KS1 DT (Russet and Pippin Class)

2021 / 2022	Term	Focus	Sketch Book Work	Final Piece	Skills Progression
	Autumn 1	Designing a home	Children will investigate	Children create their	Year 1 –
		diorama	ways of making some	own home diorama.	Design
			interior features of	They will include a	Designing for others
		A ALTERNA CALL AND A AND	homes out of variety of	moving door, window	
		TABUETZA TABUETZA VII BARTENA MK. M	materials, such as beds,	and furniture in their	Make
			chairs, lights and	models. They will	Assembling different components to work
		Really Section	decorations.	decorate their models	together to create motion Assembling
				using fabric and choose	accurately
				their own methods of	Cutting neatly
				joining the fabric to the	
				models they make.	Evaluate
					Testing a finished product
					Technical knowledge
					Developing awareness of different
					structures for different purposes
					Understanding how to turn 2D nets into
					3D structures
					Understanding what mechanisms are
					Year 2 – (as above)
					Design
					Designing for others, using criteria and
					applying their knowledge of structures
					Make
					Cutting and assembling accurately
					Evaluate
					Examples of natural & manmade
					structures
					Testing and evaluating
					Technical knowledge
					Understanding the definition and
					importance of strength, stability and

				stiffness Knowing that different shapes can strengthen or weaken structures and that materials can be manipulated to improve strength and stiffness.
Autumn 2	Perfect pizzas	Children explore different breads, toppings, leading them to design their own pizza	Children make their own original pizza	Year 1 – Design Designing packaging for their pizzas Make Preparing food safely and hygienically Chopping safely using the bridge grip Evaluate Conducting product research Evaluating a design Technical knowledge Understanding how food grows Knowing the food groups Understanding what makes a balanced diet Year 2- (as above) Design Designing packaging for their pizzas Make Safely preparing food Following a recipe Evaluate Tasting and evaluating their pizzas Technical knowledge Knowing what foods are in season and when

				Understanding the benefits of foods by their food type
Spring 1	Making Vehicles Image: Constraint of the second s	Children learn about a variety of vehicles. They learn about wheels, axles and chassis before designing their own moving vehicle.	Children create their own moving vehicle.	Year 1 – Design Designing for others Designing mechanisms Make Assembling accurately Creating different movements (up, down, along and around) Adapting Mechanisms Measuring and cutting accurately Following a design brief Working to scale Identifying materials commonly used for wheels Evaluate Testing a finished product Researching and testing mechanisms Technical knowledge Understanding what a mechanism is Understanding how to create different movement Understanding how an axle works Year 2 – (As above) Design Creating and using design criteria, generating ideas Planning for design and manufacture Designing mechanisms Make Cutting and assembling accurately Selecting appropriate equipment and materials

		Measuring and cutting accurately, working to scale and following a design brief
		Evaluate Carrying out primary research and applying to design Testing and adapting mechanisms Researching mechanisms
		Technical knowledge Learning mechanical components Identifying input and output Understanding how an axle works Know materials commonly used for wheels

2022 / 2023	Term	Focus	Sketch Book Work	Final Piece	Skills Progression
	Spring 1	Making puppets	Children explore	Children sew a hand	Year 1
			different types of	puppet	Design
		A	puppets. They make various types of puppets		Designing for others
			and practise simple		Make
		0.0	sewing skills.		Selecting suitable equipment
					Sequencing steps for construction
					Evaluate
					Reflecting on their finished product
					Technical knowledge
					Knowing the different ways fabric can be
					joined
					Understanding how to prepare fabric for joining
					Year 2 (as above)
					Design
					Considering purpose in the design process
					Make
					Threading a needle
					Sewing a running stitch
					Preparing fabrics for sewing
					Evaluate
					Discuss the making process and the
					finished product
					Technical knowledge
					Identifying parts of a needle (point and eye)
					Understand the alternative ways of
					joining fabrics and embellishments

Summer 1	Stable Structures –	The children explore	Children create a	Year 1 –
Summer 1	making a famous	making structures and	famous landmark.	Design
	landmark	how to make them	Tallious fallulliark.	-
	landmark			Designing for others
		stable. They then plan		
		and design their own		Make
		structure, ensuring it is		Assembling different components to work
		stable to stand on its		together to create motion Assembling
		own.		accurately
				Cutting neatly
				Evaluate
				Testing a finished product
				Technical knowledge
				Developing awareness of different
				structures for different purposes
				Understanding how to turn 2D nets into
				3D structures
				Understanding what mechanisms are
				onderstanding what meenanisms are
				Year 2 – (as above)
				Design
				Designing for others, using criteria and
				applying their knowledge of structures
				apprying their knowledge of structures
				Make
				Cutting and assembling accurately
				Evaluate
				Examples of natural & manmade
				structures
				Testing and evaluating
				Technical knowledge
				Understanding the definition and
				importance of strength, stability and
				stiffness
				501111855
				Knowing that different chapes can
				Knowing that different shapes can
				strengthen or weaken structures and that

Summer 2. Moving pictures Children investigate Children investigate Children create a Year 1 - Design Imaking moving pictures. They explore using Sider mechanisms, pivot and lever mechanisms and wheel mechanisms and wheel Make Assembling accurately Creating and curture action of their books Make Assembling accurately Creating and acturate action of their books Make Summer 2 Make Evaluate Evaluate Testing a finished product Researching mechanisms Imaking mechanisms Imaking mechanisms Imaking mechanisms Evaluate Testing a finished product Researching and testing mechanisms Imaking and assembling accurately Creating and manufacture Design Testing a finished product Researching and testing mechanisms Imaking and assembling accurately Colorestanding how to create different movement Understanding how an axle works Year 2 - (As above) Design Imaking and assembling accurately Creating and using design criteria, generating ideas Planning for design and manufacture Design and assembling accurately Selecting appropriate equipment and
materials

		brief
		Evaluate Carrying out primary research and applying to design Testing and adapting mechanisms Researching mechanisms
		Technical knowledge Learning mechanical components Identifying input and output Understanding how an axle works Know materials commonly used for wheels

LKS2 DT (Bramley Class)

Bramley	Term	Focus	Structure of work	Final Piece	Skill/Progression
2021-2022	Autumn	Bird feeders	Explore existing birdfeeders including those made from recycled products Look at range of materials available Design and annotate Make and evaluate Hang around the school site		 Planning: •identify the design features of their products that will appeal to intended user; •use their knowledge of a broad range of existing products to help generate their ideas; •design innovative and appealing products that have a clear purpose and are aimed at a specific user; •use annotated sketches and cross-sectional drawings to develop and communicate their ideas; •when designing, explore different initial ideas before coming up with a final design; •when planning, start to explain their choice of materials and components including function and aesthetics; Making: •with growing confidence, carefully select from a range of tools and equipment, explaining their choices; •select from a range of materials and components according to their functional properties and aesthetic qualities; •place the main stages of making in a systematic order; Practical skills and techniques •with growing independence, measure and mark out to the nearest cm and millimetre; •cut, shape and score material and components with some degree of accuracy; Evaluating: •explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose; •explore what materials products are made from and suggest reasons for this; •consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product; •evaluate their product against their original design criteria;

	All weather shelters	Look at a range of different shelters What makes a good shelter? Discuss materials, shape and structure Plan, review and build Test – rain, wind and earthquake	 Order the main stages of making a product Describe the purpose of their products Explain how particular parts of their products work Use annotated sketches and exploded diagrams to develop and communicate their ideas Assemble, join and combine materials and components with some accuracy Identify the strengths and areas for development in ideas and product Refer to design criteria as they design and make Use design criteria to evaluate their completed product
Summer	Cooking from around the world (Canada, Australia, Indonesia, Mexico and Kenya)		 To follow procedures for safety and hygiene Understand where food comes from (grown, reared and caught in the UK, Europe and the wider world Prepare and cook a variety of savoury dishes included where appropriate, the use of a heat source Use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking Understand that a healthy diet is made up of a variety and balance of different food and drink, as depicted in The Eat Well Plate Understand that in order to be active and healthy, food and drink are needed to provide energy for the body

Bramley	Term	Focus	Sketchbook Work	Final Piece	Skill/Progression
2022-2023	Autumn	Kites	Look at a range of existing products – design, materials, colour, construction Create own criteria Woodwork skills to make the frame Accurate measurements required Make, test and review		 Share and clarify ideas through discussion Use annotated sketches and exploded diagrams to develop and communicate their ideas Generate realistic ideas, focusing on the needs of the user Select tools and equipment suitable for the task Explain their choice of tools and equipment in relation to the skills and techniques they will be using Order the main stage of making Follow procedures for safety and hygiene Measure, mark out, cut and shape materials and components with some accuracy Assemble, join and combine materials and components with some accuracy Identify the strengths and areas for development in their ideas and products Refer to their design criteria as they design and make
	Spring	Cooking Local Area and United	What is seasonal? What is grown locally? Traditionally dishes/recipes from		 Follow procedures for safety and hygiene Understand that food ingredients can be fresh, pre-cooked and processed To follow procedures for safety and hygiene Understand where food comes from (grown, reared and caught in the UK, Europe and the wider

	Kingdom	Kent/United Kingdom	 world Prepare and cook a variety of savoury dishes included where appropriate, the use of a heat source Use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking Understand that a healthy diet is made up of a variety and balance of different food and drink, as depicted in The Eat Well Plate Understand that in order to be active and healthy, food and drink are needed to provide energy for the back.
Summ	r Money Containers	Evaluate existing product Who is the target user? Design ideas – materials, size, etc. Learning and practise basic sewing skills – running stitch, back stitch and fastenings	 the body Planning: identify the design features of their products that will appeal to intended customers; use their knowledge of a broad range of existing products to help generate their ideas; design innovative and appealing products that have a clear purpose and are aimed at a specific user; use annotated sketches and cross-sectional drawings to develop and communicate their ideas; when designing, explore different initial ideas before coming up with a final design; when planning, start to explain their choice of materials and components including function and aesthetics; Making: learn to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures; use a wider range of materials and components, including textiles; with growing independence, measure and mark out to the nearest cm and millimetre; assemble, join and combine material and components with some degree of accuracy; demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product; join textiles with an appropriate sewing technique; Evaluating: explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose; explore what materials products are made from and suggest reasons for this; consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product; evaluate their product against their original design criteria

UKS2 DT (Discovery Class)

Discovery	Term	Curriculum Link	Focus	Sketch Book Work	Final Piece	Skills Progression
Class						
2021-22	Autumn 1	Topic -Comparison of Ancient Civilisations - Egypt and Greece	Design a shoe	Research Design Prototype in paper/ sewing techniques developed Evaluate	Greek sandal	Design: a use research to inform and develop detailed design criteria to inform the design of innovative,
	Spring 2	Science -Electricity	Electrical Toy	Research Design Prototype (does my design work?) Evaluate Finish product	A toy that uses an electrical circuit.	 functional and appealing products that are fit for purpose and aimed at a target market; use their knowledge of a broad range of existing products to help generate their ideas; design products that have a clear purpose and indicate the design features of their products that will appeal to the intended user;
	Spring 2	Romans	Cookery	Research the main food groups.	Make and design Roman bread.	
				Consider how different foods modelled in their food group research is produced.		
		Year 6 Pasta Lunch Activity	Healthy Eating	Consider different food groups and how these are shown across various different meals.	Produce a pizza that has balanced and healthy toppings.	 d explain how particular parts of their products work; e use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-
Discovery Class						aided design) to develop and communicate their
2022-23	Autumn 2	The Americas	Totem Pole and Dreamcatchers	Research Design Create Evaluate Final product	Totem pole made from cardboard. Dream catcher made from paper and string. Both have a historical design focus.	ideas; f generate a range of design ideas and clearly communicate final designs;
	Spring 1	Invaders	Viking Long-ships	Research Design	Viking Longboat designed to feature a visually	g consider the availability and costings of resources

				Create Evaluate	traditional ship that can hold 10 Vikings (pegs) and float.	when planning out designs; work in a broad range of relevant
Sumn	(C fro	he Changing World Considering architects rom around the world – lobalisation)	Bridge Building	Research bridges from around the world. Consider their shapes and what they are made from. -Make a bridge from paper using ideas from research. -Design own bridge that will be made from wooden lolly sticks.	A bridge made out of wooden lolly sticks that can hold the most weight over a set distance between a set gap.	contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment. Make Children can:
		ear 6 Pizza salad Lunch ctivity	Healthy Eating	Consider different food groups and how these are shown across various different meals.	Produce a pizza that has balanced and healthy toppings.	 Planning independently plan by suggesting what to do next; with growing confidence, select from a wide range of tools and equipment, explaining their choices; select from a range of materials and components according to their functional properties and aesthetic qualities; create step-by-step plans as a guide to making; Practical skills and techniques learn to use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures; independently take exact measurements and mark out, to within 1 millimetre;
						g use a full range of

	1		
			materials and
			components, including
			construction materials
			and kits, textiles, and
			mechanical
			components;
			h cut a range of materials with
			precision and accuracy;
			i shape and score materials
			with precision and accuracy;
			j assemble, join and
			combine materials and
			components with
			accuracy;
			k demonstrate how to
			measure, make a seam
			allowance, tape, pin, cut,
			shape and join fabric with
			precision to make a more
			complex product;
			join textiles using a
			greater variety of
			stitches, such as
			backstitch, whip stitch,
			blanket stitch;
			refine the finish using techniques
			to improve the appearance of their
			product, such as sanding or a more
			precise scissor cut after roughly
			cutting out a shape.
			cutting out a snape.
			Evaluate
			Lvaluate
			Children can:
			a complete detailed
			competitor analysis of
			other products on the
			market;
			b critically evaluate the
			quality of design,

			manufacture and fitness
			for purpose of products as
			they design and make;
			evaluate their ideas and products
			against the original design criteria,
			making changes as needed.