

Itchen Abbas Primary School Scheme of Work for DT










Thresholds Concepts – These need to be explicitly taught and explained each time they are covered. The symbol in the planning will inform you which concept is being taught. Retrieval – you must refer to previous examples of when the threshold concept was taught when you teach new knowledge to support children in developing their concept schemas and make links in their learning.

Threshold concept symbol	Threshold concept title and descriptor	NC aim it links to
	Designing Products This concept is about understanding how to develop, plan and communicate ideas. It is about understanding the properties of materials and components in order to be able to select appropriate materials for their purpose to create products. This concept involves looking at designs from different times and places and using these to inspire new designs.	Design purposeful, functional, appealing products for themselves and other users based on design criteria. 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.
	Making Products This concept involves working with tools, equipment, materials and components to make products. It is about mastering practical skills when making products using different materials, electronics, mechanics, textiles, construction and computing (software designing).	Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
	Evaluating Products This concept is about evaluating processes and products. It involves suggesting and making improvements to their existing designs.	Critique, evaluate and test their ideas and products and the work of others.
	Cooking and Nutrition This concept is about mastering skills through preparing a variety of dishes. It is about understanding how different foods are nutritious, the importance of a balanced diet and where food comes from.	Understand and apply the principles of nutrition and learn how to cook.






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In our school, PSHE and RSE is embedded throughout our wider curriculum. These are the Threshold Concepts.







Threshold concept symbol	Threshold concept title and descriptor
	Keeping myself safe This concept involves knowing the importance of and how to stay safe both online and with personal safety. It includes understanding who to talk to and when.
	Making and maintaining healthy relationships This concept is about understanding how to be a friend and what skills and qualities friends need to have and demonstrate over time. It involves understanding what a healthy relationship is and how to respond and protect yourself and others when a relationship is healthy. It is also about having a healthy relationship with yourself.
	Health and wellbeing This concept is about understanding and maintaining good physical and mental health. It includes understanding the positive impact of physical and wellbeing activities have on the body and mind.
	Living in the wider world To learn to be tolerant and show acceptance towards others. To understand the importance of living in an inclusive society and the responsible role we all play within it. To know how to show good citizenship towards others.

Squirrels Cycle A (Yr R & 1)	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of Previous Learning	Key vocabulary
Autumn	Our area/ knights and castles		<ul style="list-style-type: none"> We will design a bird box home for our school grounds. We will explore different wood work structures and how they have been joined. 	When have you seen bird boxes before? What are they used for?	Vehicle, wheels, axles, design, create, evaluate, improve, material, adhesive, improve, compare, edit/change, evaluate, join, suitable,
			<ul style="list-style-type: none"> We will select a range of wooden materials to make our bird boxes. We will explore how to join wood together by using stronger adhesives/ screws and nails. 	What do bird boxes look like? How could you join two pieces of wood together? Yr 1 – Last year ...	
			<ul style="list-style-type: none"> We will explore how we can edit and improve our first designs of our bird boxes by experimenting with different wood and joining materials. 	Last term we evaluated our bean bags and vehicles so that we could make changes to make them better.	






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			<ul style="list-style-type: none"> We will prepare and make a British or local dish (Watercress scones?). To understand that countries have traditional dishes. We will prepare ingredients by measuring accurately and where these ingredients come from. 	<p>What do you need to cook food? How can you measure ingredients?</p> <p>Yr 1s – Last year you made bread rolls and mince pies which also contained flour that comes from wheat.</p>	ingredients, recipe, measuring, prepare.
Spring	Toys + China		<ul style="list-style-type: none"> We will design and make a toy by exploring different materials and toys (bean bags). We will make bean bags for a younger sibling/friend, consider what design or shapes might you use and why. 	<p>What toys do you play with? What makes them soft or cuddly?</p> <p>Last term we designed moving vehicles, remember when we planned our designs. How did we choose our materials?</p>	Sewing, weaving, joining, stuffing, audience, purpose, selecting, decorating, evaluate, finishing, presenting, measuring (grams, teaspoon), consistency, raw/uncooked.
			<ul style="list-style-type: none"> We will learn how to sew and weave using different materials to practise (felt, leaves, ribbon, string etc). We will make our toy by selecting materials and sewing stuffing inside. 	<p>How can you sew two materials together? What do you need to use? What things around your house have been sewn or woven together?</p> <p>Last term we made vehicles, how did we join our materials together?</p> <p>Yr 1s – Last year you made your own bags and sewed the materials together. You learnt that using stitches that were closer together meant that your materials were more securely attached.</p>	
			<ul style="list-style-type: none"> We will explore how we can edit and improve our first designs of our bean bag toys by exploring different sewing and finishing techniques. We might add more to our designs to make them more appealing for our audience. 	<p>Has the stuffing ever come out of your toys? How did you make sure the stuffing doesn't come out again?</p> <p>Last term we evaluated our vehicles – how did you improve yours?</p> <p>Yr 1s – Last year you evaluated your bag design by considering which stitch was best to join your materials and testing what objects you could hold in your bags without the stitches breaking.</p>	
			<ul style="list-style-type: none"> We will decorate biscuits and focus on how to present food? 	<p>Why do we decorate food? Why do we need to measure the ingredients?</p> <p>Last term we made kebabs/scones – how did we</p>	






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				<p>measure our ingredients; how did we present our food? Why?</p> <p>Yr 1 – Last year you made mince pies, vegetable pasta and bread rolls. You weighed your ingredients to make sure that the foods had cooked through and were not raw. You will need to weigh your ingredients for your icing accurately so you get the correct consistency.</p>	
Summer	Transport + Farming		<ul style="list-style-type: none"> We will design a moving vehicle (cars/trains) by exploring toys and real vehicles (throughout history). We will think about what materials are best to use and why when designing. 	<p>What is a vehicle? How do they move?</p> <p>What are cars or trains used for?</p> <p>Yr 1s – Last year you designed pop-up cards and books by looking at examples to inspire your ideas.</p>	<p>Slice, peel, grow, fold, fry, boil, chop, stew, and simmer.</p> <p>Saw, measure, chop/cut, join, glue/stick, evaluate, create, design, plan, test, nutritious, balanced diet, weigh.</p>
			<ul style="list-style-type: none"> We will use scrap materials, wheels and axels when making your vehicle. We will join these materials together by using different adhesives such as glue or tape. 	<p>What have you made before (junk modelling)? How did you stick your materials together?</p> <p>What materials are strong? Heavy? Light? Flexible?</p> <p>Yr 1s – Last year you made pop-up cards and books and selected a range of materials which were suitable such as card or paper. You realised cardboard was too thick to make a card.</p>	
			<ul style="list-style-type: none"> We will explore how we can edit and improve our first designs of our vehicles by changing materials. 	<p>When you have joined materials before did it always work? What did you do to make it better?</p> <p>Yr 1s – Last year you evaluated your cards by exploring how different adhesives would stick your materials together. You found out that glue sticks worked best for joining card or paper together and it dried the quickest.</p>	
		  	<ul style="list-style-type: none"> We will cook a dish using vegetables that we have grown in school (e.g soup or samosas). We will discuss how some of our ingredients have been grown and where the other foods come from. We will understand how vegetables are nutritious and help form a balanced diet. 	<p>Last term we made icing and scones by measuring our ingredients first. We found out that flour comes from wheat that is grown by farmers. We also discussed that sugar gives you energy but too much sugar isn't good for your health or body.</p>	





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Squirrels Cycle B (Yr R & 1)	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of Previous Learning	Key vocabulary
Autumn	Explorers , hot/cold areas.		<ul style="list-style-type: none"> We will design pop-up books to tell the Christmas story, including a moving mechanism. We will explore pop up books to influence our designs and communicate our ideas with others. 	<p>Where have you seen a pop-up book before? Who was it for? How did it move?</p> <p>Yr 1 – Last year you designed your product first so that you knew what materials and equipment you needed before creating your product.</p>	<p>Design, product, print, mechanism, movement, pop up, create, evaluate, levers/sliders, adhesive. Measure, cut/ carve, roll, fill, cook/bake, mix, scoop, brown, egg wash, crumble, pastry, sweet/savoury.</p>
			<ul style="list-style-type: none"> We will make pop-up books by selecting different materials and joining materials (glue, tape, split pins etc). We will include a moving mechanism such as levers and sliders to make the card more appealing to the audience. 	<p>When you made a product what materials did you use? What equipment did you use to cut or join materials together?</p> <p>Yr 1 – Last year you made vehicles and a bird box and selected the best materials (cardboard and wood). You thought carefully about the best adhesive to stick the materials together (glue, tape, blue tac).</p>	
			<ul style="list-style-type: none"> We will evaluate our products against our first design and adapt these by making improvements. We will consider the thickness of the materials used and the best method of making a moving mechanism. 	<p>When you made a product did you change any of your materials? Why?</p> <p>Yr 1s – Last year you evaluated your vehicle and bird box by making changes to improve your design. Some of you needed to use a stronger adhesive or material.</p>	
			<ul style="list-style-type: none"> We will prepare and bake mince pies by accurately measuring ingredients. We will understand where the ingredients come from and the difference between a sweet or savoury pie. 	<p>When have you eaten a pie before? What was in your pie? Have you eaten anything with pastry before (pie, pasty, sausage roll, croissant etc).</p> <p>Yr 1s – Last year you cooked scones and a vegetable dish. You needed to weigh the ingredients out before cooking and follow a recipe so that the food doesn't burn. You found out that flour comes from wheat. Flour can be used to make scones and pastry.</p>	
Spring	Weather great fire of London		<ul style="list-style-type: none"> We will design a junk model Tudor house in groups by exploring pictures of houses from the past. We will label our diagrams with the materials and equipment that we will need. 	<p>Last term we designed pop-up books and cards by looking at similar products. You are going to use pictures of Tudor houses to influence your designs.</p>	<p>Leaver, sliders, mechanism, design, join, create, evaluate.</p>

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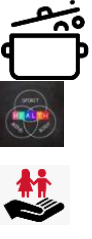

				Yr 1s – Last year we used cardboard to create moving vehicles. We turned the boxes inside out as this was easier to paint or stick to.	Fold, ingredients, chop, boil, fry, grow, mix, simmer, measure/weigh.
			<ul style="list-style-type: none"> We will make a junk model Tudor house by selecting appropriate materials and decorating them to look realistic. 	Last term we made a pop-up book to tell the Christmas story. We discovered that split pins help materials to spin around. You also discovered that glue stick was the best adhesive to join paper or card as this dried quickly.	
			<ul style="list-style-type: none"> We will evaluate our products against our first design and adapt these by making improvements. These will include changing the type or size of materials. We will evaluate our designs against our plans by adapting materials or equipment to make our house's structure more secure and our designs more realistic. 	Last term we made pop-up books using levers and sliders – how did you make your book move? Yr 1s - Last year you made vehicles and a bird box and selected the best materials (cardboard and wood). You thought carefully about the best adhesive to stick the materials together (glue, tape, blue tac).	
			<ul style="list-style-type: none"> We will learn to bake bread rolls and understand where the ingredients come from. We will strengthen our skills in cooking by kneading and rolling dough. We will start to understand the process of proving bread when using yeast. 	Last term we found out that flour comes from wheat and is grown in fields. You learnt that flour is found in lots of foods such as pastry, biscuits and pasta. You rolled out your pastry before making your mince pies so that the dough was evenly cooked.	
Summer	Our school/ Victorian times.		<ul style="list-style-type: none"> We will design our own bags by exploring different bags and sewing techniques. 	What is a bag? How is it used? How can we join materials together? Yr 1 – Last year you made toy bean bags, can you remember when you designed them first?	Model, design, create, stick, adhesive, strengthen, stiffen, structure. Mix, measure, knead, dough, score, roll, flour, spread, stick.
			<ul style="list-style-type: none"> We will sew materials together to make simple bags. We will decorate our bags fabric dye and explore how colours can be mixed together. 	Last term we made pop-up books and cards and selected paper and card when making. We didn't use cardboard as this was too thick. We used glue stick to join materials as this dried quickly. Yr 1s – Last year we made vehicles and joined our materials together using tape and PVA glue as this was stronger than glue sticks.	

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			<ul style="list-style-type: none"> We will improve our bag designs by selecting better materials (like thicker thread or thinner needles). 	<p>Last term we evaluated our book and card designs by changing materials or equipment. This improved our books and cards as the materials stuck together better and the mechanisms worked better.</p> <p>Yr 1s – Last year you evaluated your bean bags by exploring different sewing stitches that contained your stuffing the best.</p>	Sew, thread, needle, join, prove, dye.
		  	<ul style="list-style-type: none"> We will prepare and cook vegetable pasta. We will discuss the importance of eating vegetables and where our ingredients come from. 	<p>Last term we made mince pies and accurately measured our ingredients.</p> <p>Yr 1s – Last year we made a vegetable dish and discussed how vegetables are a source of fibre which is good for digesting food. You also learnt how to chop and slice vegetables safely.</p>	

Hedgehog s Cycle A (Yr 2 & 3)	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of Previous Learning	Key vocabulary
Autumn	Titanic + A UK region		<ul style="list-style-type: none"> We will design a junk model Titanic cabin, in a shoebox, to show one of the rooms on the ship. You will use pictures/videos of the ship from books and documentaries to inspire your designs. 	<p>In Squirrels you made junk model Tudor houses. You looked at pictures of old houses, from different times, to inspire your designs.</p> <p>Yr 3s – Last year you designed chariots. How did you design your product?</p>	Build, design, research, create, stick/adhesive, join, evaluate, recycling, shaping, modelling. Baking, mixing, measuring/weighting, icing, decorating,
		 	<ul style="list-style-type: none"> We will make our Titanic cabins by using a range of materials to represent different objects in each room. You will consider how to join your materials together by experimenting with different adhesives. 	<p>In Squirrels you made Tudor houses with cardboard boxes and used different adhesives to stick patterns onto your houses. You found that paper or card could be stuck on top of the cardboard to decorate your product.</p>	
			<ul style="list-style-type: none"> We will evaluate our Titanic cabins by communicating with others and changing our materials or equipment. 	<p>In Squirrels you evaluated your products against your designs by experimenting with different materials to see if this would strengthen your vehicle/bird box. You</p>	

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				also explored what adhesive works best for different materials.	designing, cutting, shaping.
			<ul style="list-style-type: none"> We will cook Titanic iced biscuits and discuss where the ingredients come from. You will decorate your biscuits with sea designs and consider the colours of your icing. We will discuss where the ingredients come from and compare how this recipe is similar to others we have followed before. 	In Squirrels you decorated biscuits and learnt how to make icing. If you added too much water the consistency was too runny. You learnt that biscuits are made of flour that comes from wheat.	
Spring	The moon landing + North America		<ul style="list-style-type: none"> You will design your own egg carton moon buggy. We will explore pictures of moon buggies and learn their purpose on the moon. 	In Squirrels you designed bird boxes. You looked at some examples and choose your materials based on these examples.	structure, base wheels, axles, product, surface, sketch, label, evaluate, cooking, spreading, mixing, chopping, sprinkling, pre-heat, grill, brown, decorating.
			<ul style="list-style-type: none"> We will make our moon buggies by measuring and different materials. You will add two axles and four wheels to make the vehicle move. 	In Squirrels you used wheels and axles when making your car/train. You also learnt how to join these to your base structure.	
			<ul style="list-style-type: none"> We will evaluate our moon buggies throughout our topic by selecting different materials or equipment. You will test your moon buggy to see if it moves on different surfaces. 	In Squirrels you evaluated your products (bird box, vehicles) to make improvements such as selecting better materials. You learnt that joining wood (for your axles) is more secure when using a glue gun rather than PVA glue.	
			<ul style="list-style-type: none"> We will decorate tortilla wraps as planets to make space pizzas. You will develop your practical skills such as chopping, slicing, sprinkling, spreading and understand that it is important to regularly check food so that it doesn't overcook. You will understand how to grate and chop ingredients safely. 	In Squirrels you decorated biscuits. You learnt how to chop and slice ingredients when making your vegetable soups and pasta. You understood that it was important to hold a knife correctly for your safety.	
Summer	Nepal, childhood throughout		<ul style="list-style-type: none"> We will design a paper mache model mountain by exploring images of mountains around the world. 	In Squirrels you designed your bird boxes with wooden materials as this was strong and could last longer outside. Last term you made moon buggies and made your	Paper Mache, mould, strengthen, structure, paint,

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	the years/ plants		<ul style="list-style-type: none"> You will consider how to strengthen your structure and how you can paint the outside of your product to make it look realistic. 	designs based on photographs of real moon buggies. These influences your designs and the materials that you wanted to use.	design, mix, newspaper, rip. Mix, mash, chop, grow, boil, coat, shape, bake.
		 	<ul style="list-style-type: none"> We will create our mountains by selecting a range of materials and experiment how to build a tall structure with cardboard tubes and boxes. You will experiment with using different adhesives to join your materials to the base of the structure before adding your paper mache. 	In Autumn term you made Titanic cabins and joined materials together by using different adhesives such as glue, tape or blue tac. You found that light materials stuck with glue stick or blue tac but heavier materials joined better with the glue gun.	
			<ul style="list-style-type: none"> We will evaluate our designs as we build our mountains to analyse whether the materials we selected are the most efficient. 	In Autumn term you evaluated your Titanic cabins and moon buggies by looking at your designs and making changes to improve your product. You found out that stronger materials needed to be used for the base structure.	
		  	<ul style="list-style-type: none"> We will prepare and cook bubble and squeak using vegetables that we have grown in science. You will understand where the ingredients come from and the importance of having fibre and carbohydrates in your diet. 	<p>In Spring we prepared toppings for our pizzas by safely using a knife to cut.</p> <p>In Squirrels you learnt about the importance of vegetables for a balanced diet when making your vegetable soup and pasta.</p>	

Hedgehogs Cycle B (Yr 2 & 3)	Unit of Work Title	Threshold Concept	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of Previous Learning	Key vocabulary
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Autumn	Stone Age/ Winchester land use		<ul style="list-style-type: none"> We will be designing Christmas stockings. You will explore different stocking designs and how they have been sewn together. You will consider what the purpose of a Christmas stocking. 	In Squirrels you made toys and bags and sewed materials together when creating products. Yr 3s – Last year you designed and labelled your cabins and considered the resources and equipment you needed before creating your product.	Sew, thread, needle, pattern, design, felt, evaluate, product, label, resources, purpose, appropriate equipment, complex, decorate. Ingredients, batter, whisk, rise, measure, mix, fry, sweet, savoury, traditional.
			<ul style="list-style-type: none"> We will be making our Christmas stockings from a range of materials. You will follow your design criteria and select the appropriate equipment to join and stick materials together. 	In Squirrels you learnt how to thread a needle and sew a button onto some fabric. You understood you needed to tie a knot in the thread so that the materials can join together.	
			<ul style="list-style-type: none"> We will adapt and improve our stockings when making them by changing materials or stitching methods where appropriate. You will consider your complexity of the design and how to improve your product with decoration. 	In Squirrels you learnt that changing materials or equipment when evaluating your bean bags/bags helped to improve your product.	
			<ul style="list-style-type: none"> You will be preparing and cooking stewed fruit by accurately weighing, chopping and boiling ingredients. You will consider where the food comes from and how the Stone Age people would have cooked the dish. 	Yr 3s – Last year you chopped and prepared ingredients when making space pizzas. You understood that it is important to hold a knife correctly to make you safe. In Squirrels you made vegetable soup and understood the importance of fruit and vegetables in your diet. You that it is important to stand away from the saucepan when you are boiling ingredients.	
Spring	Bronze – Iron Age Beaches	No making project (Art focus this term).			Stew, boil, simmer, chop, peel, corer, slice, equipment, measure, mix, diet, accurately weigh, knife, electric hob, health and safety.
			<ul style="list-style-type: none"> We will be cooking miniature toad in the holes to celebrate some of our country's traditional foods. You will find out how batter can rise and compare this to previous experiences of using eggs in recipes. 	Yr 3s – Last year you used eggs to bind ingredients together when making bubble and squeak. In Squirrels you made a dish that is traditionally eaten in the UK (scones). You understood that flour comes from wheat and it can be used in sweet or savoury recipes.	

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Summer	Romans + Italy		<ul style="list-style-type: none"> We will be designing a Roman chariot by looking at historical evidence and considering their purpose in the Roman era. 	<p>In Squirrels you made bird boxes and measured the length of your wood so that your structures joined together easily.</p> <p>Yr 3s – Last year you designed moon buggies with the purpose of travelling on rocky surfaces. You considered the thickness of your wheels to secure a better grip.</p>	<p>Historical evidence, chariot, purpose, design, wheels, axles, dowels, structure, base, evaluate, movement, lever, pulley, strengthen, reliable.</p> <p>Flour, yeast, activate, knead, prove, recipe, texture, wash, roll, mix, dough, weigh, sift, bake, rise.</p>
			<ul style="list-style-type: none"> We will make a wooden frame as the base of the structure and include an axle with two wheels to make the chariot move. You will select appropriate materials to decorate your model and equipment to join parts of your chariot together. 	<p>In Squirrels to make a bird box using wood. You used nails and the glue gun to join your materials.</p> <p>Yr 3s – Last term, when making moon buggies, you used straws and milk caps to make your wheels and axles. You discovered that wooden dowelling could also be used as a stronger axle.</p>	
			<ul style="list-style-type: none"> We will evaluate our products against our design criteria and reflect on the purpose and reliability of our chariot. You will make changes to your chariot in order to strengthen your base structure and/or ensure that materials are joined together securely. 	<p>In Squirrels you evaluated your bird boxes by selecting stronger joining materials such as nails and hammers although these were difficult to remove once used.</p> <p>Yr 3 – When you made your moon buggies, you changed the thickness of your holes in your wheels so that they would turn easily. You discovered if the holes that joined the wheels to the axles were too small, the wheels wouldn't turn.</p>	
			<ul style="list-style-type: none"> We will be making Roman spelt bread and research different recipes that people would cook during this era. 	<p>In Squirrels you made bread rolls and understood that yeast needs to be kneaded into the dough in order for it to rise. You left your rolls to prove so they became bigger and softer.</p> <p>Yr 3s – Last term you cooked stewed fruit and researched recipes that were made in the Stone Age era.</p>	

Otters Cycle A (Yr 4 & 5)	Unit of Work Title	Thresh old Conce	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of Previous Learning	Key vocabulary
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Autumn	Anglo Saxons + Winchester local study	No making project this term (Art focus).			Fruit, vegetables, fibre, digestion, balanced diet, binding ingredients, fibre, sugar, energy.
			<ul style="list-style-type: none"> We will be making honey, oats and spiced cakes from Anglo Saxon times. You will consider where the ingredients come from and how they are part of a balanced diet, honey (sugar – energy), oats (fibre – digestion). 	In Hedgehogs you made bubble and squeak and stewed fruit which included fruit and vegetables. You learnt that these foods contain fibre that is good for your digestive system.	
Spring	Australia study		<ul style="list-style-type: none"> We will be designing an electronic game for a fair or party. You will explore games that are powered by electricity and use these products to influence your ideas. 	<p>In science – how can you make a simple circuit? What games do you know of that are powered by electricity? Explore operation games etc.</p> <p>In Hedgehogs you planned products before making them by exploring some examples. This helped you to design your product.</p>	Bridge, mechanism, moving, build, construct, design and plan, adapt and evaluate, structure, strengthen, test, analyse. Knead, sift, flower, ingredients, equipment, measure, mix, dough, combine, bake, rise, roll, coat/wash, increase, activate.
			<ul style="list-style-type: none"> We will create our games using our knowledge of electrical circuits. You will select a variety of materials and equipment to make your game with a focus around electronics. You will consider how to hide your electrical mechanism (if appropriate) to make the game presentable. 	<p>When you made your circuits in science, what materials did you use? What happened when...?</p> <p>How are circuits hidden in games that you have seen?</p> <p>In Hedgehogs, when you made your chariots/moon buggies, you selected materials after your finished your designs of products.</p>	
			<ul style="list-style-type: none"> We will evaluate our electronic games by analysing and testing if our game works. You will adapt you game and selection of materials to improve your final product. 	<p>Did you circuit work? Why/why not? How could you solve/ did solve the problem?</p> <p>In Hedgehogs you evaluated your Titanic cabins and chariots and considered changing your materials to make your products more secure.</p> <p>Yr 5s – Last year you evaluated your moving animals</p>	
			<ul style="list-style-type: none"> We will be preparing and baking Viking bread. You will research Viking bread recipes and build on baking skills since Hedgehog class. 	In Hedgehogs you baked Roman spelt bread and in Squirrels you baked bread rolls. You understood that bread needs to be kneaded to activate the yeast. You also learnt that leaving bread to prove in a warm place will cause it to increase in size.	

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Summer	Rivers, Vikings		<ul style="list-style-type: none"> We will be designing drawbridges with moving mechanisms. You will consider designs of bridges throughout history and what materials are best to use. 	In Hedgehogs/Squirrels you made moving mechanisms such as pop up books and moving vehicles. You looked at examples when planning your designs.	Hygiene, safety procedures, carbohydrates, prepare, balanced diet, handling, protein, repair, muscles, different methods, bind/hold ingredients.
			<ul style="list-style-type: none"> We will be making drawbridges by following your design criteria. You will select appropriate materials and equipment to make your bridge and mechanism. 	Yr 5s - Last year you made a moving animal mechanism – what materials did you use to attach? Create movement? In Hedgehogs you thought carefully about selecting the best materials for your structure when creating your Roman chariots.	
			<ul style="list-style-type: none"> We will adapt our products to ensure that the mechanism works by changing the size or shape of materials. You will accurately measure your materials so that to ensure your drawbridges move correctly. 	In Hedgehogs you changed the size and shape of your materials when making your Roman chariots. You needed to change the shape of holes in the wheels to ensure they could turn.	
			<ul style="list-style-type: none"> We will be preparing and making fishcakes. You will understand that egg binds ingredients together and some foods can be cooked using different methods (fried, baked, grilled). You will understand where the ingredients come from and how they help to form a balanced diet (carbohydrates – give energy, protein - help to repair bodies/muscles). You will wash your hands after handling any raw fish or eggs to ensure you are following hygiene safety procedures when cooking. 	In Hedgehogs you made bubble and squeak using vegetables and potatoes. You understood that potato helps to hold different ingredients together. You understood that some vegetables can be grown at home and that vegetables give you fibre to help digest food. So far you have learnt how to prepare food safely by holding equipment correctly and washing hands thoroughly.	



Otters Cycle B (Yr 4 & 5)	Unit of Work Title	Thresh old Concep	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of Previous Learning	Key vocabulary
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Autumn	Peru study, Mayans		<ul style="list-style-type: none"> We will be designing a mechanism to create a moving animal (cams). You will watch videos and look at pictures to examine how your animal moves to help influence your design. 	In Hedgehogs you made moving vehicles, how did you get the wheels to move? What materials could you use to help the materials join together? Year 5s – Last year you designed a bridge by exploring and researching.	Mechanism, movement, design, create, mock-up, evaluate, improve, join, levers, cam, appropriate, influence/inspire, efficient, products, process. Chop, bake, mix, fry, grate, layer, protect, safety procedures, similarities, differences, comparison, food source.
			<ul style="list-style-type: none"> You will select appropriate materials to ensure your animal can move. We will consider the most efficient materials to use for our mechanisms and how to join them together. 	In Hedgehogs you selected appropriate materials when designing your Titanic cabin/ buggy and chariot. You thought about the best ways to join your materials.	
			<ul style="list-style-type: none"> You will evaluate and adapt your products during the making process. You will change the size of the materials and ensure that the product moves without difficulty. 	In Hedgehogs you evaluating your chariots when making them by changing materials or using other resources different to your criteria. You made alterations to improve your product.	
			<ul style="list-style-type: none"> We will be preparing and cooking Mayan stew. You will understand the importance of preparing and cooking food safely. If using any raw ingredients, you will understand the safety procedures when handling these ingredients. 	In Hedgehogs you prepared and cooked stewed fruit and understood that stewing means boiling for a longer amount of time.	
Spring	History topic? Indonesian volcanoes.		<ul style="list-style-type: none"> We will design a cushion with a pattern or decoration of your choice. You will think about what interests you or what you like to influence your decision. 	In Hedgehogs you designed Christmas stockings. You attached decorations and thought about the best stitching technique when planning.	Sewing, stitching, unpick, design, cross stitch, applique, decorate, assemble, fabric, cutting, measuring, stuffing, presentation. Preparing, stewing, boiling, simmering, food safety, seasoning.
			<ul style="list-style-type: none"> We will practise sewing materials together using thread and attaching objects such as buttons or sequins. You will select appropriate materials (including threads, fabric and scissors) when creating your cushion. 	In Hedgehogs you made Christmas stockings. How did you stitch your materials together? What materials did you attach to decorate the stocking? How did you attach them?	
			<ul style="list-style-type: none"> We will edit and improve our cushions by unpicking and redoing stitches to make sure that our stuffing is securely inside. 	When you make your Christmas stockings, did anything go wrong? How did you fix it?	

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			<ul style="list-style-type: none"> You will evaluate your presentation of your decoration and adapt your designs to make your cushions neater. 	Have you ever had a teddy or pillow with stuffing coming out? How could it be fixed?	
			<ul style="list-style-type: none"> ? 	Yr 5s – Last year you made fish cakes and understood that hands and surfaces need to be washed thoroughly to protect ourselves from food poisoning. In Hedgehogs you researched dishes from the Stone age and Roman era before cooking. You understood that people did not have access to the ingredients we have today as there were no supermarkets or shops to buy them from.	
Summer	Egyptians, Study of Africa.	No making project this term.			Fry, simmer, dough, mix, need, combine, measure, ingredients, equipment, traditional, adapted, savoury, caramelise, mixture.
			<ul style="list-style-type: none"> We will be preparing and cooking Egyptian honey sweet balls. We will be researching the history behind the dish and how it has been adapted. You will discuss where the ingredients come from and how the recipe could be adapted to become a savoury dish. 	In Hedgehogs and Squirrels you used flour when making biscuits, bread, batter and pastry. You understood that this ingredient can taste doughy if undercooked. You know that flour comes from wheat and fruit gives us fibre.	

Foxes Cycle A & B (Yr 6)	Unit of Work Title	Threshold Concepts	End Point - Key concepts, knowledge / skills specific to this unit/	Retrieval of Previous Learning	Key vocabulary
Autumn	Greece		<ul style="list-style-type: none"> We will design a Greek chariot by researching these vehicles through ICT and books. You will plan how to code your chariots by using crumble control boards. 	In Hedgehogs you designed rectangular Roman chariots with four wheels. You understood that wheels joined to axles need to have a hole that is big enough for the axle to loosely fit through.	Sawing, craft, decorate, joining, designing, evaluating, creating, movement, wheels, axels, dowelling, paint, adhesive,
			<ul style="list-style-type: none"> We will make our Greek chariots using wood or card as a base material. You will consider how to make straight edged wood carved by using filing, cutting or sanding materials. 	In Hedgehogs you made your Roman chariots with a simple wooden frame and dowelling. You understood that a heavier frame needed a stronger axle in order to hold the structure securely.	


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			<ul style="list-style-type: none"> You will select appropriate joining equipment to stick your materials together. 		filing, cutting, sanding, pattern, coding, crumble control board, algorithm. Chop/slice, layer, fry, mix, soften/sauté/sweat onions, bake.
			<ul style="list-style-type: none"> We will evaluate the effectiveness of our chariots by considering if we have used appropriate materials, whether any equipment needs changing and if we need to improve our algorithm on our crumble control boards. 	In Otters you evaluated your cam animal mechanisms by assessing how they move and whether this can be improved by changing the size or type of materials.	
		  	<ul style="list-style-type: none"> We will prepare and cook the traditional Greek dish moussaka. You will apply your measuring and preparing skills when chopping and weighing ingredients and research why this dish is traditional in Greece. You will prepare and fry mincemeat carefully and wash your hands and surfaces after handling the meat as you know that this can contain harmful bacteria. You will understand how the different components of the recipe help to contribute to a balanced diet (fibre, protein, fats). 	In Otters you made Mayan stew which contained meat and you know that raw meat can contain harmful bacteria. You know that meat, vegetables and oil form part of a balanced diet because they give you protein, fibre and fats. You also know how to use an oven safely and that you need protection from the heat when removing dishes from the oven.	
Spring	London/ Parliament		<ul style="list-style-type: none"> We will design a building out of junk modelling materials. Your ideas will be inspired by famous London buildings designers Norman Foster, Charles Barry and Augustus Pugin, Sir Christopher Wren. 	Last term you planned your chariots by researching examples first. You will do the same to help influence your choice of materials/design.	Model, design, stable, secure, architect, design, presentable, reliable, improve, suggest, product.
		 	<ul style="list-style-type: none"> We will make our buildings from a wide variety of materials and follow our design criteria. You will consider how to decorate your building to make it presentable and realistic. 	In Hedgehogs you made a Titanic cabin out of junk modelling resources. What materials did you choose to join? Stick? Strengthen? Last term when you made chariots what made the structures solid?	
			<ul style="list-style-type: none"> We will make changes to our structures to ensure that they are stable and secure. 	Last term you made chariot structures, how did you make changes to improve your models? Why did you make these changes? What materials didn't work?	

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			<ul style="list-style-type: none"> You will review your design criteria and make suggestions when necessary to improve your product. 		
			<ul style="list-style-type: none"> We will work in groups to plan, research and cook a meal using leftover cupboard ingredients and budget ingredients by spending £1 per head maximum. You will consider the effect that food waste has on our world and how we can save money to help others. You will learn and understand how to cook meals on a budget and apply your mathematic skills. 	<p>What does the word budget mean to you? Have you ever been given money before, what decision did you make to spend or save it?</p> <p>In maths we added together amounts of money to find a total cost. We worked out the amount of change by subtracting the total.</p>	
Summer	Self-sufficiency		<ul style="list-style-type: none"> We will design an outfit/rug from recycled materials and old clothes. You will explore the materials and look and research types of rugs/outfits to inspire your ideas. 	What do you know about designing? What does recycled mean? How can we make new products from old materials?	<p>Designers, recycled, project, upcycling, sewing, weaving, joining, applying, creating, criteria, trim/cut materials, securely, attached. Farming, produce, growing, maintaining, produce, recipe, master skills.</p>
			<ul style="list-style-type: none"> We will create our rugs or outfits by cutting, ripping and sewing different recycled fabrics together. You will explore how to apply sewing/weaving techniques previously taught when creating your outfit or rug. 	<p>How could you cut and join materials?</p> <p>In Otters you sewed designs onto cushions – how did you attached the materials together? What are the different types of stitches that you know?</p>	
			<ul style="list-style-type: none"> We will evaluate our designs against our success criteria and make changes to improve our outfits/rugs. You will trim materials and add further stitching or weaving to ensure that materials are attached together securely. 	<p>In Otters, when you made cushions, how did you tidy your designs?</p> <p>How could you improve your product? What would you do differently? How did your design change throughout the making process?</p>	
		 	<ul style="list-style-type: none"> We will design, prepare and cook our own dish using vegetables or fruit that we have grown. You will understand that some ingredients can be grown at home in the UK and the conditions needed to keep them alive. 	In Hedgehogs you grew your own vegetables and made bubble and squeak. In Squirrels you used local produce to cook a recipe (watercress scones). You understand the importance of eating fruit and vegetables (they give you vitamins, fibre) and you	

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			<ul style="list-style-type: none">• You will master skills such as chopping, slicing, boiling, frying when cooking your dish.• You will evaluate your recipe and suggest ingredients to improve the taste of your dish.	understand that growing your own produce can protect you from added chemicals.	
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