Curriculum Overview for Design & Technology

Source: National Curriculum 2014 & Design and Technology Association (DATA) Projects on a Page

	Autumn	Spring	Summer
Nursery	**Cooking/Nutrition** Bread/toast **Textiles-** Exploring fabrics - sensory	**Cooking/Nutrition** Porridge	**Cooking/Nutrition** Fruit Skewers **Structures**- Junk Modelling Boats
Reception	**Cooking/Nutrition** Gingerbread	**Cooking/Nutrition** Baked mashed bananas (Forest School) **Textiles**-Exploring fabrics- weaving	**Cooking/Nutrition** Omelette **Structures**- folding paper (aeroplanes)
Year 1	**Structures** Table decoration for an occasion (Birthday/Christmas)	**Mechanisms** Moving Vehicle toy	**Cooking/Nutrition** Summer Fruit Smoothie
Year 2	**Cooking/Nutrition** Winter Vegetable Soup	**Mechanisms** Pop-up book	**Textiles** Bunting for a celebration
Year 3	**Textiles** Pencil case with Button fastening	**Cooking/Nutrition** Healthy sandwich *Jamie Oliver/ Marcus Rashford*	**Mechanisms** Pneumatic toy/mascot
Year 4	**Structures/Computer aided DT** A Box for a treat (2D to 3D)	**Cooking/Nutrition** Puff pastry Pizza Wheel	**Electrical Systems** A buzzer/light up game *Alessandro Volta- Battery*
Year 5	**Mechanisms** CAM (shop window display)	**Electrical Systems/Computer aided DT** Night Light (sensor controlled) *Grace Hopper- computer programming/Thomas Edison Light bulb*	**Cooking/Nutrition** Flatbread and Dips
Year 6	**Structures** Birdbox/bug hotel	**Cooking/Nutrition** Savoury scones	**Textiles** Memory Cushion *Gideon Sundback- Zip/ George de Mestral- Velcro*

Early Years

Educational Programmes (Statutory)

Expressive Arts and Design

*The development of children's artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to **engage with the arts,** enabling them to **explore** and **play** with a **wide range of media and materials**. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, **self-expression, vocabulary** and ability to **communicate** through the arts. The **frequency**, **repetition** and **depth** of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe*

Physical Development

*Physical activity is vital in children's all-round development, enabling them to pursue happy, **healthy** and active lives. Gross and **fine motor** experiences develop incrementally throughout early childhood, starting with **sensory explorations** and the development of a child's **strength**, co-ordination and positional awareness through tummy time, crawling and play movement with both objects and adults.*

Personal, Social and Emotional Development

*Children's personal, social and emotional development (PSED) is crucial for children to lead **healthy** and happy lives, and is fundamental to their cognitive development. Underpinning their personal development are the important attachments that shape their social world. Strong, warm and supportive relationships with adults enable children to learn how to understand their own feelings and those of others.*

Characteristics of Effective Learning

Playing and Exploring	Active Learning	Creating and Thinking Critically
children investigate and experience things, and 'have a go'	children concentrate and keep on trying if they encounter difficulties, and enjoy achievements	children have and develop their own ideas, make links between ideas, and develop strategies for doing things

Nursery

(Non-statutory Development Matters)

3-4 Year olds will be learning to:

Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen, or one, which is suggested to them.
Make healthy choices about food and drink.
Use one-handed tools and equipment, for example, making snips in paper with scissors.
Use a comfortable grip with good control when holding pens and pencils.
Show a preference for a dominant hand.
Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids)
Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc.
Combine shapes to make new ones – an arch, a bigger triangle, etc.
Explore how things work.
Explore different materials freely, to develop their ideas about how to use them and what to make.
Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures.

Knowledge and Skills

Cooking and Nutrition	Design	Make	Evaluate	Technical Knowledge
Wash hands with support Use a knife to spread butter/spreads Make butter and observe the changes	Watch how someone else makes a creation & copy their ideas Begin to think of my own ideas	Use a variety of construction sets to…. join pieces, stack vertically stack horizontally balance and make enclosures	Describe how I made my product Say what I like about my product	Know and talk about how things work e.g. push/pull Make snips with scissors in paper Use glue to join pieces of paper/card, understand that you need to glue the reverse!

	Stir and mix dry ingredients together Push soft fruits onto a skewer Explore the sensory properties of food		Use basic materials such as paper and card in my designs (Know that card is stronger and stiffer than paper) Scrunch and tear paper		Use pipe-cleaners to join (wrapping)
Reception **(Non-statutory Development Matters)**	**Reception children will be learning to:** Develop their small motor skills so that they can use a range of tools competently, safely and confidently. -Select, rotate and manipulate shapes to develop spatial reasoning skills. -Explore, use and refine a variety of artistic effects to express their ideas and feelings. -Return to and build on their previous learning, refining ideas and developing their ability to represent them. -Create collaboratively, sharing ideas, resources and skills.				
	Knowledge and Skills				
	Cooking and Nutrition Wash hands Use a fork to mash soft foods Use a rolling pin Use a whisk to mix liquids	**Design** Work together with an adult or a friend to develop an idea.	**Make** Use a variety of construction materials to build and join. Name a variety of tools and use them safely (scissors, stapler, hole punch) Refine and adapt my ideas as I work	**Evaluate** Describe how I made my product Say what I like about my product	**Technical Knowledge** Use adhesive tape and PVA glue Make snips in card (including tubes) to join pieces together Use paperclips and string to join pieces together Fold paper in half (with support)
Early Learning Goals (ELG) - END of Reception	**<u>Physical Development</u>** **Fine Motor Skills**: Hold a pencil effectively in preparation for fluent writing– using the tripod grip in almost all cases; Use a range of small tools, including scissors, paint brushes and cutlery; Begin to show accuracy and care when drawing. **<u>Personal, Social and Emotional Development</u>** **Managing Self:** Be confident to try new activities and show independence, resilience and perseverance in the face of challenge; Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.		**<u>Expressive Arts and Design</u>** **Creating with Materials :** Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; Share their creations, explaining the process they have used; Make use of props and materials when role- playing characters in narratives and stories.		
Vocabulary	Plan, ideas, design, make, build, construct, join, shape, tools, change, like, dislike, different, improve, healthy, unhealthy, fruit, vegetable, clean, safe, ingredients, cut,				

KS1	Autumn	Spring	Summer
Year 1 NC and *additional skills and knowledge*	**Technical knowledge**-build structures, exploring how they can be made stronger, stiffer and more stable **Design-** design purposeful, functional, appealing products for themselves and other users based on design criteria **Make** -select from and use a range of tools and equipment to perform practical tasks **Evaluate**-explore and evaluate a range of existing products evaluate their ideas and products against design criteria *Roll and fold paper and card to make it stronger* *Join with tape, glue and pipe cleaners/straws* *Understand as a structure gets taller, it needs a wider base (centre of gravity)* *Identify natural and manmade Materials- Science*	**Technical knowledge**-explore and use mechanisms [wheels and axles], in their products. **Design-** design purposeful, functional, appealing products for themselves and other users based on design criteria **Make**- select from and use a range of tools and equipment to perform practical tasks **Evaluate**- explore and evaluate a range of existing products evaluate their ideas and products against design criteria *Cut and snip paper, card and straws with scissors* *Join with tape and glue* *Create holes with a single hole punch* *Understand how axels work and the difference between a fixed and free moving axel*	**Technical knowledge** -use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from **Design-** design purposeful, functional, appealing products for themselves and other users based on design criteria **Make** -select from and use a range of tools and equipment to perform practical tasks **Evaluate-**explore and evaluate a range of existing products evaluate their ideas and products against design criteria **Knife skills-** Chop roughly (soft fruits) **Appliances/Equipment-**Use a blender (with support) **Measuring-** Use spoons and cups to measure ingredients (non-standard units) **Other skills-**Peeling (with hands), squeezing (hand and juicer), *Know which foods are healthy for us* *Understand that food comes from plants or animals* *Understand where fruits and vegetables grow (ground, trees etc) - Science*
Destination questions	Design, make and evaluate a f**reestanding table decoration** for a **celebration** **Recap-** Can you remember folding paper to make an aeroplane in Reception? How did you find the centre of the paper? **Can you evaluate a range of existing products and identify the materials they are made from and the design structure?** *Which design is the most stable? Why?* *How are the materials joined together?* *Which materials are natural and which are manmade?(Science)* *What do you notice about the base?* **Can you explore a range of construction kits (wooden bricks, interconnecting plastic bricks and sticks and connectors to make frames) to make a structure?**	Design make and evaluate a **toy vehicle** for a **child** to play with **Recap**- Can you remember in The Early Years, exploring toys that move by pressing buttons and turning the wheels? **Can you evaluate a range of existing products and identify the moving parts?** *How do you think the wheels move?* *How do you think the wheels are fixed on?* *Why do you think the product has this number of wheels?* **Can you compare existing products, identifying the mechanical features?** *Can you identify the wheels, axels, chassis and body on a product and draw a diagram to explain?*	Design, make and evaluate a **summer fruit smoothie** for a **hot day** **Recap-** Can you remember making Fruit skewers in Nursery where you pushed soft fruits onto a stick – which fruits did you use and how did you prepare them? **Can you examine a range of foods including fruits and vegetables and identify how/where they have grown?** *Can you identify which foods come from a plant and which foods come from an animal?* *Can you identify which fruits grow on a tree?* **Can you handle, research and taste a range of fruits, exploring them using your senses**? **Where do they grow?** *How are they harvested?* *What do they feel, smell, and taste like?*

	How can you stop a structure from falling over? *How can it be made stronger?* **How can you make paper stiffer to withstand and support an object?** *What happens when you fold roll or stack paper?* **Can you join materials (paper and card) together in a range of ways?** Complete skills grid *(Making snips in paper/card, using straws/ pipe cleaners, glue and tape)* **Can you generate and design a product based on the design criteria?** *Can you draw your design?* *Can you talk through your design with a friend?* *Have you ensured your design has a wide base and/or a buttress?* **Can you use e tools and techniques to create a freestanding structure?** *Can you use scissors correctly to cut a simple shape or line?* *Can you join materials together choosing the most suitable technique?* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* **Next Steps:** You will explore Structures again in Year 4 when you design and make a box for a treat.	**Can you explore and evaluate a range of construction kits (duplo, lego, mobilo, straws and connectors)** *Can you make a design that moves?* *Can you use different pieces to make it move in a different way?* ***Can you* exploring materials and components and tools that use a mechanism?** Complete skills grid *Can you make a fixed axel?* *Can you make a free moving axel?* *Can you use a single hole punch to make a hole in a piece of card* *Can you use a pencil and tac to make a hole in card?* **Can you generate and design a product based on the design criteria?** *Can you draw your design?* *Can you talk through your design with a friend?* *Can you identify the parts and components?* **Can you use tools and components to create a moving vehicle?** *Can you use the tools and materials safely?* *Can you use your skills grid to support you?* **Can you evaluate your design and final product?** Does you final product meet the design criteria? **Next Steps:** You will look at mechanisms again next year, in Year 2, when you will make a pop-up book using sliders and levers to create movement?	**Can you identify foods that are healthy for us?** *How many portions of fruits and vegetables should we aim to eat in a day?* **Can you (with support)use tools, utensils and equipment safely as well as understand the importance of food hygiene** Complete skills grid *What do we need to do before we handle and prepare food?* *How can we prepare fruits for eating* *What equipment do we need?* *Can you safely demonstrate how to peel, squeeze and chop fruit* **Can you generate and design a product based on the design criteria?** *Can you draw your design?* *Can you talk through your design with a friend?* *How will your drink be served?* **Can you use ingredients and utensils to make a summer fruit smoothie?** *Can you use the utensils safely?* *Can you select from a range of fruit according to their characteristics e.g. colour, texture and taste?* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* **Next Steps:** You will further develop your chopping skills when you cut a range of vegetables to make your soup in Year 2
Vocabulary	cut, fold, **join, fix, weak, strong, base**	**vehicle,** wheel**, axle, axle holder, chassis, body, mechanism, fixed, free moving**	**fruit names, utensil names, flesh,** skin, seed, **pip, core,** slice, **peel,** cut, **squeeze**
Year 2 **NC and** *additional skills and knowledge*	**Technical Knowledge-**use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from **Design**- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology **Make-** select from and use a wide range of ingredients, according to their characteristics	**Technical Knowledge-**explore and use mechanisms [levers and sliders], in their products. **Design**- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology **Make-** select from and use a wide range of materials and components, including construction materials, according to their characteristics	**Design**- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology **Make-** select from and use a wide range of textiles according to their characteristics **Evaluate-** explore and evaluate a range of existing products evaluate their ideas and products against design criteria

	Evaluate- explore and evaluate a range of existing products evaluate their ideas and products against design criteria **Knife skills -**Slicing and dicing (soft- medium vegetables) **Appliances/Equipment-** Use a hand blender using a heat source- hob (adult only) M**easuring- Use** spoons and cups to measure ingredients (non-standard) **Other skills-** Use a peeler, snip herbs with scissors *Know that we need to eat at least 5 portions of fruit and vegetables a day* *Know the 5 food groups (eat well plate)-Science* *Know vegetables are farmed* *Understand which vegetables we can eat raw and which ones need to be cooked* *Know what happens to vegetables when we cook them*	**Evaluate-** explore and evaluate a range of existing products evaluate their ideas and products against design criteria *Cut (a pre- marked line)* *Join materials with tape and split pins* *Use digital text and art to enhance ICT and Art* *Understand how levers and sliders create movement*	*Make a pattern -using card (draw around card onto fabric)* *Join- use a stapler and a running stitch* *Glue on embellishments Art* *Understand how to create a front and a back piece (flip over template)*
Destination questions	Design, make and evaluate a Winter **Vegetable soup** for a **cold day** **Recap –** Can you remember how to hold a knife and other utensils correctly, just like when you made your smoothie in Year 1? **Can you explore, handle and taste a range of vegetables (raw and cooked)** *Where do they grow/How are they harvested?* *Which Vegetables can you eat raw?* *How can we prepare vegetables?* *What happens when we cook vegetables?* **Can you explore and evaluate a range of existing products?** *What do you think about existing soup products?* *What did you like about them? What didn't you like about them?* **Do you Know the importance of a healthy diet and the 5 food groups that make up the eatwell plate?** *What are the five food groups?* *How many portions of fruits and vegetables should we aim to eat in a day?*	Design, make and evaluate a **pop up page** for a **story book** **Recap-** Can you remember the mechanism you used to create movement in Year 1 when you made your toy vehicle? **Can you evaluate a range of existing products and identify the moving parts in a book** *How does the mechanism work?* *What is creating the movement?* *Can you identify the different types of movement?* **Can you explore sliders and levers and the movement they create?** Complete skills grid *How does the slider/lever move?* *Which part of the mechanism is the pivot?* *Can you replicate a slider and a lever, following a teacher demonstration?* *What tools and equipment do you need?* *How can you cut a line in the centre of the page?* **Can you generate and design a product based on the design criteria?**	Design, make and evaluate **bunting** for a **celebration** or event **Recap-** Can you remember exploring fabrics in The Early years and how to weave materials together? **Can you research decorations for a variety of occasions?** (From the internet and their own experience) *What are they made of?* *How are they embellished?* *Can you instantly recognise the occasion or celebration/how?* **Can you explore a range of bunting, focusing on the stiches, and embellishments?** *What shapes can you see? What is on the reverse?* *Can you find the stitching? Is all the stitching the same?* *What fabric/material is used? Why do you think that was chosen?* **Can you research your chosen celebration/ festival**

	Do you understand how to use tools, utensils and equipment safely as well as the importance of food hygiene? Complete skills grid *What do we need to do before we handle and prepare food?* *How can we prepare vegetables for eating* *What equipment do we need?* *Can you safely demonstrate how to chop, with a knife and use a peeler?* **Can you generate and design a product based on the design criteria?** *Can you draw and label your design?* *Can you plan what to do as a series of steps?* *Can you list the equipment you will need?* **Can you Use ingredients and utensils to make a Winter Vegetable soup** *Can you use the utensils safely?* *Can you select from a range of vegetables according to their (colour, texture and taste)* *Can you season and garnish your soup to improve the taste?* *How can you achieve a smoother consistency?* **Can you evaluate your design and final product** Does you final product meet the design criteria? Explain what went well. **Next Steps:** In Year 3, you will build on your knowledge of healthy foods to make a healthy sandwich	*Who will your product be for and what mechanism will you use?* *What graphics will you add to your design?* *Can you draw and label your product?* *Can you plan what to do as a series of steps* *Can you list the equipment you will need?* **Can you use your knowledge of sliders and levers to create a pop up page?** *Have you chosen the most suitable mechanism for your design?* *How does your mechanism work?* **Can you use computing and art skills and to enhance the product to create the finished design?** *Can you Use a computer to add digital text and graphics to the product?* *(Choose an appropriate art skill (collage/paint)to create/finish the final design)* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *Explain what went well.* **Next Steps:** In Year 3, you are going to look at a different type of mechanism to create movement called pneumatics	*Which symbols, colours or text would fit in with this theme?* *Can you record your ideas and label your work?* *(Use the internet and books for further research)* **Can you practise your cutting, joining and sewing skills?** Complete skills grid *Do you Understand how to make and use a template to create identical pieces?* *Can you join fabric with a stapler, tape and glue (evaluate each join)* *Can you thread a needle and make a running stitch* **Can you generate and design a product based on the design criteria?** *Can you draw and label your design?* *Can you plan what to do as a series of steps?* *Can you list the equipment you will need?* **Can you use your knowledge of materials and techniques to create a section of bunting? (to be collaborated with class)** *Can you choose a suitable material?* *Can join pieces of fabric together using a running stitch?* *Can you Decorate your design using art skills (glue on embellishments)* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *Explain what went well.* **Next Steps:** You will make a pencil case in Year 3 and learn how to sew using a backstitch and a blanket stitch
Vocabulary	**vegetable names, utensil names, ingredient, appearance,** raw**,** cooked	**slider, lever, pivot, slot,**	**tool, techniques, fabric, template, stitch, thread,** needles**, staple**
Year 3 **NC and** *additional skills and knowledge*	**Design**- 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 **Make**-select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.	**Technical Knowledge**- understand and apply the principles of a healthy and varied diet. -prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques -understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	**Technical Knowledge**- understand and use mechanical systems in their products [Pneumatics] **Design**- 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

	-select from and use a wider range of materials and components, including textiles according to their functional properties and aesthetic qualities **Evaluate**-investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work -understand how key events and individuals in design and technology have helped shape the world *Make a pattern piece- secure template to fabric using tape* *Place patterns to avoid wastage* *Join use a running stitch, backstitch and a blanket stitch* *Attach a button or a toggle fastening* *Understand that a fastening needs two parts and how to attach them* *Understand how pencil cases/writing tools have changed over time History*	**Design**- 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 **Make**-select from and use a wider range of tools and equipment to perform practical tasks -select from and use a wider range of ingredients, according to their functional properties and aesthetic qualities **Evaluate**-investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work -understand how key events and individuals in design and technology have helped shape the world **Knife skills-**slicing and dicing, using cutting techniques (bridge, claw), **Appliances/Equipment-** grater **Measuring-** using digital scales (support) **Other skills** spreading and rinsing in a colander *Understand vegetables are grown, animals are reared and fish are caught in the UK and in other countries* *Know there are a range of different breads typically eaten in different counties with the same basic ingredients Geography*	**Make**-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 according to their functional properties and aesthetic qualities **Evaluate**-investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work *Measure and cut a drawn line with some accuracy – nearest (cm)Maths* *Join with tape, split pins and elastic bands* *Understand how pneumatics create movement*
Destination questions	Design, make and evaluate a **pencil case** for someone in **my family** **Recap-** Can you remember making bunting in year 2. Which stitch did you use? **Can you investigate pencil cases that have a range of stitches, joins, fabrics, finishing techniques and fastenings.** *Do the design features reflect the type of pencil case and its function?* *Is the fastening suitable for the product?* *Disassemble products (where appropriate) to gain an understanding of 3-D shape, patterns and seam allowances*	Design, make and evaluate a **healthy sandwich** to sell in a **supermarket** **Recap-** Do you remember making vegetable soup in Year 2. Can you remember how to prepare the vegetables? **Can you gather information about existing products (Visit a local supermarket and/or evaluate real products)** *What is the most popular sandwich? (design a questionnaire)* *How many vegetarian options?* *How are they packaged?* *What are popular combinations of ingredients?*	Design, make and evaluate ***a pneumatic animal*** for a **mascot** **Recap-** You made a pop up page in year 2 using a moving mechanism. Can you explain how you did that and what you used to create the movement? **Can you investigate and analyse videos and products with pneumatic mechanisms (including hydraulics in machinery).** *Where is the air? What is happening?* *How can you record your findings?*

	Can you investigate the development, design and functionality of pencil cases and writing tools over time (Can be internet research) *What do you notice? What has changed?* *Investigate pencil cases from different cultures (Patterned fabric)* **Practise cutting, joining, sewing (running, backstitch and blanket)** Complete skills grid *What is the best way to cut and shape fabric?* *Which technique/stitch makes the strongest join?* *Which fabric/s are most suitable?* *How can you decorate different fabrics and materials?* **Can you explore a range of fastenings (zip, Velcro, button, toggle, tie)** *What are the design features and differences between the fastenings?* *Can you make a button fastening? What do you need to consider?* **Can you generate and design a product based on the design criteria?** *Can you draw an annotated sketch to communicate your ideas?* *Does you design fulfil the brief?* *Can you decide what to do and the order to do it (pictorially and in writing)?* **Can you use your knowledge of materials, techniques and stitches to create a pencil case?** *Can you follow your design?* *Can you make a pattern and secure it to the fabric using tape?* *Can you join pieces of fabric together using an appropriate stitch?* *Can you Decorate using art skills eg sewing on embellishments?* *Can you add on a button fastening?*	**Do you know the basic ingredients of bread and how it is manufactured? (internet)** *How is bread made?* *Can you compare the ingredients in the different types of bread?* *Can you evaluate the taste, texture and appearance of different breads and record the results in a table?* **Can you find out how a variety of ingredients used in the products are grown and harvested, reared, caught and processed?** *Where and how are the ingredients grown (meats/fish/cheese/eggs)?* *How and why are they harvested/processed?* **Can you explain how key individuals have shaped the world** *How have Jamie Oliver and Marcus Rashford influenced school meals today?* **Do you understand how to use tools, utensils and equipment safely as well as the importance of food hygiene?** Complete skills grid *What do we need to do before we handle and prepare food?* *How can we prepare the ingredients before eating (practise grating cheese)* *What equipment do we need?* *Can you safely demonstrate how to chop using the bridge and claw technique?* *Can you wash food using a colander?* **Can you generate and design a product based on the design criteria** (RECEP not replicate eatwell plate from Year 2- emphasise the brief **healthy** sandwich) *What do you need to consider to make it part of a balanced diet?* *Can you draw and label your design (including the different food groups)?* *Can you plan what to do as a series of steps (pictorially and in writing)?* *Can you list the equipment you will need?*	**Can you evaluate familiar objects that use air to make them work (bicycle pump, swimming aids etc)** *What does the air do? How do you know there is air inside?* **Can you construct a simple pneumatic system using a balloon and tubing?** Complete skills grid *What happens to the air when you squeeze the bottle?* *What happens when you let go?* **Can you explore and construct more complex pneumatic systems using multiple syringes (Including ones with levers) CPD- See Planner for support** *What happens when the plunger of one syringe is pressed in?* *Why do the syringes move at different speeds?* **Can you generate and design a product based on the design criteria**? *Can you draw an annotated sketch to communicate your ideas?* *Does you design fulfil the brief?* *Can you decide what to do and the order to do it (pictorially and in writing)?* **Can you use your knowledge of pneumatics to create a mascot with moving parts?** *Can you follow your design?* *Can you measure and cut to the nearest CM?* *Can you join in a variety of ways?* *Can you successfully install a pneumatic system into your product?* *Can you use finishing techniques suitable for the product?* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *Can you record what went well?*

	Can you evaluate your design and final product? *Does you final product meet the design criteria?* *Can you record what went well?* **Next Steps:** You will use your knowledge of different stitches and sewing techniques in Year 6 when you make your memory cushion. You will also practise using a sewing machine.	**Can you Use ingredients and utensils to make a Healthy sandwich?** *Can you use the utensils safely, selecting the appropriate tool for the task?* *Can you cut your sandwich in half?* *Can you use digital scales to measure quantities?* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *Can you record what went well?* **Next Steps:** You will learn to use heat in Year 4 to cook ingredients.	**Next Steps:** You will explore CAMS in Year 5 when you make a moving display
Vocabulary	**Names of fabrics ,compartment,** zip, button, **toggle, fastening, pattern, blanket stitch**	**Ingredient names, utensil names, edible,** fresh, **processed**, **grown, caught, reared**, melt**,** toast**, grate,** spread	**attach**, **pressure, inflate, deflate, pump, seal, air-tight**, **syringe, plunger,**
Year 4 **NC and *additional skills and knowledge***	**Technical Knowledge**- apply their understanding of how to strengthen, stiffen and reinforce more complex structures **Design**-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 **Make**-select from and use a wider range of tools and equipment to perform practical tasks -select from and use a wider range of materials and components, including construction materials, , according to their functional properties and aesthetic qualities **Evaluate-** investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Cut, fold and score card and understand the difference between them Join card using tabs and adhesive Use Computer Aided Design to create a net (with support) and to apply a digital font to a product- ICT	**Technical Knowledge**-understand and apply the principles of a healthy and varied diet -prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques -understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. **Design**-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 **Make**-select from and use a wider range of tools and equipment to perform practical tasks accurately select from and use a wider range of ingredients, according to their functional properties and aesthetic qualities **Evaluate-** investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	**Technical Knowledge** understand and use electrical systems in their products [for example, series circuits -incorporating switches, bulbs, buzzers and motors] **Design**-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 **Make-**select from and use a wider range of tools and equipment to perform practical tasks accurately. -select from and use a wider range of materials and components according to their functional properties and aesthetic qualities **Evaluate-** investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work -understand how key events and individuals in design and technology have helped shape the world Make a simple circuit - Science

	Understand how a 2D template can be used to create a 3D design Knowledge of nets and 3D shapes (explore and deconstruct existing products)- Maths	**Knife skills-**using cutting techniques (bridge, claw) **Appliances/Equipment-**Using a heat source- oven (with support) and a toaster **Measuring-**using digital scales **Other Skills-**rolling (dough),sifting flour, whisking Understand that a healthy diet is made up from a variety and a balance of different foods and drink Understand the effect heat has on ingredients (toast, soften, melt)	Understand the components needed in a simple circuit Know some key individuals and inventors
Destination questions	Design, make and evaluate a **box** for a **treat** **Recap-**In Year 1, you made a freestanding structure- What did you need to consider to ensure it was stable? **Can you investigate a range of shell structures/packaging?** *What is the purpose of the shell structure – protecting, containing, presenting etc?* *What material is it made from?* *How has it been constructed?* *Are the materials recyclable or reusable- How do you know?* *How has it been stiffened i.e. folded, corrugated, ribbed, laminated?* *What information does it show and why?* **Can you disassemble a product/packaging?** *How are different faces of the package arranged?* *How are the tabs used to join the 'free' edges of the net?* *Can you identify the nets?* **Can you use construction kits with flat faces to construct nets?** *Record pictorially 2D net and 3D shape* **Can you explore a range of cutting, joining and folding techniques to strengthen and stiffen paer/card?** Complete skills grid	Design, make and evaluate a **pizza, wheel/tart** for **someone in my family** **Recap-** Last year you made a healthy sandwich which ingredients did you use that can also be heated/cooked? **Can you gather information about existing products?** What are the basic ingredients of the pizzas? How are they packaged? What are popular combinations of ingredients? **Do you understand how to use tools, utensils and equipment safely as well as the importance of food hygiene?** Complete skills grid *What do we need to do before we handle and prepare food?* *How can we prepare the ingredients?* *What equipment do we need?* *Can you safely demonstrate how to chop using the bridge and claw technique?* **Can you explore the effect heat has on ingredients and food?** cheese- grilled bread- toast tomatoes- roasted *Can you describe what happened to the appearance, taste and texture?* *Which do you prefer?*	Design, make and evaluate an **electrical game** that makes a **sound** or **lights up** **Recap-** You have been exploring circuits in science. What will you need to consider when making your game? **Can you discuss, investigate and disassemble a range of battery-powered products (including games)** *How does the product/game work?* *What are its key features and components?* *How does the switch work?* *How is it suited to its intended user and purpose?* **Can you make a range of switches that operate in different ways?** Complete skills grid *How might different types of switches be useful in different types of products?* *Can you use the tools and equipment safely?* **Can you find a fault in a circuit?** *What does a circuit need to work?* *What do you need to consider when finding a fault?* **Can you research key individuals that have helped shape the world?(eg battery)** *How has electricity evolved over time?* *Are there any significant individuals who have contributed to this?*

	Can you score and fold paper- What is the difference? *Can you measure a 'window section' and cut it out?* *Can you layer paper, corrugated card and straws to make a stiffer structure?* **Can you generate and design a product based on the design criteria?** *Can you draw annotated sketches to communicate your ideas?* *Do your designs fulfil the brief?* *Which one will you choose and why?* *Can you record a sequence of steps/ instructions?* **Can you make a packaging box for a treat, using your knowledge of nets and cutting and joining techniques?** *Can you select and use tools to measure, mark out, cut, score, shape and assemble with some accuracy?* *Can you explain your choice of materials according to their functional and aesthetic qualities?* *Can you use finishing techniques suitable for the product you are creating (computer for fonts/graphics)?* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *Can you record what went well and what you would improve?* **What Next**- You will make a structure using wood in Year 6	**Can you generate and design a product based on the design criteria?** *What do you need to consider to make it part of a balanced diet?* *Can you draw and label your design (including the different food groups)?* *Can you plan what to do as a series of steps (pictorially and in writing)?* *Can you list the equipment you will need?* **Can you use ingredients and utensils to make a Pizza wheel/ tart (Can use pre-prepared puff pastry)** *Can you use the utensils safely, selecting the appropriate tool for the task?* *Can you roll out your pastry?* *Can you present your pizza in an interesting way- Doesn't have to be round!* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *Can you record what went well and what you could improve?* **Next Steps:** You will make your own flatbread and dip in year 5 and begin to combine ingredients.	**Can you design a light/ buzzer game using your knowledge of circuits and switches?** Using circuits to make games and activities - KS2 Design and Technology - BBC Bitesize ideas! *Can you draw annotated sketches to communicate your ideas?* *Do your designs fulfil the brief?* *Which one will you choose and why?* *Which components have you used? Why?* *Who is the game designed for (audience)?* *Can you record a sequence of steps/ instructions?* **Can you make a light or buzzer game using electrical components?** *What happens when the circuit is complete?* *Write a set of instructions for you game (literacy extension)* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *Can you record what went well and what you would improve?* **What Next**- You will make a nightlight next year, building on your knowledge of circuits as well as introducing sensors for control
Vocabulary	**Shell structure, net, mark out, score, tabs, adhesives, assemble**, stiff, strong reduce, reuse**,** recycle,**font, lettering, text, graphics**	**Ingredient names, utensil names,** texture, taste, sweet**, spicy, savoury,** frozen, tinned,	**Series circuit, fault, connection**, battery, **insulator, conductor**

Year 5 **NC and *additional skills and knowledge***	**Technical Knowledge-**understand and use mechanical systems in their products [CAMS] **Design-**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 **Make-**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, according to their functional properties and aesthetic qualities **Evaluate-**investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work *Measure accurately to the nearest (mm), using a ruler and cut Maths* *Make holes using a range of tools (single hole punch, hand drill, bradawl), Talk about the method most suitable for a task or material.* *Understand how cams create movement.*	**Technical Knowledge-**apply their understanding of computing to program, monitor and control their products. **Design-**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 **Make-**select from and use a wider range of tools and equipment to perform practical tasks -select from and use a wider range of materials and components, according to their functional properties and aesthetic qualities **Evaluate-**investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work -understand how key events and individuals in design and technology have helped shape the world *Programme a crumble kit- ICT* *Understand how to use different components for monitoring and control* *know some key individuals and inventors*	**Technical Knowledge**-understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. -prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques **Design-**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 **Make-**select from and use a wider range of tools and equipment to perform practical tasks -select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities **Evaluate-**investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work **Combining Ingredients-**mixing, kneading **Appliances/Equipment-**using a heat source-oven**,** blender, tin opener **Measuring -**accurately (ml and g), following a recipe, using digital scales, measuring jugs **Other skills-**follow a recipe, seasoning *Understand that seasons affect available food* *Identify foods that can be grown all year round in the UK* *Understand the importance of the correct storage of ingredients*
Destination questions	Design, make and evaluate a **moving window** display for a **shop/tourist attraction** **Recap**- You explored pneumatics in Year 3 when you made your moving mascot- How did you create movement using a syringe?	Design, make and Evaluate a **sensor controlled nightlight** for a **child's bedroom** **Recap-** You made a game in Year 4. Which components did you use in your circuit?	Design, make and evaluate a **flatbread** with a dip using **seasonal ingredients** **Recap-** You made Pizza tarts last year and explored how heat effects different ingredients.

	Can you explore a range of household objects, identifying the mechanisms in them (can opener, ice cream scoop, bottle opener etc) *How do these mechanisms create movement?* *Can you record the results in a table?* **Can you investigate a collection of moving toys that contain a cam mechanism (Use videos, photographs and computer animations of products that cannot be explored first-hand)** *Who do you think the toy is designed for?* *Which parts of the toy turn/move?* *Which parts of the toy move?* *How are the different parts attached to allow free movement?* *What shape of cam has been used and why? (snail, egg, ellipse, off centre)* **Can you use tools to make holes and understand how the position of a hole (Centre of rotation) effects the movement in a cam?** Complete skills grid *Can you use a range of tools to make holes in materials? (paper, card, wood material hole punch, drill bradawl)* *Can you explore the position of the holes in different shapes evaluating the movement created?* *Can you draw exploded/cross sectional diagrams to evaluate a range of cam shapes?* **Can you research a theme and design a product based on the design criteria?** *Can you draw cross sectional/ exploded diagrams of your ideas- consider using ICT?* *Can you choose the most suitable design from a selection?* *Does you design fulfil the brief?* *Can you write a detailed sequence of instructions, tools and material list (including measurements)?* **Can you make a product with a cam mechanism for a themed window display?** *Which cam shape did you choose? Why?*	**Can you explore a range of nightlights and sensor controlled products?** *How do they work?* *How do they turn on and off?* *What are they made of?* *What is inside?* *Why is a computer control program used to operate the products?* *What are the advantages of using computer control?* **Can you research key individuals that have helped shape the world (eg computer programming/light)?** *Are there any significant individuals who have contributed the development of computer programming?* **Can you make a circuit using a crumble kit using sensors and a range of switches?** Complete skills grid *Which components do you need?* *Can you draw a diagram showing the components?* *Can you explain how to programme the crumble kit?* *(Allow children to practise methods for making secure electrical connections e.g. using wire strippers, twist and tape connections, screw connections, crocodile clips and connecting blocks)* *What are the dangers of mains electricity?* **Can you generate and design a product based on the design criteria?** *Can you draw cross sectional/ exploded diagrams of your ideas- consider using ICT?* *Can you choose the most suitable design from a selection?* *Does you design fulfil the brief?* *Can you write a detailed sequence of instructions, tools and material list (including measurements)?* **Can you make a sensor controlled nightlight using your knowledge of circuits and programming?**	Now we are going to explore combining ingredients. **Can you investigate where foods and ingredients are grown/reared/caught and how seasonality affects their availability?** *Why do we get different foods at different times of the year?* *Can we get food which is not in season?* **Can you gather information and evaluate existing products (dips)?** *What are the main ingredients?* *Are they seasonal?* *Can you evaluate the taste, texture and appearance?* **Can you generate and design a product (Dip) based on the design criteria?** *Does you design fulfil the brief?* *Can you use seasonal ingredients?* *Can you draw a detailed diagram of your design?* *Can you write a detailed sequence of instructions, tools and ingredients (including measurements and quantities?* **Can you use ingredients and utensils to make bread?** *Can you select and use the tools effectively?* *Can you measure accurately using measuring jugs and digital scales* *Can you sift, mix and knead ingredients?* *Can you use a heat source, controlling the time and temperature?* **Can you use ingredients and utensils to make a dip?** *Can you use a tin opener?* *How can we prepare and store food safely?* *What other basic hygiene measures do you need to consider?* *Does your dip need seasoning?*

	Can you describe the movement and how it works using technical vocabulary? *Can you use finishing techniques suitable for the product you are creating (computer for fonts/graphics etc)* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *How closely does your final product resemble your initial design?* *If you were to make this product again, what would you change or adapt?* *What are other people views of your design/final product? How could you find out?* **Next Steps:** You will explore mechanisms again in secondary school	*Can you use the skills learnt in the focused tasks with some independence?* *Can you consider suitable finishing techniques?* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *How closely does your final product resemble your initial design?* *If you were to make this product again, what would you change or adapt?* *What are other people views of your design/final product? How could you find out?* **Next Steps:** You will continue to explore programming and crumble kits as part of your computing curriculum	**Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *How closely does your final product resemble your initial design?* *If you were to make this product again, what would you change or adapt?* *What are other people views of your design/final product? How could you find out?* **What Next**-You will continue to combine ingredients next year and also learn how to scale up recipes when you make your savoury scones
Vocabulary	**cam, follower, axle, shaft, crank,** handle, **rotation, annotated sketches, exploded diagrams mechanical system, input movement, process, output movement**	**light emitting diode (LED), light dependent resistor(LDR), USB cable, control,** program, **system, input device, output**	**Ingredient names, utensil names, seasonality, harvested, knead, prove, beat, season**, herbs, spice
Year 6 **NC and additional skills and knowledge**	**Technical Knowledge-**apply their understanding of how to strengthen, stiffen and reinforce more complex structures **Design-**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 **Make**-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, , according to their functional properties and aesthetic qualities	**Technical Knowledge**-understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. -prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques **Design-**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 **Make**-select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	**Design-**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 **Make**-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 textiles according to their functional properties and aesthetic qualities **Evaluate**-investigate and analyse a range of existing products

	Evaluate-investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world- *Cut wood using a junior hacksaw, securing with a clamp* *Join wood using techniques such as elastic bands, card triangles and strips of card and nails/screws* *Understand how to use triangulation to make a structure stronger*	select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities **Evaluate**-investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work **Combining ingredients-**Rubbing in fat **Appliances/equipment -**Using a heat source- oven M**easuring-** Accurately (ml and g), following a recipe, using digital scales, measuring jugs **Other skills c**reate/ adapt refine/scale up recipes *Understand the importance of the correct storage of ingredients* *Understand that recipes can be adapted to change appearance, taste, texture and aroma*	-evaluate their ideas and products against their own design criteria and consider the views of others to improve their work -understand how key events and individuals in design and technology have helped shape the world *Make a pattern- secure to fabric using pins place patterns to avoid wastage* *Join using a range of stiches, allowing for seams* *Use computer software ICT for designs (iron on transfer paper) and embroidery for finishing techniques* *sew on a zip* *Use a sewing machine with support* *Know the qualities of materials to create suitable visual and tactile effects in the decorations* *Know some key individuals and inventors (zip, Velcro, button fastenings)*
Destination questions	Design, make and evaluate a **bird house/ bug hotel** for our **conservation/woodland area** **Recap-** You have made structures in years 1 and 4 using paper and card- we are now going to be working with wood. Which tools do you think we might be using? **Can you investigate of a range of portable, temporary and permanent frame structures, e.g. tents, bus shelters, umbrellas?** *How well does the frame structure meet users' needs and purposes?* *Why were materials chosen?* *What methods of construction have been used?* *How has the framework been strengthened, reinforced and stiffened?* *How does the shape of the framework affect its strength?* **Can you research key individuals involved in designing and making frame structures (eg Eiffel Tower, Eden project, iron bridge)?**	Design, make and evaluate some **savoury -scones** to sell at **school** **Recap-** You combined ingredients in year 5 to make your bread and dip. Which techniques/utensils did you use? **Can you gather information about existing products and use research to gather consumer information for a new product?** *What flavour combinations are there?* *What are the main ingredients?* *Can you create a survey to identify consumer preferences for a new product?* **Can you research existing recipes comparing quantities and ingredients (use as a base for your own recipe)** *What are the main ingredients?* *Can you scale up/ down the recipe?* *What could you substitute ..... for?(intolerances/allergies)* *How much will your product cost to produce?*	Design, make and evaluate a **Lea memory cushion** for **yourself** **Recap-** You made pencil cases in year 3 and practised a range of stitches. Can you remember any? **Can you investigate a range of textile furnishings?** *Is the product functional or decorative?* *Who would use this product?* *What components have been used to enhance the appearance?* **Can you explore fastenings and learn about the key individuals and inventors behind them?** *How are they attached? How do they work?* *Who invented them?* *How have they evolved over time?* **Can you practise a range of stitches (taught previously) plus new embroidery techniques and stitches on a range of fabrics?** Complete skills grid

	How innovative is the design? When was it made? *Who made it? Where was it made?* *Can you research local designs and structures?* **Can you make a temporary structure (shelter) ?– Forest school** *What shape is the most stable?* *How can you reinforce the joints?* *Can you explore making knots?* *Can you use a tennon saw? (supervised)* **Can you practise cutting, shaping and joining wood?** Complete skills grid *How can you keep the wood secure?* *What other health and safety implications do you need to consider?* *Can you mark out a length to the nearest mm?* *Can you investigate a range of ways of joining wood (card strips, triangular card, elastic bands screws, nails)* *Can you evaluate each join?* **Can you generate and design a product based on the design criteria?** *Can you draw cross sectional/ exploded diagrams of your ideas- consider using ICT* *Can you choose the most suitable design from a selection?* *Does you design fulfil the brief?* *Can you write a detailed sequence of instructions, tools and material list (including measurements)* *Can you make a prototype using paper or straws?* **Can you use your prior knowledge and skills to create your bird house/bug hotel?** *Can you follow your design?* *Can you measure and cut to the nearest mm?* *Have you chosen the most suitable join?* *Do you need to adapt your design? Why?* *Have you considered the finished look?* **Can you evaluate your design and final product**?	**Can you explain the importance of the correct storage of ingredients and basic food hygiene?** *How can we prepare and store food safely?* *What other basic hygiene measures do you need to consider?* **Can you generate and design a recipe based on the design criteria?** *Does you design fulfil the brief?* *Can you use seasonal ingredients?* *Can you draw a detailed diagram of your design?* *Can you write a detailed sequence of instructions, tools and ingredients (including measurements and quantities?* **Can you follow a recipe to make a batch of savoury scones?** *Can you select and use the tools effectively?* *Can you measure accurately using measuring jugs and digital scales?* *Can you sift, mix and knead ingredients?* *Can you divide the mixture into equal parts?* *Can you use a heat source, controlling the time and temperature>* *Can you consider how to present your product for appeal?* **Can you evaluate your design and final product**? *Does you final product meet the design criteria?* *How closely does your final product resemble your initial design?* *If you were to make this product again, what would you change or adapt?* *What are other people views of your design/final product? How could you find out?* **Next Steps**: *You will learn how to prepare a range of dishes and meals in secondary school using different appliances*	*Which stitch is best for a join, seam a decorative pattern?* *Which materials are suitable?* *Can you use a sewing machine to join two pieces of material together?* **Can you use ICT software to create a logo (To be ironed on using transfer paper on final product)** *Can you create a simple logo, initial or shape* *Consider how this will be incorporated into the final design* **Can you generate and design a product based on the design criteria?** *Can you draw cross sectional/ exploded diagrams of your ideas- consider using ICT* *Can you choose the most suitable design from a selection?* *Does you design fulfil the brief?* *Can you write a detailed sequence of instructions, tools and material list (including measurements)* *Can you include your logo on your design?* **Can you use your knowledge of materials, techniques and stitches to create a memory cushion?** *Can you follow your design?* *Can you make a pattern and secure it to the fabric using pins?* *Have you placed pieces to avoid wastage?* *Can join pieces of fabric together using a range of stitches. (Turn inside out for seams)* *Can you decorate using art skills ,sewing on embellishments and ironing on transfer* *Can you add on a zip fastening?* **Can you evaluate your design and final product?** *Does you final product meet the design criteria?* *How closely does your final product resemble your initial design?* *If you were to make this product again, what would you change or adapt?*

	Does you final product meet the design criteria? *How closely does your final product resemble your initial design?* *If you were to make this product again, what would you change or adapt?* *What are other people views of your design/final product? How could you find out?* **Next Steps***: You will have the opportunity to work with wood and other materials in secondary school. What do you think you might need to remember?*		*What are other people views of your design/final product? How could you find out?* **Next Steps**: *You will continue to explore fabrics and stitches to make a range of functional and decorative pieces. Which stiches can you remember?*
Vocabulary	stiffen, strengthen, **reinforce, triangulation, stability, temporary, permanent** **clamp, hacksaw, strut, diagonal, horizontal, vertical**	**Ingredient names, utensil names** fat, sugar, carbohydrate, protein, **nutrition, gluten,** dairy**,** allergy**, intolerance, combine,** fold**, rub in**	**Seam, seam allowance, wadding, right side, wrong side, hem,** template, **pattern pieces**