

Blenheim Design and Technology Curriculum

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Overview

The DT curriculum has been designed as follows: -

1. Learning is sequential across the following areas – construction; cooking and nutrition; textiles; mechanisms; electrical and mechanical components.
2. Within each project, learning focuses on design, make, evaluate and technical knowledge.
3. Children are introduced to designers and inventors and the contributions that they have made.
4. Design and Technology has been designed to be a stand-alone subject with teaching sequences, specialised teaching resources and assessment.
5. An adapted PlanBee teaching scheme is used to support teachers with planning and delivery.

Intent, Implementation and Impact

Intent	Implementation	Impact
<p>1. Our DT curriculum is based on the National Curriculum. Knowledge is taught through five main themes: -</p> <ul style="list-style-type: none"> • Technical knowledge – to develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. • Design and make – to build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. • Evaluate – to critique, evaluate and test their ideas and products and the work of others. • Cooking and nutrition – to understand and apply the principles of nutrition and learn how to cook. • The impact of invention – to introduce pupils to a range of famous inventors, their products and the impact of those on daily life and the wider world. <p>2. Children will be taught progressive knowledge, skills and vocabulary in the areas of: -</p> <ul style="list-style-type: none"> ○ textiles ○ mechanisms ○ construction ○ electrical and mechanical components ○ cooking & nutrition. <p>Expose the children to a range of work from various engineers, architects, inventors and chefs.</p>	<ul style="list-style-type: none"> • DT lessons are taught weekly or in Blocks depending on the activity e.g. a cooking day, construction day etc. in order for the children to focus on a particular strand. • Lessons are well-planned, using the adapted PlanBee resources alongside our progression of skills document. • Knowledge Organisers are shared with children and parents at the beginning of a unit of work – they identify the knowledge, skills and vocabulary to be taught. • Medium Term Plans for each unit of work are produced, which breaks down the unit into steps. These steps show the learning objectives that are to be achieved and the success criteria that are needed to be met. • Work is recorded in children’s learning books. Record of practical work may take the form of photographs and notes from the children and adults. • Teacher assessment for DT takes place and is recorded at the end each block taught. This is written as a list of children who are working towards expected, those that are at expected and those who are at greater depth. 	<p>Know more</p> <ul style="list-style-type: none"> • Children are taught age-related content and skills. • Children are taught about a range of engineers, inventors, architects and chefs, both male and female • Knowledge Organisers set out the knowledge, skills and vocabulary for a unit of work. <p>Do more</p> <ul style="list-style-type: none"> • Children use the work of famous engineers, inventors, architects and chefs to influence their own designs. • Children are explicitly taught a wide range of techniques and given the opportunities to apply them. • Children are expected, to apply the skills/techniques they have learnt when producing their own work. <p>Remember more</p> <ul style="list-style-type: none"> • Children build upon knowledge and skills from Reception to Year 6 (DT Progression document). • Knowledge is developed through five key strands – <ul style="list-style-type: none"> ○ Textiles ○ Mechanisms ○ Construction ○ Electrical and mechanical components ○ Cooking and nutrition, • Knowledge and skills will be recapped at the beginning of each new unit of work. Children will be encouraged to make connections to other subjects (e.g nutrition and electricity in Science) <p>Children will use knowledge organisers, which contain key vocabulary and information.</p>

Curriculum Coverage - 2 year rolling programme

Design and Technology Projects				
EYFS	1. Design and Technology takes place through 'Free Flow Continuous Provision'. Some examples of specific working in this area include: <ul style="list-style-type: none"> • Pupils are taught to use a range of tools - scissors, hole punches, staplers, stampers, different types of glue etc • Pupils are taught the following skills and given opportunities to apply them through continuous provision: - cutting, scrunching, linking, attaching, ripping, fringing, labelling, stapling, curling, sticking, folding, collaging, designing, planning... • Pupils are taught how to design, plan, build, risk assess, place and fit together, balance, shape and size awareness. 2. Areas set up to support Design and Technology: - <ul style="list-style-type: none"> • Outside construction which contains large blocks, tyres, planks, tubes, crates • The Workshop – there is a range of recycled and collaging materials on offer and a range of tools to work with e.g. boxes, cartons, yoghurt pots, buttons, string, cellotape, masking tape, pasta etc. • Inside construction – this space provides pupils with the opportunity to plan, make, manipulate, follow instructions and pictures, deign using construction kits such as small blocks, mobile, straws, duplo, stickle bricks 3. Adult led activities include making cards, cooking, decorating, making Divas from clay, making Christmas decorations from salt dough or card, making Easter treasure boxes.			
Cycle A				
	Autumn	Spring	Summer	Food day
Oak R/1	Making Christmas decorations	Playgrounds	Moving Pictures	Eating more fruit and veg
	<ul style="list-style-type: none"> • Explore different kinds of decorations • Using simple stitches • Making a Christmas bauble using fabric and sewing 	<ul style="list-style-type: none"> • Looking at different types of playground equipment, what they are made of and how they move. • Different ways of joining materials. • Make models of playground equipment 	<ul style="list-style-type: none"> • Explore sliders, levers, pivots and wheel mechanisms • Making pictures move using mechanisms. 	<ul style="list-style-type: none"> • Healthy eating • Exploring a variety of fruits and vegetables • Preparing fruits and vegetables • Designing, making and evaluating a salad of fruit smoothie
Birch 2/3/4	Making a fire engine	Making puppets	Making mini greenhouses	Seaside snacks
	<ul style="list-style-type: none"> • Learning about wheels, axles and a chassis • Looking at fire engines and their features • Design, make and evaluate own model fire engines. 	<ul style="list-style-type: none"> • Looking at puppets and how they are made • Cutting out fabric and using simple stitches. Design, make and evaluate own hand puppets.	<ul style="list-style-type: none"> • The purpose of a greenhouse and how it works • How structures are made and made stable. • Appropriate materials. Design, make and evaluate own mini greenhouses.	<ul style="list-style-type: none"> • Texture, flavour and colour of food • What is a balanced meal? Designing and making a seaside picnic
Willow 4/5/6	Building bridges	Moving toys	Pencil cases	Burgers
	<ul style="list-style-type: none"> • Different types of bridges • Structures that support bridges • Building own bridges <ul style="list-style-type: none"> • Add bridge designers 	<ul style="list-style-type: none"> • Learning about cams • Create a sturdy structure • Design, make and evaluate own toy with a cam mechanism 	<ul style="list-style-type: none"> • Different materials and ways pencil cases are opened and closed • Variety of stitches – running, whip and back • Decorating own pencil cases 	<ul style="list-style-type: none"> • Burger recipes • Design, cook, taste and evaluate own burgers • Combining flavours to make healthy and tasty meals

Cycle B

	Autumn	Spring	Summer	Food day
Oak R/1	Making Christmas decorations	Moving Pictures	Stable structures	Eating more fruit and veg
	<ul style="list-style-type: none"> • Explore different kinds of decorations • Using simple stitches • Making a Christmas bauble using fabric and sewing 	<ul style="list-style-type: none"> • Explore sliders, levers, pivots and wheel mechanisms • Making pictures move using mechanisms. 	<ul style="list-style-type: none"> • Create own structures • Follow and adapt plans • Considering 'purpose' of a structure 	<ul style="list-style-type: none"> • Healthy eating • Exploring a variety of fruits and vegetables • Preparing fruits and vegetables • Designing, making and evaluating a salad of fruit smoothie
Birch 2/3/4	Seasonal stockings	Photograph frames	Moving monsters	Sandwich snacks
	<ul style="list-style-type: none"> • Learn different sewing techniques • Joining and decorating fabric • Design and make own Christmas stocking 	<ul style="list-style-type: none"> • Explore the materials used and components of photo frames • Learn how to use tools and techniques. • Design, make and evaluate own photo frame. 	<ul style="list-style-type: none"> • Learn about pneumatic systems • Create own monster with moving parts 	<ul style="list-style-type: none"> • Learn about food groups • Taste and test a range of bread and sandwich fillings • Design, make and evaluate a healthy sandwich.
Willow 4/5/6	Fairgrounds	Funky furnishings	Shelters	Great British Dishes
	<ul style="list-style-type: none"> • Examine rotating fairground rides. Design, make and evaluate own ride using an electrical motor 	<ul style="list-style-type: none"> • Analyse, design, make and evaluate cushion covers <p>Sewing techniques, joining and decorating fabric</p>	<ul style="list-style-type: none"> • Using different materials to create free standing objects • Reinforcing structures • Suitable materials <p>Design, make and evaluate own structures</p>	<ul style="list-style-type: none"> • Explore sweet and savoury national dishes • Explore how cuisine is influenced • Plan and shop for a meal, <p>Add great British chefs – Delia, Fanny Craddock, Heston Blumenthal, Jamie Oliver</p>

Progression of Knowledge and skills - summary

	EYFS	Y1/2	Y3/4	Y5/6
Design	<ul style="list-style-type: none"> • Begin to think about what they want to make and discuss their plans. • Talk about problems and how they can be overcome. 	<ul style="list-style-type: none"> • Can identify the key features of an existing product • Can evaluate an existing product by saying <ul style="list-style-type: none"> ○ How it is useful ○ How it works ○ Whether they like it and why. • Can generate ideas for different ways of making/using a product • Can make a plan of an existing product and label it. • Can communicate their ideas and plan by describing them to someone else including what the purpose is. • Can make a list of materials that they will need 	<ul style="list-style-type: none"> • Can compare existing products. • Can identify the features of existing products and what makes them fit for purpose. • Can create design criteria and use these to evaluate existing products • Can carry out a range of investigations: • Can identify materials that are suitable for a particular purpose • Can apply what they know about a product to create a relevant design. • Can identify areas that could be improved upon in their design • Can create an accurate labelled diagrams • Can design a product with design criteria 	<ul style="list-style-type: none"> • Can compare, contrast and analyse existing product in detail using criteria. • Can assess and talk about the advantages and disadvantages of different types of product/features. • Can investigate and discuss different features/scenarios. • Can investigate, carry out tests and experiment with different techniques to gather ideas for their own work. • Can make suggestions about what feature/material would work best. • Can use knowledge and a range of information to information to create a design for a particular user and purpose. • Can describe how they will construct their design and what materials and tools they will need. • Can suggest some alternative designs and discuss the benefits/drawbacks • Can identify the parts of the process that will be easy and more challenging. • Identify how they can overcome challenges (ask for help). • Can articulate that they have considered the use of the product when selecting materials • Can create a detailed plan, recording how the design meets the needs of the user, the purpose; the equipment needed and the order of work for the making process. • Can draw scaled diagrams

Working with tools and equipment	<ul style="list-style-type: none"> • Can move hands and fingers independently from shoulders • Can rotate lower arms and wrists independently. • Can tummy-crawl, crawl on all fours, climb, pull themselves up on a rope and hang on monkey bars. • Can undertake small world tasks such as thread and sew, pour, stir, dress and undress dolls, plant, play with small world toys, and make models with junk materials, construction kits and malleable materials like clay. • Can correctly hold a pencil, paintbrush, pair of scissors, knife and fork. • Can sit upright at a table and on the floor. • Can use simple tools safely – scissors 	<ul style="list-style-type: none"> • Can cut out using scissors (paper and fabric) • Join 2 pieces of paper/card together with glue & tape • Join two pieces of fabric together using a needle and thread • Can select appropriate tools and use them safely 	<ul style="list-style-type: none"> • To thread a needle and secure the thread with a knot • Measure and cut out using centimetres • Can select the most appropriate materials, tools and techniques to use and can use them safely 	<ul style="list-style-type: none"> • Can thread a needle, & secure the first stitch with a knot (hidden/visible). • Can complete & secure the last stitch. • Measure and cut precisely to millimetres • Can independently organise appropriate equipment and materials needed. • Can use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters • Work within health and safety rules when working with materials such as scissors and other sharp objects
Making	<ul style="list-style-type: none"> • Construct using a range of materials • Can do some simple joining techniques - using adhesive tape and different sorts of glue. 	<ul style="list-style-type: none"> • Can follow their design to make a relevant product (lever, sturdy structure, bauble, puppet) • Can successfully join materials together e.g: - attach button to a piece of fabric, simple stitches • Can make a structure stronger through rolling and layering 	<ul style="list-style-type: none"> • Can follow their design accurately to make a product. • Can consider which materials are fit for purpose and join them appropriately • Can join two pieces of material using a stitch (overstitch, running stitch and back stitch) • Can use finishing techniques like fastenings, embroidery and applique • Can strengthen joins and corners in a variety of ways using tape, glue, 	<ul style="list-style-type: none"> • Can independently follow their design to make a successful product that is for a specific user. • Can ensure products are carefully finished. • Can make improvements from design suggestions • Can use and join two pieces of fabric together using a range of stitches (back stitch, running stitch, zig-zag stitch, over stitch, blanket stitch).

			<p>string, staples Can create a mini greenhouse that has: -</p> <ul style="list-style-type: none"> ○ A frame strong enough to keep the structure stable ○ Transparent sections within the frame <ul style="list-style-type: none"> • Can use a template. 	<ul style="list-style-type: none"> • Can sew on accurately, buttons, beads, ribbons, tassels and frills to add interest and texture. • Can use template to investigate • Can use a pattern to make a product • Know a range of techniques to make a structure sturdier. • Can demonstrate how their product is strong and fit for purpose
Evaluation	Reflect on whether they have made what they wanted to make.	<ul style="list-style-type: none"> • Say what they like & dislike about their own work • Can say what they like about others' work & give positive feedback (I like X about your product) • Can identify what has gone well with their product. • Can say how they could improve their work • Can assess how well their product works • Can predict how changes will improve the finished product 	<ul style="list-style-type: none"> • Look at a range of existing products – talk about what makes them successful. • Recognise what has gone well, but suggest further improvements for the finished article • Suggest which elements they would do better in the future • Can assess how well their product works in relation to the design criteria and the intended purpose: • Can identify problems faced and talk through how they were overcome. 	<ul style="list-style-type: none"> • Test and evaluate commercial/other products using criteria: - <ul style="list-style-type: none"> ○ Is it fit for purpose? ○ What would improve it? ○ Would different resources have improved their product? ○ Would they need more or different information to make it even better? ○ Does their product meet all design criteria? • Can say how they are going to use this information in their own designing. • Can analyse a prototype by asking questions that are based on the design criteria • Can identify what works well and what might be improved using these prompts: <ul style="list-style-type: none"> ○ Which parts of the making process went well. ○ What are you particularly pleased with? ○ Did you encounter any problems in the making process? How did you overcome them?

				<ul style="list-style-type: none"> ○ Did you change any part of your design during the making process, if so why? ○ How well does your product fit the design criteria and the intended purpose? ○ Would you change anything about your finished product if you were to make it again? ● Understand that all finished products, no matter how good, can be improved in some way.
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Technical knowledge	
Textiles	Y1/2 <ul style="list-style-type: none"> ● Know that a decoration is an item that you put on something else to make it look more attractive. ● Know that sewing with a needle and thread can be used to join two pieces of fabric together ● Can recognise the running stitch and over stitch. ● To know that a template is a shaped piece of paper that is used as a pattern for cutting out. ● To know that a running stitch is a line of small even stitches that do not overlap.
	Y3/4 <ul style="list-style-type: none"> ● Know that there are different stitches that are used to join fabric together: - <ul style="list-style-type: none"> ○ Backstitch – a line of overlapping stitches to form a solid line that gives the most secure join ○ Running stitch - a simple stitch consisting of a line of small even that do not overlap. ○ Whip stitch/overstitch - a line of parallel line stitches that often goes around the edge. ● Know that there are different ways of adding embellishments to fabric: - <ul style="list-style-type: none"> ○ Buttons (practical and embellishment), ○ Appliqué (pieces of material are sewn onto a larger piece to create a picture or pattern) ○ Beads, ribbons, sequins (to add detail and decoration) ● To know that embroidery is decorating fabric using stitches to apply thread or yarn to a piece of material ● To know that fabric pencil cases can be fastened in different ways: zip (most common), buttons, Velcro, poppers, lids and hinges (closed with a catch) ● Know that a zip is difficult to secure without a sewing machine. ● Embellishment can be attached to fabric by sewing or sticking them on using glue. ● Sewing is a much more secure way of adding embellishments.
	Y5/6 <ul style="list-style-type: none"> ● To know that functional means that a product has a practical use and aesthetic refers to how appealing the product is to look at ● To know that the ‘right side’ of the fabric is the side that you want to be seen on the finished product. ● To know that the ‘wrong side’ of the fabric is the surface that you do not want to be facing outwards on the finished design. ● To know that fabric can be plain, patterned or textured. ● To sew two pieces of fabric together, we need to: - <ul style="list-style-type: none"> ○ make sure that both pieces of fabric are the same size ○ join the fabric together using hidden or visible stitches.

		<ul style="list-style-type: none"> • Hidden stitches are stitches that cannot be seen on the finished product – running stitch, back stitch and zig zag stitch can be used. • Visible stitches are seen on the finished product e.g., overstitch and blanket stitch • To know that cushions have a re-sealable opening on one side, where a filling/stuffing can be added or removed. They can be fastened with zips, Velcro, laces, poppers, safety pins, buttons and an envelope fold.
Mechanisms	Y1/2	<ul style="list-style-type: none"> • Know that a pivot is a central point that something moves around • Know that a lever is a bar that is attached to a pivot that is used to move a load • Know that mechanism moves because force is put on a lever which is attached to a pivot • To know that a wheel is a circular object that revolves on an axle • To know that an axle is a rod that passes through the centre of a wheel • To know that a chassis is the base frame of a wheeled vehicle. • To know that there are two ways of attaching a wheel to an axle: - <ul style="list-style-type: none"> ○ Fixed (the axle and wheel move together) ○ Rotating (the wheel rotates separately to the axle)
	Y3/4	<ul style="list-style-type: none"> • Pneumatic is used to describe a mechanical device that is moved by air pressure (compressed air). • In pneumatics, an object moves or a sound is made because compressed air is pushed through a tube by a force.
	Y5/6	<ul style="list-style-type: none"> • A cam mechanism is a linkage system which has a follower to convert rotary movement (moving round and round) to linear movement (moving up and down). • As the cam is rotated by the dowelling, the follower is lifted up and down because of the shape of the cam • The shape of the cam affects the movement of the follower. • Lots of children’s toys have objects attached to the follower to create a fun moving toy • Electrical circuits and motors are used to make objects rotate. Fairgrounds and other everyday objects (vacuum cleaner, electric fan) use electrical circuits for rotation. • The components of an electrical circuit are – battery, wire, switch, motor. The circuit needs to be complete for the motor to work. • Motors can be attached to pulley and belt systems so that other objects can be rotated as well as the motor itself • Belt and pulley systems are used to transfer movement from one axel to another.
Construction	EYFS	Know that construction means to make/build something
	Y1/2	<ul style="list-style-type: none"> • Know that to make a structure more stable it needs reinforcing e.g.- <ul style="list-style-type: none"> ○ more tape to hold it together ○ rolling, folding, layering, gluing and taping • Know that materials have different properties including rigidity, flexibility, length, width, thickness
	Y3/4	<ul style="list-style-type: none"> • For a structure to be stable and unlikely to collapse, it needs to be steady, strong and safe. • The stability of a structure depends on its shape and the materials it is made from. • The weight of a structure needs to be evenly spread on the base for it to be stable. • A wide base makes free standing objects more stable. – the wider the base, the more stable the structure will be. • Paper and card can be strengthened by: - <ul style="list-style-type: none"> ○ Rolling to create poles. Short poles are stronger than long poles ○ Layering and gluing to the required thickness ○ Twisting into tight folds ○ Folding repeatedly to make a strip. • If the sides or walls of a structure have some parts missing, the structure will be less stable and more likely to collapse or fall down.

	<ul style="list-style-type: none"> • Glass and plastic sheeting are less stable than wood, metal, plastic tubing • A greenhouse frame needs to be strong and stable and stop the structure from collapsing; the sections within the frame need to be transparent.
Y5/6	<ul style="list-style-type: none"> • A beam is a length of sturdy material that has been cut and shaped to span a gap or support a floor or roof • Beams are formed into different shapes for different purposes. • The deck is the flat surface of a bridge. A smooth, flat deck allows wheeled vehicles to cross. • Side sections of bridges (parapets) make the bridge more sturdy • Pillars allows bridge builders to span bigger gaps. When a bridge spans a river, the pillars stand on man-made islands so they do not wash away. • Steel and concrete are often used in the construction of modern bridges. Beams and pillars made of these materials can be made much bigger, longer and stronger • Steel girders are often used in bridge construction. Tubular steel in different shapes is also used frequently • The Millennium Footbridge in London stands on foundations called piers • A truss is made up of several beams connected together in different ways. Trusses enable longer, stronger bridges. • A bridge deck runs through, or on top of the trusses • Gravity is a downward force acting on bridges. This downward force pulls down on the beams and decks, causing them to squeeze, stretch, twist and bend • Trusses help strengthen bridges by distributing the weight along its length and transferring the compression forces down through the pillars and abutments • Lattice truss, Warren truss and Pratt truss are commonly used in bridge design. • Until developments in technology and engineering meant that engineers could construct large beams made of iron, long bridges were made with brick or stone arches. • In the past, stone arches were used to build long bridges. Arches help to spread the load by changing the direction of the compression forces caused by the weight of the bridge itself and the weight of the objects crossing • Suspension bridges are different to many other bridge designs because they spread out the weight of the bridge and the traffic crossing it in a different way. Suspension bridges use tension forces, pulling rather than pushing. • Modern engineering means that huge suspension bridges can be built. Thick, heavy, twisted steel cables transfer the weight of the bridge to the vertical columns. Their weight means they have to hang in long loops between the columns. The cables are anchored at either side of the bridge deep into hard rock or into tonnes and tonnes of poured concrete. Because the columns of suspension bridges can withstand huge compression forces, they can be built with long decks and big gaps between them. Another advantage is that the deck can be hung high above the gap it is spanning, unlike other bridge designs • Technical drawings and models are often drawn and built to a scale that is smaller than the final product. • Know the following strengthening methods: - <ul style="list-style-type: none"> ○ inserting sculpture wire or pipe cleaners into a straw before using it ○ creating a triangle shape in corners ○ rolling paper into tubes • Know how to reinforce frameworks: <ul style="list-style-type: none"> ○ Create a triangle out of the corners. ○ Creating diagonals in the frame ○ Making 'beams' across shapes

Progression of Knowledge and Skills – Cooking and Nutrition

Progression document – KS1			
	EYFS	Year 1 – Fruit and Veg	Year 2 – seaside snacks
Cooking skills	Can use a range of cooking tools safely.	Can use some simple equipment – sharp knife, peeler and grater.	Use a knife, scales, skewers and rolling pin safely
		Can explain that some ingredients need to be washed or peeled before they can be eaten.	Can cut and arrange fruits and vegetables into a finished dish
	Can wash hands before food preparation.	Can combine fruits or vegetables.	Can work hygienically by washing hands, food and surfaces.
Nutrition	Understand that food is needed for us to grow and be active.	Can understand that we need food to grow, be active and keep healthy.	<ul style="list-style-type: none"> Know that healthy means that your body is in a good physical and mental condition and that eating fruit is healthy. Can explain that fruit and vegetables have nutritional value and are an important part of our diet.
	Can sort foods into healthy & unhealthy groups.	Know that a healthy diet means eating a variety of foods that give you nutrients to keep healthy, feel good and have energy.	<ul style="list-style-type: none"> Know that a balanced meal means having a plate that covers the three main food groups. Can put together a balanced picnic by choosing foods from different food groups.
Food knowledge	<ul style="list-style-type: none"> Can talk about a range of fruits and vegetables. That you can grow food or buy it from shops. 	<ul style="list-style-type: none"> Can identify a wide variety of fruit and vegetables Know that fruits and vegetables taste and smell differently That different parts of the vegetables and fruit are called – skin, flesh and seeds. 	<ul style="list-style-type: none"> Know the following vegetables - sweet potato, courgette/zucchini, bell pepper, aubergine, avocado and know how and where they are grown. Know the following fruits – oranges, kiwi fruit, starfruit, pear, banana, pineapple, strawberries, mango, cantaloupe melon. Know how and where they are grown.
Enjoying food	<ul style="list-style-type: none"> Enjoying food Are willing to try new food 	Can express a preference including like/dislike	Can experience a range of food and explain their opinion.

Progression document – KS2

Progression document – KS2			
KS2	3 Sandwich snacks	5 Burgers and 6 British Dishes	
Cooking skills	How to cut (with a knife), chop (with a vegetable knife), spread (with a knife) and grate safely.	<ul style="list-style-type: none"> • Can weigh and measure accurately. • How to shape and make a burger 	How to cut and chop vegetables using the bridge hold and claw grip.
		Can measure and mix ingredients correctly.	How to combine ingredients (mixing together)
	<ul style="list-style-type: none"> • How to design and make a healthy sandwich. • Can select own ingredients • 	Can follow a recipe step by step.	<ul style="list-style-type: none"> • Know how to follow a simple recipe by following each instruction and doing what it says. • Know how to modify recipes.
	How to present food that looks appealing by using fresh ingredients, arranging products neatly, ensuring the plate is clean.		To know how to plan a meal by choosing what is to be made, list the ingredients needed and put a price next to each of those things to determine the overall cost.
	How to work safely and appropriately with food by washing hands before handling food; ensure work areas are clean; wearing an apron; being sensible with knives and graters.		Give general kitchen health and safety advice: <ul style="list-style-type: none"> ○ Get everything ready that is needed. ○ Wash hands and keep surfaces clean. ○ Use the correct equipment safely ○ Don't lick or taste food unless checking with an adult. ○ Follow instructions. ○ Tidy up.
Nutrition	That food can be divided into groups <ul style="list-style-type: none"> ○ carbohydrates - they contain sugars that give us energy ○ fruit and vegetables are low in fat and contain natural sugars to give us energy. ○ proteins help our body to grow and repair itself ○ dairy products contain calcium to keep our bones and teeth strong Fats and sugars are necessary but in small amounts.	<ul style="list-style-type: none"> • That fat is a natural oil substance that helps prevents disease in our bodies. • That proteins are large molecules that assists with muscle and hair growth in our bodies. • That carbohydrates are a nutrient that changes into sugar and provides energy for our organs. 	
	A 'food pyramid' shows the proportions of different foods that should be eaten.	<ul style="list-style-type: none"> • That the nutritional facts label gives detailed information about the proteins, carbohydrates, 	Know that nutrition labels include information on energy (kJ/kcal), fat, saturates (saturated fat), carbohydrate, sugars, protein and salt.

		<p>sugars, fats and salts in the food and how many calories it has.</p> <ul style="list-style-type: none"> • That there are guidelines to tell us if a food is high in fat, sugar and salt. 	
	<ul style="list-style-type: none"> • Can understand that a variety and balance of food and drink is needed in a healthy diet. Junk foods taste nice but do not contain many nutrients and eating too many is unhealthy. 	<ul style="list-style-type: none"> • That energy in food is measured in calories. • The amount of calories our bodies need to power our brain and organs depends on our age, height and weight. 	Can recognise that the amount of energy and nutrients provided by food depends on the portion eaten.
Food Knowledge	<ul style="list-style-type: none"> • Vegetarians replace meat and fish with eggs, beans, lentils and soya. That different combinations of ingredients affect the taste and texture of the product. 		<ul style="list-style-type: none"> • That a national dish consists of food that is strongly associated with a particular country, they are made from locally available foodstuffs, and are an important part of the country's identity. • That a savoury dish is food that has a salty/spicy flavour. • Fried Breakfast, Roast Dinner, Toad in the Hole, Fish and Chips, Cornish pasty and Cottage pie are traditional national English dishes. • Cottage pie is made with meat and mashed potato. It was first made at the end of 18th century when poorer people in Britain (living in cottages), started using potatoes as an everyday food. • The Scottish climate is perfect for growing oats and has been a staple in Scotland since the Middle Ages. • Oatmeal, Haggis, Cranachan, Oatcakes, Neeps and Tatties, Stovies, Rumbledethumps and Tablet are traditional Scottish dishes. • Oatcakes have existed since the time of the Roman Conquest at the end of the 1st Century. • Know that different fruits and vegetables are ripe and harvested at different times in the year – this is called 'seasonal food'. • To know that a food product's 'shelf life' is the recommended maximum amount of time that it should be stored before needing to be eaten or thrown away.

Appendix 1 – National Curriculum for Design and Technology

Key stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information & communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Key stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to:

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, textiles and 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

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

Design and technology – Cooking and nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Pupils should be taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Key stage 2

- 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