		Birchwood Design Technology Curriculum Map		E COMON
Year Group	Substantive Knowledge	Disciplinary Knowledge	Vocabulary	Resources
Reception- autumn	Autumn 1- Cooking and Nutrition – Open Banana Sandwich Expressive Art and Design - Know what and idea is. Communication and Language -Know how to take turns during a conversation. -Know a range of words to describe taste. Physical Development -Understand how to bridge cut bananas. Personal, Social and Emotional Development -Know common uses of spoons and knives.	Autumn 1- Cooking and Nutrition – Open Banana Sandwich Expressive Art and Design -Talk about ideas. Communication and Language -Follow one-step instructions. -Begin to take part in discussions in circle time, e.g. what their likes and dislikes are, their thoughts and ideas about various topics. -Can talk about their banana sandwich and use a range of vocabulary to describe the taste. -Follow two-step instructions. Physical Development -Construct and eat open top banana sandwiches. -Spread with the back of a spoon. Personal, Social and Emotional Development -Select tools and resources that they need to complete a task of their own choosing. -Begin to respect each other's ideas.	Idea, equipment, safely, risk, bridge, healthy, knife, spread, spoon, prepare, sweet, sour, delicious, disgusting.	Bread, butter, banana, spoons, knives, cutting board, plates.
	Autumn 2 – Structures -Bear Cave Expressive Art and Design -Know how to join materials with glue and sticky tape. Communication and Language -Know what a question is and that questions can be used to clarify meaning. Physical Development -Know the difference between pens, pencils, crayons etc. -Know what the tripod grip is. Personal, Social and Emotional Development -Know that following the rules keeps you safe. Understanding the World -Know man made materials are made by humans and machines.	Autumn 2 - Structures -Bear Cave Expressive Art and Design -Experiment and build with a range of construction materials. -With support, can use scissors, tape dispenser, stapler, glue stick, etc. -Use a variety of materials and fabric. -Choose resources and tools with a purpose in mind. -Talk about what they like about their models. -Use junk modelling to create a bear cave for the bear in Bear snoozes on. Communication and Language -Understand and can respond appropriately to a variety e.g. Why? Do you think? What? -Ask questions to clarify instructions. -Use talk to help them work out problems and possible solutions. Physical Development -Pick up and use a variety of pens, pencils, crayons and paint brushes. -Begin to use pens, pencils and crayons using a tripod grip. -Use pencils to draw. -Begin to transfer skills from other activities to their creative activities. Personal, Social and Emotional Development -Begin to transfer skills from other activities to their creative activities. Personal, Social and Emotional Development -Begin to remember rules without being prompted. Understanding the World -Use a range of materials natural or man mad to construct with. -Explore which materials are best for thei	Objects, tools, movement, material, join, construct, join, build, construct, resource, model,	Range of junk modelling boxes, tubs, fabric, scissors, glue, tape, glue spreaders, paint, crayons, pencils, cut out bears.

	Autumn 2 -Cooking and Nutrition – Pumpkin Soup Expressive Art and Design -Know what an idea is. Communication and Language -Know that instructions can have more than one step. -Know that ingredients are used to create a recipe. Physical Development -Know the difference between pouring, mixing and stirring. Personal, Social and Emotional Development -Understand why they need a healthy, balanced diet. Understanding the World -Know that when they cook something it warms it up, makes it hotter and the ingredients change.	Autumn 2 -Cooking and Nutrition – Pumpkin Soup Expressive Art and Design -Talk about ideas. Communication and Language -Talk about their Pumpkin Soup and use a range of vocabulary to describe the steps they went through to create the soup. -Understand the meaning of ingredients when working with food. These are the things that when put together make the end result. Physical Development -Stir and mix ingredients. Personal, Social and Emotional Development -Make batches of pumpkin soup with adult support.	Idea, mix, mixing, stir, stirring, batch, pumpkin, spoon measure, pour, recipe, ingredient	Pumpkin, water, bowl, spoon, measuring jug, chopping board, pan, wooden spoon.
Reception - spring	Spring 1 – Cooking and Nutrition -Ice Lollies Expressive Art and Design -Know some techniques and steps involved in food preparation. Communication and Language -Know that instructions can have more than 1 step. -Know that recipes must be followed in order. Physical Development -Know how to pour into a container. Personal, Social and Emotional Development -Know that we must always wash our hands before handling food. Understanding the World -Understand that fruit and vegetables can be grown in different areas of the world. -Know that by manipulating fruit and vegetables they can produce a different result (recipes).	Spring 1 – Cooking and Nutrition -Ice Lollies Expressive Art and Design -Mix and pour into a mould. Communication and Language -Follow 2-step instructions. -Ask why questions. -Discuss the process of how to make an ice lolly. Physical Development -Have a hand preference. -Pour liquid into a mould. Personal, Social and Emotional Development -Follow instructions carefully. Understanding the World -identify some fruits grown in the UK (apples, pears, strawberries) and some from abroad (pineapple, kiwi, banana).	variety, prepare, fruit, pour, jug, mould, flavour, freeze, ice, liquid, solid.	squash, water, moulds, freezer, lolly sticks, jug, spoon
	Spring 2 – Structures - Dinoscape Expressive Art and Design -Know the best ways to join paper together – glue, staples, tape -Know that paper mâché can be used to make solid structures. -Know about the properties and functions of different materials (sturdy or flexible). <u>Communication and Language</u> -Know the meaning of sturdy and flexible, Physical Development -Know how to hold scissors correctly. -Know how to use paper mâché.	Spring 2 – Structures - Dinoscape Expressive Art and Design -Talk about what they like and dislike about their models/constructions. -Create and make a Dinoscape for the class dinosaurs, using papier mâché, junk modelling, tape, paint and PVA glue. -Use different materials and fabrics to collage such as paper, silk, net, cotton wool. Communication and Language -Use complete sentences in their everyday talk. -Begin to connect one idea or action to another using connectives: and, because, then, but. -Be confident to try new activities and they can ask for help if they need it. Physical Development -Use scissors without the support of an adult. -Construct using paper mâché. Personal, Social and Emotional Development -Follow instructions carefully.	collage, fabric, papier mâché, sturdy, flexible	Range of junk modelling materials, wallpaper paste, newspaper, PVA glue, paint brushes, paints, fabrics.

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Reception-	Summer 1 – Structures – African Musical Instruments	Summer 1 – Structures – African Musical Instruments	strong, sturdy,	Containers, tubes,
summer	Expressive Art and Design	Expressive Art and Design	construct, build,	paper, fabric, elastic
	-Know that a drum is made from a hollow container	-Use a variety of joining techniques in their designs such as (tape, fold, stick, tie, split pin)	assemble, join,	bands, glue sticks,
	with a covering over the tops.	-Say what they like about their own work.	plan, design,	decorations, templates,
		-Improve their own work.	structure, thick,	paint, string.
		-Make their own props to use in their role play such as masks of different African animals and drums to be played.	thin, hard, strong,	
		-Choose their own resources and tools depending on the task in hand.	animal skin,	
		-Use templates to help them with their designs. Such as animal templates, mask templates, patterns.	wood, hollow,	
	Communication and Language	Communication and Language	instrument,	
	Know the meaning of the word sturdy.	-Talk about how to change their models to make them stronger and sturdier.	traditional	
	Know that improvement means to make something	-Say what they think about their constructions and why.		
	better.	-Offer suggestions for how to improve them.		
		-Discuss their work with an adult.		
	Physical Development	Physical Development		
	- Know what the pincer grip is.	-Use a pincer grip when writing, drawing and painting.		
		-Show accuracy and care when drawing and painting pictures.		
	Understanding the World			
	- Know that traditional African drums are made with	Understanding the World		
	wood and animal skins.	- Talk about instruments from Africa.		
	Summer 1 – Cooking and Nutrition -Fruit Kebabs	Comment Cashing and Nutrition Fruit Kababa	Heathy, risk,	Range of fruits, knives,
	Expressive Art and Design	Summer 1 – Cooking and Nutrition -Fruit Kebabs	vegetable, fork,	peelers, scissors,
	-Know to use scissors, knives and peelers.	Expressive Art and Design	bridge cutting	skewers, chopping board
	Communication and Language	-Use utensils to chop fruit and salad, knives, peeler, scissors.	technique, peel,	skewers, chopping board
	-Know that instructions can have more than 1 step.	Communication and Language		
	•	-Follow 2-step instructions.	arrange,	
	-Know that recipes must be followed in order.	-Ask why questions.	ingredients,	
		-Discuss the process of making a fruit kebab.	measure,	
	Physical Development	Physical Development	colander, peeler,	
	-Know the bridge technique for using a knife.	Children can use utensils to chop and salad safely.	chopping boards,	
	Personal, Social and Emotional Development	Personal, Social and Emotional Development	sharp knife,	
	 -Know that to be healthy fruit and vegetables are 	-Understand why they need a healthy, balanced diet and can identify more foods which are healthy.	kitchen scissors,	
	important factors.	-Use knives to chop fruit and salad safely using the bridge technique.	skewers, pattern	
	-Know the names of some fruit and be able to identify	Understanding the World		
	them.	-identify some fruits grown in the UK (apples, pears, strawberries) and some from abroad (pineapple, kiwi, banana).		
	-Understand the reason we need a chopping board			
	when chopping food to stay safe.			
	Understanding the World			
	-Know that fruit and vegetables can be grown in			
	different areas of the world.	Summer 2 – Structures - Minibeasts		
	-Know that by manipulating fruit and vegetables they	Expressive Art and Design		
	can produce a different result (recipes).	Create their own designs of mini beasts by using a range of different materials such as pipe cleaners, junk modelling tubs,		
		boxes, tubes.		
		Create artwork which use different textures, using collage materials.		
		Say what they like about work by other children		
	Summer 2 – Structures - Minibeasts	Explore working with paint on different surfaces and in different ways (e.g. different textured, coloured, sized and shaped		
	Expressive Art and Design	paper).	Twist, turn, on, in,	
	- Know how to manipulate pipe cleaners to create	Communication and Language	underneath, next	Pipe cleaners, junk
	different shapes and representations.	-Follow instructions to cut out and assemble a structure.	to, on top, model,	modelling resources,
			tall, taller, tallest,	paints, mini beast
	Communication and Language	-Say what they think about their constructions and why.	big, small,	construction
	-Know that instructions can be visual as well as spoken.	-Offer suggestions for how to improve them.	smaller, smallest,	instructions, eyes.
	and the state of t	Personal, Social and Emotional Development	sindicity sindicisty	
	Personal, Social and Emotional Development	-Evaluate their work with friends discussing the positives and negatives of what they have created/designed.		
	-Know that evaluation is an important part of the	-Know that mistakes are part of the creative process and are an important part of learning.		
	designing process.	Children identify problems and can discuss them.		
	designing process.	Know that a problem can be solved with shared thinking and discussion		

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spring Now a structure, weak, structure, str		 Know that wheat is harvested to make flour. Know that you need to wash your hands. before preparing food for good hygiene. Know that an oven can be used to cook food. Know that dough rises as it cooks. 	 Weigh ingredients on a spring balanced scale to a labelled point. Mix with hands to form a bread dough with support. Roll dough into a ball. Use a rolling pin to roll into a flat, round shape. Knead and shape with hands to form pittas. Select fillings based on own preferences. 	farmed, grown, hygienically, measuring, spring balanced scale, mixing, kneading, shaping, rise, filling,	recipe card 11 for ingredients and method Measuring jugs, mixing bowl, table spoon, rolling pin, baking tray, spring balanced scales
		 Know a structure is a building or other object constructed from several parts. Know structures can be made stronger, stiffer and more stable using wider bases and buttresses for stability. Know that glue, blue tac and tape can be used to secure structures. Spring 2 Cooking and Nutrition - Pasta Salad with Roasted Vegetables Know that pasta is made from wheat. Know that a salad is made from a mixture of different vegetables. know that onions, courgette, peppers and tomatoes are types of vegetables (when cooking and looking at recipes) and are grow. Know that we should aim to eat 5 portions of fruit and vegetables a day. Know that the bridge and claw are safe knife cutting techniques. Know that you need to wash your hands before 	Designing - Explore a range of existing chair designs commenting on their stability and comfort. - Test out different support for chairs (buttress and wide base) and assessing which are most stable using art straws and cardboard boxes. - Test different joining methods (glue, blue tac, tape) evaluating their effectiveness. - Generate ideas for a chair based on simple design criteria (must stand up on its own and must hold a teddy bear). - Develop, model and communicate their ideas through talking, mock-ups and drawings. Making -Select and use tools, skills and techniques, explaining their choices. - Select new and reclaimed materials to build their structures. -Use simple finishing techniques to decorate their chair. Evaluating -Evaluate their chair by discussing how stable it is, if it supports the teddy bear and its appearance Spring 2 - Cooking and Nutrition - Pasta Salad with Roasted Vegetables – -Use the bridge and claw knife techniques to cut soft vegetables (tomatoes, courgettes and peppers). -Place chopped vegetables on a baking tray and add pre-chopped onion and garlic. -Drizzle vegetables with olive oil. -Use owen gloves to safely place the tray into oven and remove once cooked. -Add pre-cooked and cooled pasta to a bowl and mix in cooked vegetables using a spoon.	structure, weak, strong, base, evaluate, user, purpose, design criteria, product Farmed, grown, pasta, vegetable, hygienically, cutting, claw knife	standing structures- Design and Technology Association Project on a Page. -photographs of various different chairs -examples of different chairs -paper, card, paper and plastic straws, pipe cleaners -reclaimed materials including small containers, card boxes, cotton reels, masking tape, PVA glue, Blue tac, left/right handed scissors, felt tip pens and crayons See Focus on Food recipe card 12 for ingredients and method Measuring jugs, mixing bowl, table spoon, rolling pin, baking tray,

Y1	Summer 1 - Textiles and joining techniques - A Eleg for	Summer 1 Textiles and joining techniques – A Flag for a Carnival		
Y1 summer	 Summer 1 – Textiles and joining techniques -A Flag for a Carnival -Know what a flag is. -Know that a flag is made from textiles. -Know that simple 3-D textile products are made, using a template to create two identical shapes. -Know how to join fabrics using different techniques - running stitch, glue and stapling. -Know there are different finishing techniques (adding buttons, fabric and sequins) 	 Summer 1 Textiles and joining techniques – A Flag for a Carnival Designing Explore and evaluate a range of existing flags commenting on designs. Test a range of joining techniques (running stitch, glue and stapling) and evaluate their effectiveness. Generate ideas for a flag based on a simple design criterion (must be made by joining two pieces of material, must have a bright coloured design) Develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and information and communication technology. Making Select from and use textiles according to their characteristics. Evaluate their flag by assessing if it is securely joined together and if it has a brightly coloured design. 	Textile, joining, running stich, fabrics, decorate, finish, features, mock-up, design brief, design criteria, make, evaluate, user,	Design and technology association projects on a page – templates and joining. -A range of flags, examples of running stich, thread, pins, needles, staplers, staples, fabric glue, left/right handed scissors -items for finishing buttons, fabric pieces, sequins
	Summer 2 – Cooking and Nutrition – Fruit pots for the Farmers Market -Know that fruit is grown. -Know that we should aim to eat 5 portions of fruit and vegetables a day. -Know that the bridge and claw are safe knife cutting techniques. -Know that you need to wash your hands before preparing food for good hygiene.	Summer 2 – Cooking and Nutrition – Fruit pots for the Farmers Market -Use the bridge and claw knife techniques to cut soft fruits (strawberries and grapes) -Peel the satsumas -Mix together in pots	Farmed, grown, hygienically,	Chopping board, knife, spoon, bowl
	Summer 2 -Cooking and Nutrition – Design a sandwich for a picnic -Full Project -Know that a sandwich is made with bread and a filling. -Know that bread is made from flour and flour comes from wheat and wheat is grown. -Know that there are different types of bread (white, brown and wholemeal). -Know that there are lots of different sandwich fillings (investigate a selection of these including cheese, jam, ham and tuna) -Know that you need to wash your hands before preparing food for good hygiene.	 Summer 2 -Cooking and Nutrition – Design a sandwich for a picnic -Full Project Designing Explore and evaluate a range of existing sandwiches looking at types of bread and fillings. Generate ideas for a sandwich based on personal preferences (must be made by joining two pieces of bread, must contain a filling inside, must be easy to pick up and eat) Develop, model and communicate their ideas as appropriate through talking, drawing and writing. Making Select and use equipment, skills and techniques, explaining their choices. Select from and use ingredients based on their preferences. Evaluating Evaluate their sandwich by assessing if it looked appealing, held together well when picked up and tasted nice. 	Farmed, grown, filling, hygienically, wholemeal	Plate, knife, spoon, bowl

Y2	Autumn 1 – Mechanisms – wheels and axels	Autumn 1 – Mechanisms – wheels and axels	vehicle, wheel,	-Design and Technology
autumn			axle, axle	Association Projects on a
	- Know what vehicles are and the vocabulary to describe key parts of them (wheel, axle, axle holder,	Designing - Explore and evaluate a range of products with wheels and axles.	holder, chassis, body, cab,	page resource – mechanisms wheels and
	chassis).	-Generate initial ideas and simple design criteria (vehicle must have moving wheels) through talking and using own	assembling,	axels.
	- Know what wheels, axles and axle holders are and	experiences.	cutting, joining, shaping,	-selection of toy vehicles
	how they work.	- Develop and communicate ideas through drawings and mock-ups.	finishing, fixed,	with differently fixed axles
	 Know how to distinguish between fixed and freely moving axles. 	Making	free, moving, mechanism,	-card boxes, card, cotton
	- Know that there are different ways of creating an axel	 Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing. 	evaluate,	reels, plastic tubing,
	and how to.	- Select from and use a range of materials and components such as paper, card, plastic and wood according to their	purpose, user,	dowel, clothes pegs, paper sticks/dowel,
	- Know how to use a ruler to measure in cm.	characteristics.	criteria, functional	paper/plastic straws,
	- Know how to use a saw to cut doweling.	Evaluating		card discs, MDF wheels, wooden wheels, single
	 Know how to join materials together using glue and tape. 	- Evaluate their ideas throughout and their products against original criteria.		hole punch, card drill,
	- Know how to strengthen basic structures.			cutting mat, masking
				tape, PVA glue, paint, thin/thick paint brushes,
				felt tip pens, decorative
				paper, double sided sticky tape, junior
				hacksaw, vice, left/right
				handed scissors
	Autumn 1 – Cooking and Nutrition - Baking Bread	Autumn 1 – Cooking and Nutrition- Baking Bread		
	- Know that flour comes from wheat and is grown.	-Use a jug to measure water to a labelled point.	Harvested,	See link for simple recipe and ingredients.
	- Know that wheat is harvested to make flour.	-Weigh ingredients on a spring balanced scale to a labelled point.	farmed, grown,	
	- Know that flour is the main ingredient of bread.	-Mix with hands to form a bread dough.	yeast, hygienically,	https://www.bbcgoodfo od.com/recipes/easy-
	 Know that yeast is used to make bread rise. Know that dough can be moulded into 	-Roll dough into a ball. -Knead and shape with hands to form desired shape of bread roll.	measuring, spring	white-bread
	different shapes.	-Use oven gloves to safely place the tray into oven and remove once cooked.	balanced scale, mixing, kneading,	Measuring jugs, mixing
	 Know that you need to wash your hands before preparing food for good hygiene. 		shaping, rise.	bowl, table spoon,
	- Know that an oven can be used to cook		1 0,	rolling pin, baking tray,
	food.			spring balanced scales, oven gloves.
	- Know that dough rises as it cooks.			

Y2 spring	 Spring 1 - Cooking and Nutrition -Jumping Bean couscous salad -Know that couscous is made from wheat. -Know that a salad is made from a mixture of different vegetables. -know that spring onions, kidney beans, sweetcorn and peppers are types of vegetables and that an orange is a fruit. -Know that we should aim to eat 5 portions of fruit and vegetables a day. -Know that a balanced diet involves eating foods from different groups and that the eat well plate helps us to identify these groups. -Know that the bridge and claw are safe knife cutting techniques. -Know that you need to wash your hands before preparing food for good hygiene. 	 Spring 1 - Cooking and Nutrition- Jumping Bean couscous salad -Use the bridge and claw knife techniques to cut soft vegetables (spring onions and peppers) and orange. -Snip the parsley with scissors in a jug. -Peel the oranges. -Use a lemon squeezer to squeeze the juice from the oranges. -Use a fork to separate the couscous grains (which have already been pre-pared with bouillon powder and boiling water and left to cool). -Add the vegetables and parsley to the couscous. -Pour the orange juice over the couscous and vegetables and mix with a wooden spoon. -Serve onto a plate and add slices of orange to garnish. 	Farmed, grown, hygienically, cutting, peeling, garnish, portion, eat well plate, claw knife technique, bridge knife technique, snipping	See Focus on Food recipe card 13 for ingredients and method Chopping boards, sharp knives, wooden spoons, measuring jugs, scissors, lemon juicer
Y2 summer	Summer 1 – Mechanisms – levers and sliders -Know that pictures can have moving parts. -Know that different mechanisms produce different types of movement. -Know how to make a lever and a slider mechanism. -Know how to join materials. -Know how to strengthen materials.	Summer 1 – Mechanisms – levers and sliders Designing -Explore a range of existing books and everyday products that use simple sliders and levers. -Explore and make mock up sliders and levers to decide which to use in their design -Generate ideas based on simple design criteria (must be a moving picture linked to their pirate story, must move easily, must be sturdy) and their own experiences, explaining what they could make. -Develop, model and communicate their ideas through drawings and mock-ups with card and paper. Making -Plan by suggesting what to do next. -Select and use tools, explaining their choices, to cut, shape and join paper and card. -Use simple finishing techniques suitable for the product they are creating. Evaluating -Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria (does picture link to story? does the picture move? is it sturdy?) (Meet with Y4 to share their levers and linkages project and for children to see next steps)	design, make, evaluate, user, purpose, ideas, design criteria, product, function, card, masking tape, paper fastener, slider, lever, pivot, slot, bridge/guide card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards.	Design and technology association projects on a page resource mechanisms – sliders and levers. -Books and everyday products with levers and slider mechanisms -slider and lever teaching aids -card strips, card rectangles, paper, masking tape, paper fasteners, glue, finishing materials and media -left/right handed scissors, cutting mats, card drills

	Summer 2 – Design fruit ice lollies for the Farmer's Market -Know that fruit is grown and that different fruits are grown in different countries and at different times of the year. -Know that yoghurt is made from milk and that milk comes from cows. -Know that we should aim to eat 5 portions of fruit and vegetables a day. -Know that the bridge and claw are safe knife cutting techniques. -Know that you need to wash your hands before preparing food for good hygiene.	Summer 2 – Design fruit ice Iollies for the Farmer's Market Designing - Explore and evaluate a range of existing fruit Iollies looking at types of fruit used. - Test out different fruits to confirm personal preferences including strawberries picked from the kitchen garden. - Generate ideas for a fruit ice Iolly based on personal preferences (must include two different fruits) Children can decide if fruit is mixed with yoghurt to change the colour of the yoghurt or if larger whole pieces of fruit are used and how much fruit is used. - Develop, model and communicate their ideas as appropriate through talking, drawing and writing. <u>Making</u> -Select and use equipment, skills and techniques, explaining their choices. - Select from and use ingredients based on their preferences. <u>Evaluating</u> -Evaluate their Iolly by assessing if it looked appealing and tasted nice.	Farmed, yoghurt, grown, hygienically, cutting, peeling, claw knife technique, bridge knife technique	See link for simple ice lolly recipe idea. <u>https://www.bbcgoodfo od.com/recipes/strawbe</u> <u>rry-ice-lollies</u> Chopping boards, sharp knives, wooden spoons, measuring jugs, lemon juicer
Y3 autumn	Autumn 1 – Structures A bridge for a toy car to cross -Know a structure is a building or other object constructed from several parts. -Know what a bridge is (a structure built to span a physical obstacle without blocking the way underneath). -Know that the Golden Gate Bridge designed by Joseph Strauss in 1917 was significant as it was the first bridge of its type in the world and the precedent for suspension bridge design around the world. -Know structures can be made stronger, stiffer and more stable using wider bases and buttresses for stability. -Know that glue, blue tac and tape can be used to	Autumn 1 – Structures A bridge for a toy car to cross Designing - Explore and analyse a range of existing bridges evaluating strength and stability. - Test out different joining techniques by comparing the strength of square frameworks with triangular frameworks. - Reinforce square frameworks using diagonals to help develop an understanding of using triangulation to add strength to a structure using art straws or lolly sticks. - Test how paper tubes can be made from rolling sheets of newspaper diagonally. - Use these tubes and masking tape or paper straws with pipe cleaners to build 3-D frameworks such as cubes, cuboids and pyramids. - Explore how each of the frameworks could be reinforced and strengthened. - generate ideas for a bridge design that meets the design criteria (Is able to support a toy car to cross between two tables) - Develop, model and communicate their ideas through talking, mock-ups and drawings.	Bridge, join, structure, framework, triangulation, diagonals, reinforce, strengthen	Design and technology association projects on a page resource – freestanding structures Photographs of bridges, Building materials such as newspaper, art straws, pipe cleaners, card, masking tape, glue.

	 secure structures. -Know how to strengthen, stiffen and reinforce 3-D frameworks using triangulation. -Know how to create paper tubes. -Know the different ways to join paper tubes. Autumn 1 – Brilliant American Burgers Know that beef is a red meat and is reared from cattle. -Know that raw meat can cause food poisoning and how to avoid cross contamination. -Know that you need to wash your hands before preparing food for good hygiene. -Know how to divide a mixture into equal parts. -Know how to shape a mixture with a cutter. -Know that the bridge and claw are safe knife cutting techniques. - Know that a noven can be used to heat food. -Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell Plate' -Know that to be active and healthy, food and drink are needed to provide energy for the body. 	 -Select and use tools, skills and techniques, explaining their choices. - Select new and reclaimed materials to build their bridges. - Use strengthening techniques to ensure their bridges are strong enough for a toy car to pass over. Evaluating -Evaluate their bridge by discussing how stable it is, if it supports the toy car to cross and its appearance. Autumn 1 – Brilliant American Burgers Peel and crush garlic using a garlic press. Use bridge and claw knife techniques to chop an onion. Snip parsley with scissors. Use a vooden spoon to pound mice and mix in other ingredients. Divide mixture into equal parts. Use a over gloves to lift into and out of the oven with adult support. Garnish burger with chosen toppings (bun, lettuce, gherkins, tomatoes, mayonnaise, mustard, ketchup). 	Meat, mince, reared, savoury, heat source, energy	See Focus on Food recipe card 23 for ingredients and method Mixing bowls, chopping boards, sharp knives, 6cm pastry cutters, pastry brushes, baking trays, fish slices, oven gloves.
Y3 - spring	 Spring 1 – Breakfast pots -Know that cereals are grasses grown for their grains. -Know the different types of cereals grown in the word (wheat, maize, rice, barley, oats, rye and sorghum). -know different cereals are grown in different climates. -know that many shop bought breakfast cereals can contain a lot of added sugar. -Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell Plate'. -Know that to be active and healthy, food and drink are needed to provide energy for the body. 	Spring 1 – Breakfast pots -Peel and use the claw technique to slice bananas. -Use bridge technique to halve strawberries. -Use lemon squeezer to squeeze lemons. Weigh ingredients on a spring balanced scale. -Snip dried apricots with scissors. -use a table spoon to stir ingredients. -Layer ingredients in pots. -Garnish pots with mint leaves and fruit.	Cereal, wheat, maize, rice, barley, oats, rye, sorghum, climates, layer, garnish	See Focus on Food recipe card 17 for ingredients and method Mixing bowls, chopping boards, sharp knives, spring balance scales, lemon squeezer, scissors, pots.

Year 3- summer Summer 1 – Mechanisms – Pneur A moving mythical monster Toy f - Know that different mechanism types of movement. - Know how pneumatic mechanism - Know how to make a simple pr	for a Child ns produce different isms work. neumatic mechanism.	Summer 1 – Mechanisms – Pneumatics A moving Mythical Monster Toy for a Child Designing -Explore and analyse products with pneumatic mechanismsTest out making a simple pneumatic mechanismGenerate ideas for a moving monster toy that meets the design criteria (toy is a mythical monster with a mouth that opens and closes)Use annotated sketches and prototypes to develop, model and communicate ideas. Making -Order the main stages of makingSelect from and use appropriate tools with some accuracy to cut and join materials and components such as tubing, syringes and balloonsSelect from and use finishing techniques to create their monster toy design. Evaluate their monster toy by discussing if it looks like their mythical monster and does the pneumatic mechanism work to allow the mouth to open and close.	components, fixing, attaching, tubing, syringe, plunger, split pin, paper fastener, pneumatic system, input movement, process, output movement, control, compression, pressure, inflate, deflate, pump, seal, air-tight, linear, rotary, oscillating, reciprocating	Design and Technology Association projects on a page – mechanisms – pneumatics -examples of products and books, photos and videos showing pneumatic systems -washing-up liquid bottles, 5mm plastic tubing, sterile syringes, T-connectors, balloons -card, plastic sheet, PVA glue, masking tape, parcel tape, sticky pads, pipe cleaners, elastic bands, syringe clips,
Summer 2 – Shell structures using design (CAD) (Packaging for a new box of chood -Know what the nets of cubes and -Know how to create a net. -Know how to measure accurately -Know that there are computer pr used to design a product and th computer assisted design (CAD) -Know how to use a CAD program design.	colates) d cuboids look like. / with a ruler. rograms that can be nat this is called). I to create their own	Summer 2 – Shell structures using computer-aided design (CAD) (Packaging for a new box of chocolates) Designing -Investigate and evaluate a range of existing chocolate box designs (next, structure, strength, appearance). Links to Cadburys World trip. -Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and the functional and aesthetic purposes of the product (must be able to hold chocolates securely, must be clear what the product is, must be aesthetically appealing). -Develop ideas through the analysis of existing shell structures and use computer-aided design to model and communicate ideas. Making -Plan the order of the main stages of making. -Select and use appropriate tools and software to measure, mark out, cut, score, shape and assemble with some accuracy. -Stylain their choice of materials according to functional properties and aesthetic qualities. -Use computer-generated finishing techniques suitable for the product they are creating.	shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, pyramid, width, breadth, capacity marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, font, lettering, text, graphics	bands, syringe clips, left/right handed scissors, snips, card drills, cutting mats, hole punches, finishing media and materials Design and Technology association projects on a page – shell structures using computer aided design (CAD) -collection of chocolate boxes -card, squared paper, coloured paper, adhesive tape, masking tape, PVA glue, glue spreaders, pencils, felt-tip pens, rulers, right/left handed scissors -computer with computer-aided design (CAD) software such as Techsoft 2D Primary, Purple Mash, Tinkercad

	Summer 2 - Fruit chocolates for the Farmers Market- Full Project (Design a fruit chocolate to sell at the Farmers Market) -Know that chocolate comes from cocoa pods and is grown. -Know that there are different types of chocolate (plain, milk and white) -Know that fruit is grown and that different fruits are grown in different countries and at different times of the year. -Know that the bridge and claw are cutting techniques. -Know that we should aim to eat 5 portions of fruit and vegetables a day. -Know that you need to wash your hands before preparing food for good hygiene.	 -Test and evaluate their own products against design criteria by discussing if it holds chocolates securely, look appealing and makes clear what the product is. Summer 2 – Fruit chocolates for the Farmers Market- Full Project (Design fruit chocolates to sell at the Farmers Market) Designing Explore and evaluate a range of existing chocolates (Link to Cadburys World trip) and whether there is a gap in the market (fruit chocolates) Research and test out different fruit and chocolate combinations to find ones that work well together. Survey people to find out which combinations are most popular. Generate a chocolate flavour and packaging label to go with it. (flavour must contain one type of chocolate and complementary fruit, label must be aesthetically pleasing and explain what the product is could be produced with CAD) Develop, model and communicate their ideas as appropriate through talking, drawing and writing. Making Select and use equipment, skills and techniques, explaining their choices. Select from and use ingredients based on their designs. Evaluate their chocolates by assessing taste and if it looked appealing. 	Farmed, grown, cocoa pod, combination, packaging, hygienically, cutting, peeling, claw knife technique, bridge knife technique	or Microsoft Word, printer Chopping boards, sharp knives, wooden spoons, ice trays Foil Paper, labels, pencil, felt tips, crayons, -computer with computer-aided design (CAD) software such as Techsoft 2D Primary, Purple Mash, Tinkercad, or Microsoft Word, printer
Y4 autumn	 Autumn 1 – Fantastic Fish Pie Know that fish are caught. Know that different vegetables are grown in different countries and at different times of the year. know that recipes can be seasoned with herbs and that herbs can be grown. Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell Plate' Know that to be active and healthy, food and drink are needed to provide energy for the body Know that some vegetables need to be peeled before eating. Know how to safely use a peeler. Know that the bridge and claw are cutting techniques. Know that recipes can be adapted and changed by removing ingredients or substituting with similar ingredients. (egg, cheese, mustard, spring onions, 	 Summer 2 - Fantastic Fish Pie Wash herbs. Peel potatoes using a peeler Use the claw and bridge techniques to chop potatoes, chives and parsley. Grate the carrot and cheese and zest a lemon. Fill a large pan with water and boil potatoes in the pan on the hob with adult support. Fill a small pan with water and boil the eggs in the pan on the hob with adult support. Peel and slice eggs using claw technique once cooled. Place fish, carrot, herbs, and lemon zest in a bowl and season with pepper. -Drain potatoes in a colander, return to pan and add milk and butter then mash with a potato masher. Measure milk in a measuring jug. Add crème fresh and mustard. Stir in grater cheese. -Pour over fish mixture and mix together with a wooden spoon. -Place fish mixture in an oven proof dish. Add sliced eggs. -Place mashed potato on top of fish mixture and sprinkle with cheese. -Use oven gloves to lift into and out of the oven with adult support. 	Adapted, substituting, farmed, caught, hygienically, cutting, peeling, claw knife technique, bridge knife technique.	See Focus on Food recipe 22 for recipe and ingredients Large saucepan, small saucepan, chopping boards, vegetable peelers, sharp knives, kitchen scissors, mixing bowls, graters, measuring jugs, folks, colanders, potato mashers, wooden spoons, ovenproof dishes, oven gloves.

 chives and the types of fish are all examples of this within this recipe) -Know that you need to wash your hands before preparing food for good hygiene. Autumn 2 – Electrical systems - Monitoring and control – Design a Christmas decoration with an LED message -Know what an electrical system isKnow who Thomas Edison was and that he invented the light bulbKnow how to construct a simple circuit using batteries, wires, crocodile clips, bulbs/buzzers, a switchKnow there are different types of switches including switches that they can make themselvesKnow how to use electrical systems in their productsKnow that mechanical and electrical systems have an input, process and an output -Know how to apply their understanding of computing to program, monitor and control their products.	Autumn 2 – Electrical systems – Monitoring and control. Designing -Design a decoration which includes a message displayed electronically. -Explore and analyse a range of existing battery-powered LED products. - Develop a design criterion to inform the design of products that are fit for purpose, aimed at a particular individuals or a group. (It must contain an LED message) -Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams. Making - Order the main stages of making. - Select from and use tools and equipment to cut, shape, join and finish with some accuracy. - Select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities. Evaluating - Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.	Monitor, control, program, system, input device, output device, series circuit, parallel circuit, function, innovative, design specification,	Design and technology association projects on a page resource – monitoring and control -micro bits card, art straws, reclaimed materials, finishing materials and media. -right/left handed scissors, PVA glue, tape, blue tac.
 Autumn 2 – Gingerbread biscuits -Know what gingerbread is why it has become a Christmas tradition. -Know that a gingerbread mixture makes a dough. - Know that gingerbread dough can be moulded into different shapes. Know that an oven can be used to cook food. -Know that gingerbread can be decorated after it has cooled down. - Know that you need to wash your hands before preparing food for good hygiene. 	 Autumn 2 – Gingerbread biscuits weigh ingredients on a spring balanced scale. Heat butter, syrup and sugar together on the hob with adult support. Set aside to cool. Mix dry ingredients together with a wooden spoon then stir in buttery syrup mixture. Mix with hands to form a dough. Roll dough into a ball. Use a rolling pin to roll out flat. Then cut out desired shapes with cutters. Use oven gloves to safely place the tray into oven and remove once cooked. Decorate with icing and sweets once cooled down. 	Gingerbread, tradition, mixture, dough, product, packaging,	See link for Simple Gingerbread recipe and ingredients. <u>https://www.bbcgoodfo od.com/recipes/ultimat</u> <u>e-easy-gingerbread</u> Measuring jugs, mixing bowl, table spoon, rolling pin, baking tray, spring balanced scales, oven gloves.

Y4 spring	 Spring 1 – Ratatouille Know that aubergines, onions, peppers and tomatoes and are grown. Know that different vegetables are grown in different countries and at different times of the year. Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell Plate' Know that to be active and healthy, food and drink are needed to provide energy for the body. Know that the bridge and claw are cutting techniques. Know that you need to wash your hands before preparing food for good hygiene. 	 Spring 1 – Ratatouille peel and crush garlic using a garlic crusher. use the claw and bridge techniques to slice aubergines, peppers and onions heat the onion, garlic and oil in a pan on the hob until soft. add the peppers and aubergines and cook gently until soft. add the tomatoes and dried basil and simmer until water has evaporated. 	Farmed, hygienically, cutting, peeling, claw knife technique, bridge knife technique	See Focus on Food recipe 20 for recipe and ingredients. Peeler, sharp knife, chopping board, pan, tablespoon, wooden spoon, bowl, colander.
Y4 summer	Summer 1 - Mechanisms – Levers and Linkages -Know that different mechanisms produce different types of movement. -Know how to make a lever mechanism. -Know how to use lever and linkage mechanisms. -Know to distinguish between fixed and loose pivots. Know how to join materials. -Know how to strengthen materials	Summer 1 - Mechanisms – Levers and Linkages - Designing - Investigate and analyse books and, where available, other products with lever and linkage mechanisms. - Generate realistic ideas and their own design criteria through discussion, focusing on the needs of the user (must include a lever and linkage mechanism.) - Use annotated sketches and prototypes to develop, model and communicate ideas. Making - Order the main stages of making. - Select from and use appropriate tools with some accuracy to cut, shape and join paper and card. - Select from and use finishing techniques suitable for the product they are creating. Evaluating -Evaluate their own products and ideas against criteria and asses if lever and linkage worked and if poster achieved its purpose. (Meet with Year 2 to share their levers and sliders books and so they can see the next steps)	mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output, linear, rotary, oscillating, reciprocating, user.	Design and technology association projects on a page resource – mechanisms – levers and linkages -books and other products with lever and linkage mechanisms -lever and linkage teaching aids, card strips, card rectangles, paper, masking tape, paper fasteners, paper binders, stick glue, left/right handed scissors, finishing media and materials
	 Summer 2 - Design and make a pizza know that pizzas are made with a dough base, and then a tomato and cheese topping as well as other toppings. Know that different vegetables are grown in different countries and at different times of the year. Know that beef is a red meat and is reared from cattle. Know that ham is a red meat and is reared from pigs. Know that chicken is poultry and comes from chickens. Know that raw meat can cause food poisoning and how to avoid cross contamination with cooked meat. Know how to safely store and prepare meat and poultry. know that recipes can be seasoned with herbs and that herbs can be grown. 	 Summer 2 -Design and make a pizza Designing Explore and evaluate a range of existing pizzas by looking at different toppings. Try different pizza toppings to see which children like and make links to the Eatwell Plate and how they can create a healthy pizza. Design a pizza with a range of toppings (such as peppers, sweetcorn, mushrooms, pineapple, olives, tomatoes, onions, cooked ham, cooked chicken, cooked beef) that looks appealing. Develop, model and communicate their ideas as appropriate through talking, drawing and writing. Making Select and use equipment, skills and techniques, explaining their choices. Select from and use ingredients based on their designs. Evaluate their pizzas by assessing taste and if it looked appealing.	Adapted, substituting, farmed, reared, hygienically, cutting, peeling, claw knife technique, bridge knife technique.	Peeler, sharp knife, chopping board, pan, measuring jug, tablespoon, wooden spoon, bowl, baking tray, oven gloves.

	 - Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell Plate' -Know that to be active and healthy, food and drink are needed to provide energy for the body -Know that some vegetables need to be peeled before eating. -Know how to safely use a peeler. -Know how to safely use a grater. -Know that the bridge and claw are cutting techniques. -Know that recipes can be adapted and changed by removing ingredients or substituting with similar ingredients. -Know that you need to wash your hands before preparing food for good hygiene. 			
Y5 -autumn	Autumn 1 –	Autumn 1 –	cam, snail cam,	vide Design and
	 Mechanical Systems – Cams (A moving theme park ride souvenir for a child) -Know that a cam mechanism has two main parts: a cam - attached to a crankshaft, which rotates a follower - touches the cam and follows the shape, moving up and down -Know how cams can be used to produce different types of movement and change the direction of movement. Know that mechanical systems have an input, process and an output. 	Mechanical Systems – Cams (A moving theme park ride souvenir for a child) Designing -generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources. -develop a simple design specification to guide their thinking (toy must contain a cam mechanism which moves.) -develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views including cross sections. Making -produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. -select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost. Evaluating -compare the final product to the original design specification.	off-centre cam, peg cam, pear shaped cam, follower, axle, shaft, crank, handle, housing, framework, rotation, rotary motion, oscillating motion, reciprocating motion, mechanical system, input movement,	technology association projects on a page resource – mechanical systems – cams - photographs of cams, models or toys with different cam mechanisms -MDF, card or wooden wheels, wooden cams, dowel, card boxes, PVA glue, masking tape, double-sided tape, square section wood, card, finishing media

	 Know how to use a saw to cut doweling. Know how to join materials together using glue and tape. 	 test products with the intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. consider the views of others to improve their work. 	process, output movement	-junior hacksaws, glass paper, G-clamps, bench hooks, hand drill
	 Autumn 2 – Cup Cake for a Christmas Gift – Full project -Know the basic ingredients involved in a cake mixture (flour, butter, eggs and sugar) -Know that a cake mixture can be adapted to incorporate different flavours. -Know that an oven can be used to cook food. -Know that a cup cake can be decorated after it has cooled down. -Know that you need to wash your hands before preparing food for good hygiene. -Know how to create packaging. 	Autumn 2 - Cup Cake for a Christmas Gift - Full project Designing -Explore and taste a range of existing cupcakes including different flavours and ways of decorating and packaging. -Develop a design criterion to inform the design of products that are fit for purpose, aimed at a particular individuals or a group. (The flavour or the cupcake and decoration must be well suited to the individual and it must be well packaged) -Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches. Making - weigh ingredients on a digital scale. - Mix ingredients together with a wooden spoon then add in selected flavours. - Use oven gloves to safely place the tray into oven and remove once cooked. - Decorate with icing and sweets once cooled down. - Create packaging for cup-cake. Evaluating - Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.	Cup-cake, adapt, flavour, mixture, product, packaging,	See link for Simple Cup- cake recipe and ingredients. https://www.bbcgoodfo od.com/recipes/cupcake <u>S</u> Measuring jugs, mixing bowl, table spoon, baking tray, spring balanced scales, oven gloves
Y5- spring	 Spring 1 – Tomato and Basil Flatbread -Know that flour comes from wheat and is grown. - Know that wheat is harvested to make flour. - Know that flour is the main ingredient of bread. - Know that yeast is used to make bread rise. - Know that dough can be moulded into different shapes. -Know that different ingredients can be added to bread to change the appearance, taste, aroma and texture. - Know that you need to wash your hands before preparing food for good hygiene. - Know that an oven can be used to cook food. - Know that dough rises as it cooks. 	Spring 1 – I Tomato and Basil Flatbread -Use a jug to measure water. -Weigh ingredients on a digital scale. -Mix with hands to form a bread dough. -Roll dough into a ball. -Knead and shape with hands to form a rectangle then roll out with a rolling pin. -Use bridge and claw cutting techniques to chop sun dried tomatoes and basil (children should select and try adding other fillings too including cheese and chive, leek and mushroom or olive and feta) -Use hands to carefully roll dough and seal in ingredients. -Use a knife to cut dough into halves, quarters and then eighths. -Use oven gloves to safely place the tray into oven and remove once cooked. -Evaluate different fillings and discuss personal preferences.	Harvested, farmed, grown, yeast, hygienically, kneading, shaping, bridge and claw, adapt, flavour, aroma, texture	See Focus on Food recipe 27 for recipe and ingredients Chopping boards, sharp knives, kitchen scissors, measuring jugs, wooden spoons, mixing bowl, baking trays, oven gloves.

	 Spring 1 (continuing into Summer 1) Mechanical systems - Pulleys or Gears – A load pulling vehicle for a STEM competition -Know who the Engineer and Inventor George Stevenson was and that he designed the first locomotive steam train. -Know how his invention impacted the world at that time. Know what vehicles are and the vocabulary to describe key parts of them (wheel, axle, axle holder, chassis). - Know what wheels, axles and axle holders are and how they work. - Know how to distinguish between fixed and freely moving axles. - Know that there are different ways of creating an axel and how to. - Know that mechanical and electrical systems have an input, process and an output. -Know how gears and pulleys can be used to speed up, slow down or change the direction of movement. - Know how to use a ruler to measure in cm. - Know how to use a saw to cut wood. - Know how to join materials together using glue and tape. 	 Spring 1 (continuing into Summer 1) Mechanical systems - Pulleys or Gears – A load pulling vehicle for a STEM competition Designing -generate ideas by carrying out research using surveys, interviews, questionnaires and web-based resources develop a simple design specification to guide their thinking (must design a vehicle that can pull a load up hill with choices made on the size and type of wheels used and any additional covers to the chassis) - develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views. Making - produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost. Evaluating - compare the final product to the original design specification test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose consider the views of others to improve their work. 	pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, electrical system, input, process, output, triangulation, design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief	Design and Technology Association Project on a Page Mechanical systems – pulleys or gears -videos, photographs and everyday products or toys with pulleys or gears -batteries, battery holders, wires, crocodile clips, motors, switches, aluminium foil, paper fasteners, paper clips, card, motors, motor stands, dowel, paper sticks -consumable and construction kit pulleys or gears of different sizes, elastic bands -junior hacksaws, glass paper, G-clamps, bench hooks, hand drill, automatic wire strippers -PVA glue, sticky pads, masking tape, dowel, double-sided tape, card triangles, square section wood, card, finishing media
Year 5 - summer	 Summer 2 - Spicy Potato Wedges and Dips Know that potatoes, sweet potato and herbs are grown. Know that different vegetables and herbs are grown in different countries and come into season at different times of the year. Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell Plate' Know that to be active and healthy, food and drink are needed to provide energy for the body Know that the bridge and claw are cutting techniques. Know that you need to wash your hands before preparing food for good hygiene. 	Summer 2 - Spicy Potato Wedges & Sweet Potato wedges -Wash potatoes - Use the claw and bridge techniques to chop potatoes into wedges - Place wedges into boiling water and simmer - Drain potatoes with a colander. - Mix dry ingredients in a bowl and add oil to create a paste - Pour the mixture over the potato wedges and mix thoroughly. -Spread the potatoes on a baking tray. - Use oven gloves to lift into and out of the oven with adult support. Children could also try different dips and then have a go at creating their own using herbs from the kitchen garden.	Seasons, processed, appearance, taste, texture, aroma, substances, nutrients, seasoning to taste	See Focus on Food recipe 28 for recipe and ingredients Colander, chopping board, sharp knife, mixing bowl, small bowl, tablespoon, teaspoon, non-stick baking trays, fork, saucepan, oven gloves.

Year 6 - autumn	 Autumn 1 – Fruit crumble -Know that a crumble contains cooked fruit and is usually served hot. -Know that apples and pears grow on trees in an orchard and are harvested in the Autumn. -Know that a fruit crumble is a tradition British dessert and that the recipe can be adapted by adding different fruits or changing the topping depending on personal preferences. -Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell Plate' -Know that to be active and healthy, food and drink are needed to provide energy for the body -Know that the bridge and claw are cutting techniques. -Know that you need to wash your hands before preparing food for good hygiene. 	Autumn 1 – Fruit Crumble -Collect apples and pears from school orchard, check condition and wash. -Peel apples and/or pears using a peeler. -Core and slice apples and/or pears using bridge and claw cutting technique. -Add fruit to foil tin and press down (pupils may select to add sultanas to their fruit at this point) -Weigh dry ingredients and butter on a digital scale then mix together with fingertips until mixture looks like breadcrumbs. -Pour mixture over fruit and even out with a fork (pupils may select to add a layer of oats at this point) -Use oven gloves to lift into and out of the oven with adult support. -Evaluate different fillings/toppings and discuss personal preferences.	Seasons, processed, appearance, adapted, flavour, orchard, harvested, bridge cutting technique, claw cutting technique	See link for Simple apple crumble recipe and ingredients. <u>https://www.bbcgoodfo od.com/recipes/best- apple-crumble</u> Peeler, sharp knife, chopping board, tin foil trays, digital scales, mixing bowls, fork, oven gloves.
	Autumn 2 – Textiles- Combining different fabric shapes A personalised mobile phone case - Know that Hedy Lemarr (Hollywood actress) & George Antheil patented the 'Secret Communication System' which was to block signals from radio-controlled missiles during WW2 and that this technology was a precursor to the secure wi-fi, GPS and bluetooth later used in modern mobile phones. -Know that 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. -Know that fabrics can be strengthened, stiffened and reinforced where appropriate. -Know that there are different types of stitches for different purposes (joining and decoration)	Autumn 2 – Textiles- Combining different fabric shapes - Design and Technology Association Project on a Page Children to design and make a mobile phone case Designing -Investigate and analyse a range of textile products linked to their final product. These could include mobile phone cases, pencil cases and purses or wallets. -Generate innovative ideas by carrying out research including surveys, interviews and questionnaires. -Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design. -Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification. (Must be able to hold a mobile phone, must fasten securely, and must include a design) Making -Produce detailed lists of equipment and fabrics relevant to their tasks. -Formulate step-by-step plans.	seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, design criteria, annotate, functionality, mock-up, prototype	Design and technology association projects on a page resource – textiles – combining fabric shapes existing textile products for investigation and deconstruction linked to their product -wide selection of textiles including reclaimed and reusable fabrics

 -Know that running stitch, back stitch and blanket stitch can be used to join two pieces of fabric together. -Know that satin stitch and embroidery can be used to add designs to fabric. -Know how to do a range of different stitches. -Know that applique is a decorative design made by sewing one material over another. -Know that there are different types of fasteners for fabrics including zips, buttons, press studs and Velcro. 	 -Select from and use a range of tools and equipment to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost. <u>Evaluating</u> -Compare the final product to the original design specification (Does case hold phone, fasten securely and include a design?) -Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. -consider the views of others to improve their work 		-pins, needles, thread, measuring tape, left/right handed fabric scissors, pinking shears iron, iron transfer paper, sewing machine -range of fastenings, materials for insulating or strengthening e.g. bubble wrap, wadding, interfacing
Autumn 2 – Smoked Paprika Sausage Hotpot	Autumn 2 – Smoked Paprika sausage Hotpot		
 Know that sausages are traditionally made from pork and that pork comes from pigs. -Know that vegetarian sausages do not contain meat and that people sometimes eat these as an alternative to traditional pork sausages Know that different vegetables are grown in different countries and at different times of the year. know that recipes can be seasoned with herbs and spices and that herbs can be grown. Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell Plate' 	 Use the claw and bridge cutting techniques to chop potatoes, onions, carrots and flat leaf parsley Use a jug to measure water Place onions in a pan and cook gently with adult support. Add carrots, potatoes, chopped tomatoes, paprika and oregano then pour in water. Bring vegetables to the boil with adult support and then leave to simmer Cut pre-cooked sausages into pieces using the bridge cutting technique Stir sausages and mixed beans into the pan with adult support and simmer Season to taste with pepper Serve with parsley and crème fresh to garnish 	Vegetarian, pork, season to taste, bridge and claw cutting technique, adapted, hygienically	See Focus on Food recipe 30 for recipe and ingredients Chopping board, sharp knife, peeler, sieve, tablespoon, saucepan, saucepan, oven gloves.
-Know that to be active and healthy, food and drink are needed to provide energy for the body			
 -Know that some vegetables need to be peeled before eating. -Know that the bridge and claw are cutting techniques. -Know that recipes can be adapted and changed by removing ingredients or substituting with similar ingredients. -Know that you need to wash your hands before preparing food for good hygiene. 			

Y6-summer	Summer 1 – Burrito bowls (Full project)	Summer 1 – Burrito bowls (Full project)	Burrito, Seasons,	See link for Simple
			adapt,	Burrito Bowl recipe and
	- Know that Burrito bowls are an adaptation of	Designing	appearance, taste,	ingredients.
	traditional Mexican Burritos. -Know that the ingredients of a Burrito bowl can be	-Explore, research and taste a range of existing Burrito bowl ingredients and combinations including different ways of	texture, aroma, nutrients	https://www.bbc.co.uk/f
	adapted based on personal preferences	presenting them.	nutrients	ood/recipes/black bean
	- Know that different vegetables and herbs are grown in	-Develop a design criterion to inform the design of products that are fit for purpose, aimed at a particular individuals or a		burrito bowls 34530
	different countries and come into season at different	group. (The ingredients must be well suited to the individual or group, must contain foods from different areas of the		
	times of the year.	Eatwell plate in order to provide a balanced meal, must be well presented)		
	-Know that rice is grown and then harvested.	-Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches.		Sharp knives, can
	- Know that a healthy diet is made up from a variety	Making		openers, sieves or
	and balance of different food and drink, as depicted in 'The Eatwell Plate'	 weigh ingredients on a digital scale. Cook rice, beans and meat (if using) with adult supervision on the hob 		colanders, grater, chopping boards,
		- Use bridge and claw cutting techniques to chop and prepare selected vegetables and herbs		wooden spoons, bowl,
	-Know that to be active and healthy, food and drink are needed to provide energy for the body	- Arrange ingredients carefully in the bowl		measuring jugs, large
		Evaluating		pan
	-Know that the bridge and claw are cutting techniques.	- Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement		
	-Know that you need to wash your hands before preparing food for good hygiene.	in their work.		
	preparing rood for good hygiene.			
	 Summer 2 - Electrical systems - Monitoring and control - An invention to solve a problem at school or home -Know what an electrical system is. -Know how to construct a simple circuit using batteries, wires, crocodile clips, bulbs/buzzers, a switch. -Know there are different types of switches including switches that they can make themselves. -Know how to use electrical systems in their products. -Know that mechanical and electrical systems have an input, process and an output -Know that computer control systems can be used to control products. -Know how to apply their understanding of computing to program, monitor and control their products. -Know that glue, blue tac and tape can be used to secure structures. -Know how to strengthen, stiffen and reinforce 3-D frameworks using triangulation. -Know the different ways to join paper tubes. 	Summer 2 - Electrical systems - Monitoring and control - An invention to solve a problem at school or home Designing -Look at existing products which incorporate monitoring and control systems. -Decide on own problem to try and design a solution to. -Develop a design specification for a functional product that responds automatically to changes in the environment. -Generate, develop and communicate ideas through discussion, annotated sketches and pictorial representations of electrical circuits or circuit diagrams. Making -Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components. -Competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product. -Create and modify a computer control program to enable their electrical product to respond to changes in the environment. Evaluating -Continually evaluate and modify the working features of the product to match the initial design specification. -Test the system to demonstrate its effectiveness for the intended user and purpose.	Monitor, control, program, system, input device, output device, series circuit, parallel circuit, function, innovative, design specification,	Design and technology association projects on a page resource – monitoring and control -micro bit -i-pad or laptop batteries, battery holders, crocodile leads -different output devices including bulbs with bulb holders, buzzers, light emitting diodes (LEDs), motors - input devices including micro switches, reed switches and magnets, light dependent resistors (LDRs) -wire, automatic wire strippers, masking tape, construction materials and tools as required