DESIGN TECHNOLOGY POLICY

INTENT

At Wickersley Partnership Trust (primary) we aim to ensure our Design Technology curriculum is designed to sequence learning and embed the key skills that are required to develop curious students into competent designers, engineers, architects and chefs.

We believe that Design Technology prepares children for the rapidly changing world that we live in. It encourages children to exercise their creativity and use of imagination through designing, making and evaluating their work. It stimulates them to become practical problem solvers and thinkers, individually and as part of a team. As we live in a technological world, Design Technology should have a real life purpose and children should be inspired by engineers, designers, architects and chefs.

It is vital that curriculum knowledge and skills are not learnt in isolation. We teach Design Technology through the progression of skills and knowledge, both of which are planned in a sequential document and include in this, key lines of inquiry to develop links across the curriculum as well as to the bigger concepts that drive our curriculum intent, such as democracy and equality.

HOW WE INTEND TO REMOVE BARRIERS

In Design Technology we remove barriers to learning and support students' ability to access the curriculum through the development of literacy, numeracy, oracy skills and vocabulary acquisition. Misconceptions do not go unchallenged and the supportive environment within each and every lesson ensures that students develop their own literacy and vocabulary.

LITERACY
Students are given many opportunities to read widely and often with students directed to texts related to Design Technology, as well as researching independently. Pupils take part in learning opportunities with a range of contexts for reading and writing. These will develop from being supported to independent.

NUMERACY
Throughout each year of the curriculum data handling skills are sequenced to become more complex over time. This ensures students build on the fundamental aspects of each one and develop their confidence and understanding.

ORACY
In order to develop their oracy within a subject specific context pupils are given opportunities to talk about their learning. Staff challenge use of technological design related language and will direct pupils towards the correct terminology when appropriate.

VOCABULARY
Students are introduced to key subject specific vocabulary and have regular opportunities to reinforce their understanding. Key Design Technology vocabulary is highlighted to the pupils and pupils are guided to use this in their work.

HOW WE DEVELOP SKILLS FOR LEARNING

Students are given opportunities to develop their skills for learning in each and every lesson. Engaging starter activities help students to recall the key concepts of prior learning. Our aspiring designers are presented with a variety of experiences and learning opportunities. They are challenged to think critically and form opinions.

The skills for learning process within the Design Technology curriculum both reinforces the key design skills content and helps our students to know, remember and be able to do more at each stage of the curriculum.

Teacher assessment informs planning and progression within the curriculum.

HOW WE FOSTER PERSONAL ATTRIBUTES

In Design Technology our curriculum intent embodies that of the school. We are committed to ensuring students are exposed to the wider world context in order to develop them as well rounded individuals. Our curriculum demands independence, resilience and responsibility in line with SCHOOL Way.

Design and technology is an inspiring, rigorous and practical subject. It allows children to use their creativity and imagination. Pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world.

HOW WE INTEND TO ENRICH STUDENT EXPERIENCES AND BROADEN THE HORIZONS OF STUDENTS

Design Technology is a curriculum that is rooted in the wider world of work. To this end we broaden the horizons of all our students and enrich their learning through a range of first hand experiences. All our students have exposure to learning beyond the traditional mainstream lesson and have opportunities to enrich their experiences. As a trust, we have developed links with the Advanced Manufacturing Park in order to enable pupils to see a real world context for the subject. Primary schools are developing links with the subject specialist departments in the secondary schools in order to enhance opportunities and inspire pupils to see how the study of Design Technology can lead to future roles in society. Design Technology is planned as a discrete subject.

DESIGN TECHNOLOGY CURRICULUM OVERVIEW

		EYFS	KS1	LOWER KS2	UPPER KS2
DEMOCRACY	How do we communicate with others and reach a joint understanding and agreement?				
	Design Communication	I can communicate my ideas through talking and drawing.	I can communicate my ideas through annotated drawings and mock ups.	I can communicate my ideas through annotated drawings and mock ups. As well as some of the following strategies; pattern pieces, prototypes, exploded drawings and cross sectional drawings.	I can communicate my ideas through annotated drawings and mock ups. As well as all of the following strategies; pattern pieces, prototypes, exploded drawings and cross sectional drawings.
	CAD - chromebooks/ simple program/ via large board	I can use 2D CAD software to select and position shapes.	I can use 2D Design to resize, reposition and move shapes that are given to me and deleted objects.	I can use some of the following tools in 2D Design including, repositioning, resizing and moving shapes. Drawing, lines, basic shapes and curves. Deleting, segments and whole objects.	I can use all of the following tools in 2D Design including, repositioning, resizing and moving shapes. Drawing, lines, basic shapes and curves. Deleting, segments and whole objects.
	Testing and Evaluating	I can identify aspects of my work and other people's work that I like and don't like.	I can evaluate my product against a design specification.	I can evaluate my product against a design specification and take into consideration the views of others to improve my work.	I can test my product against a design specification and take into consideration the views of others and suggest possible improvements to my work, annotating and redrawing as appropriate
IMPACT OF HUMANS	How do the ideas we create impact the users? How has the work of previous designers impacted the world we live in? How do the materials we select impact the environment? How do we the processes we use to manufacture products change society/workforce? How do the foods we grow/rear/catch affect the food we eat?				
	Generating Ideas	I can verbally describe and draw my design ideas.	I can generate ideas for a simple brief and develop my ideas based on feedback.	I can generate ideas for a simple brief and develop my ideas based on feedback and testing.	I can generate ideas, taking into account the needs of the users and develop my ideas based on feedback and testing.
	Analyse Products, Key Events and individuals.	I can conduct a limited product analysis of a given product.	I can conduct a product analysis of a given product.	I can conduct a product analysis of a given product and describe how key events have helped shape the world.	I can conduct a product analysis of a given product and explain how key events and individuals have shaped the world.
	Selecting Materials	I know the reason behind material selection for a certain application. I can describe the reason behind material selection.	I know the characteristics of a limited range of materials. I can explain why I have chosen certain materials based on their characteristics.	I know the aesthetic properties of a range of materials. I can explain why I have chosen certain materials based specifically on their aesthetics.	I know the aesthetic and functional properties of a range of materials. I can explain why I have chosen certain materials based specifically on their aesthetics and functional properties.
	Manufacturing Skill	I can use a limited range of tools and equipment safely.	I can select and use a limited range of tools and equipment safely.	I can select and use a range of tools and equipment safely.	I can select and use a range of tools, equipment and machinery.
	Manufacturing Knowledge	I know the names of a range of tools and equipment.	I know the specific names of a range of tools and equipment.	I know the specific names of a wide range of tools and equipment and state their purpose.	I know the specific names of all tools and equipment used and state their purpose.
	Seasonality and Source	I know where vegetables and fruits come from.	I know where different types of food come from.	I know how different foods are grown, reared, caught and processed.	I know how different foods are grown, reared, caught and processed, including their seasonality.
EQUALITY	How do we design products that are inclusive for all?				
	Specification	I can describe a function of a product.	I can describe the main functions of a product.	I can describe what the main functions of a product need to be and who the potential user could be.	I can write a basic design specification including the functions the product should be able to perform, the potential users it is for and suitable materials that could be used.

	EYFS	KS1	LOWER KS2	UPPER KS2
FOOD				
PROBLEM	What can we create to help children to eat more fruit and vegetables?	What can we create to encourage people to eat healthy snacks between meals to keep energy levels up?	What kind of food can you create that can be cooked and eaten at a picnic?	How would you encourage people to not rely on take away food?
COOKING & NUTRITION	**PSED: Know and talk about the different factors that support their overall health and wellbeing: Healthy Eating**	**Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from.**	**Understand and apply the principles of a healthy and varied diet Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.**	
DESIGN	**Physical: Begin to show accuracy and care when drawing. EAD: Create collaboratively, sharing ideas, resources and skills. CL: Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.**	**Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology**	**Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	
	I know where vegetables and fruits come from. I know the names of some dishes which have fruit in.	I know where a range of ingredients come from (those in the recipes)	I know how different foods are grown, reared, caught and processed.	I know how different foods are grown, reared, caught and processed, including their seasonality.
	I know the basic principles of nutrition and that fruits and vegetables are good for me.	I know and can apply the basic principles of nutrition to plan a meal. I know what proportions are required in a healthy diet (meal)	I know the principles of the eatwell guide and can apply them to plan a meal	I know the principles of the eat well guide and can apply them to plan a meal for a given customer.

	EYFS	KS1	LOWER KS2	UPPER KS2
DESIGN	I can conduct a limited product analysis of a given product	I can conduct a product analysis of a given product.	I can conduct a product analysis of a given product and describe how key events have helped shape the world. I can conduct a product analysis, using ACCESS FM criteria	I can conduct a product analysis of a given product and explain how key events and individuals have shaped the world. I can explain the lasting impact of significant people on food in schools.
	I can talk to a potential user of my product.	I know the different target market groups for snacks healthy vs junk I can generate relevant interview questions for a target market group / potential user of my product	I can generate a range of questions for an interview and record their responses.	I can undertake relevant research such as user interviews, research into existing products and mood boards. I can produce a mood board using IT to inspire my design ideas.
	I can verbally describe my design ideas. I can communicate my ideas through talking and drawing.	I can draw a simple design and label the key parts of my design I can generate ideas and develop my ideas based on feedback.	I can communicate my ideas through annotated drawings and mock ups. As well as some of the following strategies; pattern pieces, prototypes, exploded drawings and cross sectional drawings. I can generate ideas and develop my ideas based on feedback and testing. I can produce cross section sketches.	I can communicate my ideas through annotated drawings and mock ups. As well as all of the following strategies; pattern pieces, prototypes, exploded drawings and cross sectional drawings. I can generate ideas, taking into account the needs of the users and develop my ideas based on feedback and testing. I can generate suitable dishes for specific target market groups based on feedback. I can use all of the following tools in 2D Design including, repositioning, resizing and moving shapes. Drawing, lines, basic shapes and curves. Deleting, segments and whole objects. I can produce exploded drawings that show how ingredients are combined in one dish.
		I can describe the main functions of a product (design specification)	I can describe what the main functions of a product need to be and who the potential user could be.	I can write a basic design specification including the functions the product should be able to perform, the potential users it is for and suitable materials that could be used.
MAKE	**EAD: Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. EAD: Create collaboratively, sharing ideas, resources and skills.**	**Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics**	**Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities**	
	I can use simple tools and techniques competently and appropriately. I can peel and chop foods using the correct equipment.	I can select and use a limited range of tools and equipment. I know the names of a wide range of tools and equipment. I can use the right tools to cut, peel grate and chop	I can select and use a range of tools and equipment. I know the names of a wide range of tools and equipment and state their purpose.	I can select and use a range of tools, equipment and machinery. I know the names of all tools and equipment used and state their purpose.
	I know how to use the bridge and claw technique cutting fruit with support	I can use the right tools and techniques to cut, peel, grate and chop.	I can join and combine a range of ingredients. I can work safely and hygienically.	I know how to combine ingredients to make a dish.
		I know how to use the bridge and claw technique when cutting	I can select from and use a wider range of equipment to perform practical tasks accurately	
		I know how to cream in ingredient when baking.		
EVALUATE		**Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria**	**Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand how key events and individuals in design and technology have helped shape the world**	
	I can identify aspects of my work and other people's work that I like and don't like.	I can evaluate my product against a design specification.	I can evaluate my product against a design specification and take into consideration the views of others to improve my work.	I can test my product against a design specification and take into consideration the views of others and suggest possible improvements to my work.
TECHNICAL KNOWLEDGE	**EAD: Share their creations, explaining the process they have used.**	**Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**	**Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products.**	
	I can say what I have chosen my ingredients.	I know the characteristics of a limited range of materials. I can explain why I have chosen certain materials based on their characteristics.	I know the aesthetic properties of a range of materials. I can explain why I have chosen certain materials based specifically on their aesthetics.	I know the aesthetic and functional properties of a range of materials. I can explain why I have chosen certain materials based specifically on their aesthetics and functional properties.

	EYFS	KS1	LOWER KS2	UPPER KS2
	TEXTILES			
PROBLEM	How can we make a puppet for retell a familiar story?	How can we organise our stationary equipment, to prevent it becoming lost?	How can we improve the comfort of a school chair?	How can we make a soft toy for a younger child?
DESIGN	**Physical: Begin to show accuracy and care when drawing. CL: Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.**	**Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology**	**Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	
DESIGN	I can conduct a limited product analysis of a given product. I can say what a product is for.	I can conduct a simple product analysis of a given product. I can describe the main functions of a product (design specification)	I can conduct a product analysis of a given product I can describe what the main functions of a product need to be and who the potential user could be.	I can conduct a product analysis of a given product I can write a basic design specification including the functions the product should be able to perform, the potential users it is for and suitable materials that could be used.
DESIGN	I can talk to a potential user of my product.	I can interview a potential user of my product and record their responses.	I can generate a range of questions for an interview and record their responses.	I can undertake relevant research such as user interviews, research into existing products and mood boards. I can produce a mood board using IT to inspire my design ideas.
DESIGN	I can verbally describe my design ideas. I can communicate my ideas through talking and drawing.	I can draw a simple design and label the key parts of my design I can generate ideas and develop my ideas based on feedback. I can create a mock-up of my design.	I can communicate my ideas through annotated drawings and mock ups. As well as some of the following strategies; pattern pieces, prototypes, exploded drawings and cross sectional drawings. I can use some of the following tools in 2D Design including, repositioning, resizing and moving shapes. Drawing, lines, basic shapes and curves. Deleting, segments and whole objects.	I can communicate my ideas through annotated drawings and mock ups. As well as all of the following strategies; pattern pieces, prototypes, exploded drawings and cross sectional drawings. I can generate ideas, taking into account the needs of the users and develop my ideas based on feedback and testing. I can use all of the following tools in 2D Design including, repositioning, resizing and moving shapes. Drawing, lines, basic shapes and curves, deleting, segments and whole objects.
MAKE	**Physical: Use a range of small tools, including scissors, paintbrushes and cutlery. EAD: Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.**	**Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics**	**Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities**	
MAKE	I can use a limited range of tools and equipment.	I can select and use a limited range of tools and equipment.	I can select and use a range of tools and equipment to perform tasks accurately. I know the names of a wide range of tools and equipment and state their purpose.	I can select and use a range of tools, equipment and machinery. I know the names of all tools and equipment used and state their purpose.
MAKE	I know the names of a limited range of tools and equipment.	I know the names of a wide range of tools and equipment.		I know the names and functions of a range of electronic inputs and outputs. I can select and explain, the use of, appropriate electronics to use in my product.
MAKE	I can use tools and techniques appropriately e.g. taking needle for a walk over fabric. I can select tools and techniques needed to shape, assemble and join materials i.e. scissors can select tools and techniques needed to shape, assemble and join materials i.e. scissors	I can use a template to cut out shapes. I can join fabrics using glue & a running stitch. I can decorate textiles using buttons, beads, sequins, braids & ribbons. I can attach embellishments to create a desired effect using glue and/ or a stitch.	I can create a simple pattern. I can use a seam allowance. I can shape and stitch materials together I can attach embellishments to create a desired effect using glue and/ or a stitch. I can use appliqué to decorate by gluing, & stitching	I can create a simple pattern. I can use a seam allowance. I can join fabrics using a running stitch, over stitch & back stitch. I can show precision in techniques. I can choose from a range of stitching techniques. I can attach embellishments to create a desired effect using glue and/ or a stitch. I can use appliqué to decorate by gluing, & stitching I can quilt, pad and gather fabric to create a desired effect. I can use electronics in textile applications

	EYFS	KS1	LOWER KS2	UPPER KS2
EVALUATE	**CL: Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher.**	**Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria**	**Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand how key events and individuals in design and technology have helped shape the world**	
	I can identify aspects of my work and other people's work that I like and don't like.	I can evaluate my product against a design specification.	I can evaluate my product against a design specification and take into consideration the views of others to improve my work.	I can test my product against a design specification and take into consideration the views of others and suggest possible improvements to my work.
TECHNICAL KNOWLEDGE	**EAD: Share their creations, explaining the process they have used.**	**Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**	**Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products.**	
	I know the reasons behind material selection for a certain application. I can describe the reasons behind material selection.	I know the characteristics of a limited range of materials. I can explain why I have chosen certain materials based on their characteristics.	I know the aesthetic properties of a range of materials. I can explain why I have chosen certain materials based specifically on their aesthetics.	I know the aesthetic and functional properties of a range of materials. I can explain why I have chosen certain materials based specifically on their aesthetics and functional properties.
PRODUCT LINK	Puppet - hand, sock, finger	Pencil case	Cushion	2 faced toy (e.g Happy /sad)
CONSTRUCTION				
PROBLEM	How can we make a book more interesting to read?	How would you modify a given design to make it function better. i.e launch further/ more accurately/different objects?	How would you provide emergency sheltering for people caught in natural disasters?	How would you encourage wildlife into your garden?
DESIGN	**Physical: Begin to show accuracy and care when drawing. CL: Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.**	**Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.**	**Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.**	
	I can construct with a purpose in mind.	I can conduct a product analysis of a given product. I can describe the main functions of a product (design specification). I can think of a solution to a problem.	I can conduct a product analysis of a given product. I can analyse the different structural elements of a range of structures, houses, bridges, tents. I know the names and functions of a limited range of mechanisms. I can describe what the main functions of a product need to be and who the potential user could be. I can write a design specification considering the needs of the user.	I can conduct a product analysis of a given product and explain how key events and individuals have shaped the world. I can write a basic design specification including the functions the product should be able to perform, the potential users it is for and suitable materials that could be used. I know the names and functions of a limited range of mechanisms.
	I can talk to a potential user of my product.	I know the different target market groups for snacks healthy vs junk. I can generate relevant interview questions for a target market group / potential user of my product.	I can generate a range of questions for an interview and record their responses.	I can undertake relevant research such as user interviews, research into existing products and mood boards. I can produce a mood board using IT to inspire my design ideas.
	I can verbally describe my design ideas. I can communicate my ideas through talking and drawing.	I can draw a simple design and label the key parts of my design I can generate ideas and develop my ideas based on feedback. I can follow a manufacturing plan.	I can communicate my ideas through annotated drawings. As well as some of the following strategies; prototypes and cross sectional drawings. I can generate ideas and develop my ideas based on feedback and testing. I can produce cross section sketches.	I can communicate my ideas through annotated drawings and mock ups. As well as all of the following strategies; prototypes and cross sectional drawings. I can generate ideas, taking into account the needs of the users and develop my ideas based on feedback and testing. I can generate suitable dishes for specific target market groups based on feedback. I can use all of the following tools in 2D Design including, repositioning, resizing and moving shapes. Drawing, lines, basic shapes and curves. Deleting, segments and whole objects. I can produce exploded drawings that show how ingredients are combined in one dish.

	EYFS	KS1	LOWER KS2	UPPER KS2
MAKE	**EAD: Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.**	**"Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics"**	**Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities**	
	I can use a limited range of tools and equipment. I know the names of a limited range of tools and equipment.	I can select and use a limited range of tools and equipment. I know the names of a wide range of tools and equipment.	I can select and use a range of tools and equipment. I know the names of a wide range of tools and equipment and state their purpose. I can use advanced mechanisms in my product.	I know the names of all tools and equipment used and state their purpose.I can select and use a range of tools, equipment and machinery I can use advanced mechanisms in my product.
	I can use various construction materials to build with. I can join construction pieces together to build and balance. I can manipulate materials to achieve a planned effect. I can select tools and techniques needed to shape, assemble and join materials I am using. I can use simple tools and techniques competently and appropriately. I can explain how a glue gun is used (by an adult)	I know the main structural elements of the catapult (triangles for stability etc) and their purpose. I know the function of the main elements of a given structure. I can build structures and explore how they can be made stiffer, stronger and more stable. I know the names and functions of a given mechanism. I can use simple mechanisms in my product.	I know how to reinforce given elements of a given structure.I can reinforce, stiffen and increase stability of structures I know how to mark and cut timber I know how to create corner but joints and t joints using card triangles and PVA glue.	I know how to reinforce a range of structural elements.I can reinforce, stiffen and increase stability of complex structures I can cut accurately to 1mm: strip wood, dowel & square section. I can build frameworks using a range of materials: wood, card, corrugated plastic. I can use a glue gun with close supervision. I can cut accurately and safely to a marked line. I can use a craft knife, cutting mat and safety ruler under one to one supervision (if appropriate). I can make a model using multiple pieces
EVALUATE	**EAD: Share their creations, explaining the process they have used. CL: Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher.**	**Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria**	**Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand how key events and individuals in design and technology have helped shape the world**	
EVALUATE	I can talk about my model. I can say how I could make my model better.	I can evaluate my product against a design specification.	I can evaluate my product against a design specification and testing and take into consideration the views of others to improve my work.	I can test my product against a design specification and take into consideration the views of others and suggest possible improvements to my work.
TECHNICAL KNOWLEDGE		**Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**	**Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products.**	
		I know the characteristics of a limited range of materials including timber and elastic. I can explain why I have chosen certain materials based on their characteristics.	I know the aesthetic properties of a range of materials. I can explain why I have chosen certain materials based specifically on their aesthetics.	I know the aesthetic and functional properties of a range of materials including softwoods and plastics. I can explain why I have chosen certain materials based specifically on their aesthetics and functional properties.
PRODUCT LINK	Pop up story book Mechanisms and sliders	Catapult project	Shelters	Bird box/bird feeder/bug hotel