Generate ideas through brainstorming and identify a purpose for their product *Draw up a specification for their design	*Generate ideas through brainstorming and identify a purpose for their product *Draw up a specification for their design

	*Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail *Use results of investigations, information sources, including ICT when developing design ideas *Select appropriate materials, tools and techniques *Measure and mark out accurately *Use skills in using different tools and equipment safely and accurately *Apply the rules for safe practices *Cut and join with accuracy to ensure a good-quality finish to the product *Evaluate a product against the original design specification * Evaluate it personally and seek evaluation from others	*Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail *Use results of investigations, information sources, including ICT when developing design ideas *Select appropriate materials, tools and techniques *Use skills in using different tools and equipment safely and accurately * Weigh and measure accurately (time, dry ingredients, liquids) *Apply the rules for basic food hygiene and other safe practices *e.g. hazards relating to the use of ovens* *Evaluate a product against the original design specification * Evaluate it personally and seek evaluation from others		*Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail *Use results of investigations, information sources, including ICT when developing design ideas *Select appropriate materials, tools and techniques *Use skills in using different tools and equipment safely and accurately * Weigh and measure accurately (time, dry ingredients, liquids) *Apply the rules for basic food hygiene and other safe practices *e.g. hazards relating to the use of ovens* *Evaluate a product against the original design specification * Evaluate it personally and seek evaluation from others	*Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail *Use results of investigations, information sources, including ICT when developing design ideas *Select appropriate materials, tools and techniques *Measure and mark out accurately *Use skills in using different tools and equipment safely and accurately *Apply the rules for safe practices *Cut and join with accuracy to ensure a good-quality finish to the product *Evaluate a product against the original design specification * Evaluate it personally and seek evaluation from others	*Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail *Use results of investigations, information sources, including ICT when developing design ideas *Select appropriate materials, tools and techniques *Use skills in using different tools and equipment safely and accurately * Weigh and measure accurately (time, dry ingredients, liquids) *Apply the rules for basic food hygiene and other safe practices *e.g. hazards relating to the use of ovens* *Evaluate a product against the original design specification * Evaluate it personally and seek evaluation from others
Vocabulary	**Triangulation, framework, cladding, modifying,**	**Availability, rationed, seasonal, Vocabulary linked with WW1**		**Seasonal, availability, foraging,**	**Gear train, cams, cogs, follower, pulleys, systems, cross sectional diagrams, components, dismantle,**	**Ribbon peeling, proving, seasonal, wholemeal, balanced meal**
Enquiry Title Y6	What was 15th Century Britain like compared to 15th century central America?		What was life like during WW 2?		What could we discover on a North American road trip?	
Items Designed/ Made	**Textiles**: Combining different fabric shapes (History Link) **Bag/ purse or clothing**	**Cookery**: **Celebrating Culture** *Either*-15th Century British food e.g. Pottage and bread or Aztec cooking involving Chilli/chocolate?	**Electrical Systems**: More complex switches and circuits. E.g. **Air Raid Siren** (Spring Term) or **Traffic Light Coding** (Summer Term)	**Cookery: Celebrating Culture** - (RE Link) Food linked with celebrations		**Cooking- Celebrating Culture Design, make, serve a homemade version of foods celebrating our multicultural society.**
Knowledge	D1- Develop detailed criteria for designs for products	D1- Develop detailed criteria for designs for products	D1-Develop detailed criteria for designs for products	D1- Develop detailed criteria for designs for products		D1- Develop detailed criteria for designs for products aimed at

	aimed at particular individuals or groups, sharing ideas through cross-sectional and exploded diagrams, prototypes and pattern pieces. D3- Check work as it develops and modify their approach in light of progress. D4- Research cultural traditions and evidence their influence in their work. E1- Explain the form and function of familiar existing products. E2- Demonstrate modifications made to a product, as a result of ongoing evaluation, by themselves and others. E3- Explain how fashions & fabrics have changed over time and how this has affected fashion. Describe how an individual in the field of design & technology has helped shape the world. M1- Use more complex tools with increasing accuracy. M2- Choose the best materials for a task, showing an understanding of their working characteristics. M3- Demonstrate how their products take into account the safety of the user., T1- Use a simple pattern to create a life-sized item of clothing. Create a 3-D product using a range of materials and sewing techniques. T2- Use a craft knife, cutting mat and safety ruler with 1:1 supervision if needed.	aimed at particular individuals or groups, sharing ideas through cross-sectional and exploded diagrams, prototypes and pattern pieces. D3- Check work as it develops and modify their approach in light of progress. D4- Research cultural traditions and evidence their influence in their own work. E1- Explain the form and function of familiar existing products. E2- Demonstrate modifications made to a product, as a result of ongoing evaluation, by themselves and others. M1- Use more complex tools with increasing accuracy. M2- Choose the best materials for a task, showing an understanding of their working characteristics. M3- Demonstrate how their products take into account the safety of the user., F1- Use appropriate tools and equipment, weighing and measuring with scales. F2- Plan how they can have a health/affordable diet. F3- Explain how the ingredients were grown, reared, caught and processed.	aimed at particular individuals or groups, sharing ideas through cross-sectional & exploded diagrams. D2- Use CAD/CAM packages to design. D3- Check work as it develops and modify their approach in light of progress. E1- Explain the form and function of familiar existing products. E2- Demonstrate modifications made to a product, as a result of ongoing evaluation, by themselves and others. E3- Explain how fashions and fabrics have changed over time and how this has affected fashion. Describe how an individual in the field of design and technology has helped shape the world. M1- Use more complex tools with increasing accuracy. M2- Choose the best materials for a task, showing an understanding of their working characteristics. M3- Demonstrate how their products take into account the safety of the user. T6-Design products incorporating the most appropriate electrical systems.	aimed at particular individuals or groups, sharing ideas through cross-sectional and exploded diagrams, prototypes and pattern pieces. D3- Check work as it develops and modify their approach in light of progress. D4- Research cultural traditions and evidence their influence in their own work. E1- Explain the form and function of familiar existing products. E2- Demonstrate modifications made to a product, as a result of ongoing evaluation, by themselves and others. M1- Use more complex tools with increasing accuracy. M2- Choose the best materials for a task, showing an understanding of their working characteristics. M3- Demonstrate how their products take into account the safety of the user., F1- Use appropriate tools and equipment, weighing and measuring with scales. F2- Plan how they can have a health/affordable diet. F3- Explain how the ingredients were grown, reared, caught and processed.		particular individuals or groups, sharing ideas through cross-sectional & exploded diagrams. D3- Check work as it develops & modify their approach in light of progress. D4- Research cultural traditions and evidence their influence in their own work. E1- Explain the form and function of familiar existing products. E2- Demonstrate modifications made to a product, as a result of ongoing evaluation, by themselves and others. M1- Use more complex tools with increasing accuracy. M2- Choose the best materials for a task, showing an understanding of their working characteristics. M3- Demonstrate how their products take into account the safety of the user., F1- Use appropriate tools and equipment, weighing and measuring with scales. F2- Plan how they can have a health/affordable diet. F3- Explain how the ingredients were grown, reared, caught and processed.

	T3- Join materials using the most appropriate methods for the materials or purpose.					
Skills	*** Sewing Skills-Threading needles, tying knots, range of stitches** *Communicate their ideas through detailed labelled drawings *Develop a design specification *Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways *Plan the order of their work, choosing appropriate materials, tools and techniques *Select appropriate tools, materials, components and techniques *Assemble components make working models * Use tools safely and accurately *Construct products using permanent joining techniques *Make modifications as they go along * Pin, sew and stitch materials together create a product *Achieve a quality product *Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests *Record their evaluations using drawings with labels *Evaluate against their original criteria and suggest ways that their product could be improved	*Use research to find out about available products & & communicate ideas through detailed labelled drawings *Plan the order of their work, choosing appropriate materials, tools & techniques *Follow a simple recipe independently and carry out modifications to recipes. *Follow hygiene & safety procedures & wash/ dry up independently *Measure independently & accurately. * Cut higher resistant food with a vegetable knife using a claw grip/bridge hold *Knead & shape, cut out dough equally and accurately * Rub fat into flour, roll out dough to a specific thickness *Fold ingredients together & use a sieve with precision *Confidently crack an egg & separate egg with help *With supervision, whisk using an electric hand mixer *With supervision, use whisk, a food processor etc. *Gauge the quantities spooned to ensure equal amounts of ingredients containers *Spread food evenly with a coating, paste or glaze *With supervision, be able to use a spoon, ladle or jug to serve hot liquids (e.g. soup)	*Communicate their ideas through detailed labelled drawings *Develop a design specification *Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways *Plan the order of their work, choosing appropriate materials, tools and techniques *Select appropriate tools, materials, components and techniques *Assemble components make working models * Use tools safely and accurately *Construct products using permanent joining techniques *Make modifications as they go along *Achieve a quality product *Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests *Record their evaluations using drawings with labels *Evaluate against their original criteria and suggest ways that their product could be improved	*Use research to find out about available products & communicate ideas through detailed labelled drawings *Plan the order of their work, choosing appropriate materials, tools & techniques *Follow a simple recipe independently and carry out modifications to recipes. *Follow hygiene & safety procedures & wash/ dry up independently *Measure independently & accurately. * Cut higher resistant food with a vegetable knife using a claw grip/bridge hold *Knead & shape, cut out dough equally and accurately * Rub fat into flour, roll out dough to a specific thickness *Fold ingredients & use a sieve with precision *Confidently crack an egg & separate egg with help *With supervision, whisk using an electric hand mixer *With supervision, use whisk, a food processor etc. *Gauge the quantities spooned to ensure equal amounts of ingredients containers *Spread food evenly with a coating, paste or glaze *With supervision, be able to use a spoon, ladle or jug to serve hot liquids (e.g. soup)		*Use research to find out about available products & develop design criteria & communicate ideas through detailed labelled drawings *Plan the order of their work, choosing appropriate materials, tools & techniques *Follow a simple recipe independently and carry out modifications to recipes. *Follow hygiene & safety procedures & wash/ dry up independently *Measure independently & accurately. *Peel using swivel peeler to create food ribbons with supervision * Cut higher resistant food with a vegetable knife using a claw grip/bridge hold *Thread higher resistant food onto kebab sticks e.g. pepper *Knead & shape, cut out dough equally and accurately * Rub fat into flour, roll out dough to a specific thickness *Fold ingredients together carefully & use a sieve with precision *Confidently crack an egg & separate egg with help *With supervision, whisk using an electric hand mixer *With supervision, use whisk, a food processor etc. *Gauge the quantities spooned to ensure equal amounts of ingredients containers

		*Cut food into equal & appropriate portions for the number being served and garnish *Make modifications during process *Achieve a quality product *Evaluate their products, identifying strengths & areas for development & against original criteria & suggest improvements		*Cut food into equal & appropriate portions for the number being served & garnish *Make modifications during process *Achieve a quality product *Evaluate their products, identifying strengths & areas for development & against original criteria & suggest improvements		*Spread food evenly with a coating, paste or glaze *With supervision, be able to use a spoon, ladle or jug to serve hot liquids (e.g. soup) *Cut food into equal & appropriate portions for the number being served & garnish *Plan & serve simple balanced cooked meal *Achieve a quality product *Evaluate their products, identifying strengths & areas for development & against original criteria & suggest improvements
Vocabulary	**Stitch Vocabulary, blanket, cross stitch, embroidery, pattern, tacking, safety pins, sewing machine, thread,**	**Vocabulary linked with 15th Century Britain, /South America**	**Circuits- parallel, fuse, electrical Symbols, modifications, input/ output, conductor, insulator**	**Vocabulary linked with religious celebrations, ingredients, grown, cultural, traditional**		**ingredients, grown, cultural, traditional, affordable, social influences, vegetarian, vegan**