

## Coleridge Primary School

## DESIGN & TECHNOLOGY

CREATIVE, CARING, RESILIENT

Whole School Curriculum Map

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	Autumn 1	Autu	mn 2	Spring 1	Spring 2	Summer 1		Summer 2
		Wood	lwork	Woodwork	Woodwork	Wood	dwork	Woodwork
Nursery		Children will be introduced to the woodwork station and learn how to be safe. They will learn how to use a hammer correctly.		Children will fix wood together with a hammer and nails.	Children will use a saw and handle drill.		nake their own tions.	Children will continue to create and explore different materials and methods.
	Woodwork		lwork	Woodwork	Woodwork	Woodwork		Woodwork
Reception	Children will be introduced to the woodwork station and learn how to be safe. They will learn how to use a hammer correctly.	e woodwork station and learn handle drill. Thow to be safe. They will learn toge		Children will create something with skills they have previously learnt – including bird boxes.	Children will continue to create and explore different materials and methods.	and explore dif	entinue to create ferent materials ethods.	Children will continue to create and explore different materials and methods.
	Throughout the year in Nursery & Reception, children will also: safely use & explore a variety of materials, tools and techniques; share their creations, explaining the process they have used; use their increasing knowledge of tools and materials to explore their interests and develop their thinking.							
	Autumn			Spring 1	Spring 2		Summer	
YEAR 1	Textiles – Puppets  Children will design a puppet and use a template to cut out their fabric. They will join their two puppets' faces together using staples or glue. They will decorate their puppet and evaluate their product.		Mechanisms - Making a moving story book  Children will look at mechanisms called 'sliders' and identify if they move side-to-side or up-and-down. They will design their own story book and clearly label which part of their design will move and in which direction. They will then construct their moving storybook and evaluate the main strengths and weaknesses of their product.		Structures - Constructing a windmill  Children will design and create a stable structure. They will then make functioning sails and attach them to their structure. They will evaluate and improve their windmill, such as adding weight to the base for stability.		Food - Fruit and vegetables  Children will describe fruit and vegetables and identify their characteristics. They will name a range of places where fruits and vegetables grow. They will safely chop fruit and create a smoothie.	
YEAR 2	Children will explore wheel mech designing and labelling their ow They will select the appropriate n their structure with a rotating wheel adapt their design where necess	designing and labelling their own Ferris wheel. They will select the appropriate materials to build their structure with a rotating wheel. They will adapt their design where necessary add pods		extiles – Pouches earn how to sew a running stitch aced, neat stitches. They will then d cut 2 pieces of fabric from a y to make a pouch. They will join f fabric together using a running knot after the final stitch. Finally, nen decorate their pouches.	Structures - Baby Bear's chair  Children will explore the concept and features of structures and the stability of different shapes.  They will then work independently to create their own stable structure – a chair for baby bear.  They will test their chair and evaluate its strength, stiffness and stability.		Food - A balanced diet  Children will name the main food groups and identify foods that belong to each group. They will identify the balance of food groups in a healthy meal. They will then choose ingredients and make their own wrap.	
YEAR 3	Structures - Constructing a castle  Children will draw and label their own castle design using 2D shapes. They will draw and cut out nets of 3D shapes, before constructing them to make their own 3D castle.		Textiles - Cushions  Children will design and cut the template for a cushion. They will use cross-stitch and applique to decorate a cushion face. They will then assemble their cushion using a running stitch and insert stuffing inside.		Mechanical systems - Pneumatic toys  Children will learn how pneumatic systems work. They will design a toy that uses a pneumatic system, including labels, arrows and explanations in their diagram. They will then create their pneumatic toy and test if it works effectively.		Food - Eating seasonally  Children will learn that fruits and vegetables grow in different countries based on their climates, and that they grow in different seasons. Children will then use seasonal ingredients to plan and make a tart.	

YEAR 4	Textiles - Fastenings  Children will identify the features, benefits and disadvantages of a range of fastening types.  They will design a book cover and make and test a paper template. They will then create their book sleeve out of fabric, selecting the most appropriate stitch style to join their pieces of fabric together. They will incorporate a fastening into their design. Finally, they will test and evaluate their product.	Mechanical systems - Making a sling- shot car  Children will design a suitable car chassis shape. They will build the chassis and the car body. They will improve their cars by altering the shape to reduce air resistance. They will test their finished product.	Structures – Pavilions  Children will make a range of free-standing frame structures of different shapes and sizes. They will then design their own pavilion that is strong, stable and aesthetically pleasing. Children will build their structure using lolly sticks and card, before adding cladding.	Food - Adapting a recipe  Children will evaluate and compare a range of biscuits. They will then design their own biscuit within a given budget. They will follow their own recipes to make their biscuit. They will design packaging for their biscuit and will evaluate their final product.
YEAR 5	Mechanical systems - Pop-up book  Children will design their own pop-up book; producing a suitable plan for each page. They will make their pop-up book; assembling all the necessary components for their structures/mechanisms.	Structures – Bridges  Children will identify beam, arch and truss bridges and describe their differences. They will identify stronger and weaker shapes, and learn that supporting shapes can help increase the strength of a bridge. They will safely cut beams down to the correct size to create their own wooden truss bridge. They will reinforce their bridge and evaluate the finished structure.	Textiles - Stuffed toys  Children will design a stuffed toy, considering the main component shapes and creating an appropriate template. They will measure, mark and accurately cut fabric, before joining the pieces together using a blanket stitch. They will create and add decorations using an appropriate stitch. Finally, they will evaluate their toy and think about points for improvement.	Food - What could be healthier?  Children will learn about the farm-to-fork process. They will look at recipes and think about possible alternative ingredients that could be used. They will analyse the nutritional content on food packages. They will make bolognaise following a recipe, and will design their own food packaging that could be used for their meal.
YEAR 6	Textiles – Waistcoats  Children will create a waistcoat design, considering a range of factors in their design criteria. They will use a template to mark and cut out a design from fabric which fits them. They will use a running stitch to join their fabric together and will attach buttons and decorate their functional waistcoat. Finally, they will evaluate their product.	Mechanical systems - Automata toys  Children will safely measure, mark and cut out wood ready to create an automata frame. They will assemble the frame components and supports with the help of a diagram. They will then make 3 cam profiles and follower toppers. They will decorate and finish their automata toy before evaluating their finished product.	Structures – Playgrounds  Children will design their own playground with a variety of structures. They will build these structures using wood and other materials – drawing upon their prior knowledge. They will add detail/decorations to their structures and improve them following peer evaluation. Finally, they will create a surrounding landscape.	Food - Come dine with me  Children will research and design their own recipe, including the key steps, methods and ingredients. They'll work safely and hygienically to create their meal, before tasting and evaluating it.