The T-RF DT Curriculum Coverage Knowledge EYFS F1

	Rhyme Time	Let's Celebrate	People who help us	You can't catch me/Traditional tales	Changes/growing	Our Wonderful world
F1 Expressive arts and design - DT	**Development matters:** *Explore different materials freely, to develop their ideas about how to use them and what to make.* *Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.* ***Other**:* *To use one handed tools and equipment.* *Begin to join materials together.*		***Development matters:*** *Develop their own ideas and then decide which materials to use to express them.* ***Other**:* *To bake using various ingredients and tools with a purpose in mind.*		**Other:** To begin to design ideas about what to model and build. Can confidently join different materials together. Using glue and masking tape. Confidently chooses which materials to use for a purpose in mind. To begin to explore a range of healthy foods.	
How to support this	Offer opportunities to explore scale. Suggestions: Long strips of wallpaper Child size boxes Invite crafts people into the setting to widen the range of ideas which children can draw on. Provide children with glue and masking tape for sticking pieces of scrap materials onto old carboard boxes. To make strips of paper using scissors. Provide lots of flexible and open-ended resources for children's imaginative play.		Offer a range of materials for children to explore and choose. Offer opportunities for children to discuss their work, their ideas for their designs as well as likes and dislikes. **Resources:** Access art – Prop making for toys. Access art – Magic caring box		Offer opportunities for children to talk about their work through questioning and group discussion time. Offer a range of healthy fruits and vegetables for children to explore/ taste and discuss why they are healthy. **Resources:** Access art – Top tips for card board creations.	
Sticky Knowledge	I Know how to explore a range of materials and can begin to develop ideas about how to use them. I know how to join construction toys together. I know how to use construction equipment to make small world environments. I know I need scissors to cut materials such as paper and card.		I know how to talk about my ideas for my creations. I know I need to use different tools when baking. I know I must wash my hands before cooking.		I know which resources I need, to join materials together. I know which materials I need, to build with a purpose in mind. I Know how to talk about my likes and dislike about my creations. I know how to make some basic healthy food choices.	

The T-RF DT Curriculum Coverage EYFS F2

	Super Star Me	Families and communities	Once upon a time down on the farm	A Rumble in the Jungle	Pond Life	Where in the world shall we go?
F2 Expressive arts and design - DT	**Development matters:** Return to and build on their previous learning. **Other:** Can use moulding tools with malleable materials. To begin to explore joining materials using a wider range of tools. Begin to develop cooking skills using the correct tools for the job.		**Development matters:** refining ideas and developing their ability to represent them. **Other:** Can use a range of tools and select the appropriate tools for the job. Explore a range of materials and select the correct materials for a particular purpose. Can explain their ideas and reasoning for their creation and its uses. Refine using cooking utensils.		**Other:** Safely uses and explores a variety of tools, techniques and materials. To confidently use scissors. Experiments with design, texture and function. To confidently use tools and ingredients for a purpose when baking.	
How to support this	Provide opportunities to work together to develop and realise creative ideas. Provide opportunities for simple prepping and cooking skills eg, buttering bread decorating biscuits ect. **Resources:** Access art – how to clay play.		Provide children with a range of materials for children to construct with. Encourage them to think about and discuss what they want to make. Discuss problems and how they might be solved as they arise. Reflect with children on how they have achieved their aims. Conduct simple science experiments to explore the strength of materials and allow time for children to discuss their findings and explain reasoning. Provide cooking opportunities such as sandwich making, fruit kababs ect. **Resources:** Access art – making props for toys. Access art – making a book world.		Provide children with a selection of materials for junk printing and modelling. Provide children with baking opportunities. **Resources:** Access art – world in a matchbox. Access art – Insect hotels.	
Sticky Knowledge	I know which materials and tools I need to make with a purpose in mind. I know how to model for a purpose using malleable materials such as play dough/ clay. I know I must wash my hands before touching food. I know I must use a knife when buttering bread.		I know how to talk about my creations and the function of them. I know I need to use certain materials to make my creations stronger. I know I must wash my hands before prepping and cooking food. I know the stages of making simple snack foods.		I know a range of techniques of how to join different materials together. I know how to create independently. I know which tools I need when baking, including using spoons, rolling pins and knives. I know I need to wash my hands before cooking I know which foods are healthy and unhealthy.	

The T-RF DT Curriculum Coverage Vocabulary EYFS

Designing	Making	Evaluation	Textiles	Mechanism materials	Food
Draw *Ideas* *Make*	Build Model Box Junk modeling Box modelling Flat Sides Stick	Like Don't like Better Worse	Bead Button Thread Fabric Materials	Scissors Materials Sello tape Masking tape Glue stick PVA glue Glue spreader Paper clip Plasticine Ruler Straw Clay	Apron Chop Spread Cut Equipment Knife Fork Mix Spoon Cook bake

ELG ; Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used. Make use of props and materials when role playing characters in narratives and stories.

The T-RF DT Curriculum Coverage KS1 Cycle A

Designing	Making	Evaluating	Technical Knowledge
NC: Pupils should be taught to : • ***Design - purposeful, functional, appealing products for themselves and other users based on design criteria*** • ***Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology***	***NC: Pupils should be taught to :*** • ***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***	***NC: Pupils should be taught to :*** • ***Explore and evaluate a range of existing products*** • ***Evaluate their ideas and products against design criteria***	***NC: Pupils should be taught to:*** • ***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.***

Pizza	• I know different foods have different tastes and textures. • I understand why I need to eat a healthy balanced diet. • I know that fruit and vegetables are part of a balanced diet and I can sort between them. • I know where and how the vegetables I am using have grown • I know that a recipe is a list of instructions and need to be followed in order. • I know that when I am cooking, it is important that everything is clean and I have washed my hands and the vegetables and the surface I am working on. • I know that when I am cooking we combine food together, I know that a pizza can be balanced as it contains carbohydrates, vitamins, protein, and diary. • I know the words sprinkle, chop, slice, peel, spread and can use them appropriately. • I know how to be safe near a hot oven. • I know that there are lots of varieties of pizza and that people have different tastes • I know different foods have different tastes and textures which appeal to different people. • I know how to evaluate a dish based on its taste and texture
Textiles: bag	• I know that there are ways to join different fabrics are joined– zip/ Velcro/ buttons/ press studs sewn/ • I know bags are made from different materials to suit their purpose.- leather, plastic, canvas, sparkly , waterproof, • I know that bags can be functional or decorative • I know the name of different fabric types, felt, cotton, velvet, canvas, satin and can use labels to identify some materials in products. • I know the essential parts of a bag. • I know that a mock-up is a model which allows us to try out different ideas, but using cheaper materials • Yr 2 I know that running stitch is a stich that goes up and down. I know that I need a needle and thread to sew. I know that I must tie a Knot at the end of my sewing so it doesn't come undone. • I know that a seam allowance needs to be left and this will make my bag smaller. • Yr 1 I know that when I fix cloth together I must ensure that it is secure so my bag can carry an item. • I know that a bag must be fit for purpose, and know how to evaluate success of my product.

The T-RF DT Curriculum Coverage KS1 Cycle A

Designing	Making	Evaluating	Technical Knowledge
NC: Pupils should be taught to : • ***Design - purposeful, functional, appealing products for themselves and other users based on design criteria*** • ***Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology***	***NC: Pupils should be taught to :*** • ***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***	***NC: Pupils should be taught to :*** • ***Explore and evaluate a range of existing products*** • ***Evaluate their ideas and products against design criteria***	***NC: Pupils should be taught to:*** • ***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.***

Structure: We are Architects GFoL	• Link with Art • I know that a structure is a combination of materials (wood , bricks, metal) and or parts to make a 3d shape. Bridges, buildings and statues are structures. • I know that a freestanding structure can stand up by itself. It needs to be strong, sturdy and stable. • *I know that architects design structures.* • I know that architecture can be large, incredible buildings, or can be smaller places near where I live. • I know architects build buildings for a purpose for people to use. • I know that when making a model building, I will need to use materials that are strong and stable. • I know that a structure needs a strong foundation. A foundation is the bottom part of a building that holds up the top part. • I know that when building houses from bricks, the brick layer will overlap the bricks to make them strong – brick bonding. • I know that a slot joint/ L brace/ and butt joints are ways to connect flat materials together to make a free standing structure. • I know that when making a model I can adapt my design through making.
Levers and sliders Link to Superheroes	• I know a mechanism is where materials or components are connected to make a movement. • I know there are different types of movement – moving in a straight line , moving back and forth, rotation and moving in a curved motion. • I know that a slider can move from side to side in a straight line. • I know a slider can move up and down in a straight line • I know a lever moves around a pivot. Wo can move in a curved motion and we can rotate it. I know that a pair of scissors is a lever and that a opening drawer is a slider. • I know that the pivot holds materials together so we can make the movement. • I know we need a slot when we are making a slider so our construct can move side to side or up and down. • I know that to make a slider or a lever I need to choose construction materials that is rigid such as thick cardboard. • I know that for our product to be functional, the mechanism needs to work effectively. • I know that when making a moving picture I need to chose my mechanism based on the effect I wish to create.

The T-RF DT KS1 Vocabulary Cycle A

Making Pizza Day	Textile Bag	Structure Great Fire of London Link to Art	Levers and sliders
Taste – savory/ sweet/ spicy/ Texture / soft/ crunchy / chewy/ crispy/hard Balanced diet carbohydrates, vitamins, protein, and diary. Balanced Fruit names Vegetable names Recipe Hygiene sprinkle, chop, slice, peel, spread Variety	Zip? Velcro? buttons/ press studs sewn Leather /plastic/ canvas/ sparkly / waterproof, Functional Decorative Fabric/ types/ felt,/cotton/ velvet/ canvas/ satin Mock up Running stitch Knot Seam allowance Needle Thread	Structure Woods/ bricks/ metal Design Architect Purpose Strong Stable – stability Base Foundations Brick bonding Overlapping slot joint/ L brace/ and butt joints Free standing	Component Back Forward / forth Rotate Slider Straight Curved Lever Pivot rotate

The T-RF DT Curriculum Coverage KS1 Cycle B

	Designing	Making	Evaluating	Technical Knowledge
	NC: Pupils should be taught to : • ***Design - purposeful, functional, appealing products for themselves and other users based on design criteria*** • ***Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology***	***NC: Pupils should be taught to :*** • ***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***	***NC: Pupils should be taught to :*** • ***Explore and evaluate a range of existing products*** • ***Evaluate their ideas and products against design criteria***	***NC: Pupils should be taught to:*** • ***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.***
Muffins	• I know that fruit is part of a balanced diet and they contain vitamins. • I know where the fruits I am using have grown. • I know that a recipe is a list of instructions. • I know that when I am cooking, it is important that everything is clean and I have washed my hands and the fruit and the surface I am working on. • I know that when I am using a knife or peeler I need to take care. • I know that when I am cooking we combine food together using a spoon or my hands, • I know how to make a muffin healthy and can name the different ingredients. . • I know about the purpose and nutritional value of each ingredient and why we add them to a muffin. • I know how to explore and evaluate existing products. • I know how to evaluate a dish based on the design criteria.			
Year 2- Wheels and Axels – Playful Making	• This is part of an art unit – the focus for this will be a rollercoaster cart. Children will be taught how to make a chassis and axle and then use these techniques to complete their art sculpture move. • I know a wheel is a circular, flat object that can spin around a central point. • I know that most wheels are made from hard materials, such as metal, plastic or wood. This is so they can carry heavy loads and be used many times without breaking. • I know that wheels are used in vehicles, such as cars or bicycles, to help them move forward and backward • I know that wheel mechanisms are used on wheel barrows, Ferris wheels, rollercoasters, drawers and wheel chairs. • I know wheel moves forward and backwards by rolling in a circle, using circular motion. • I know that the wheels on the toy car move at the same time and speed because each pair of wheels is attached to a pole called an axle. • I know real vehicles, such as cars and vans, also have axles. • I Know an axle is a rod that passes through the center of a wheel. • I Know that the wheel needs to grips the axle tightly, so the wheel and axle turn together. • I know Axles help wheels stay in place and spin smoothly. • I know an axle needs to be attached to the chassis. A chassis is the frame upon which the rest of the vehicle is built.			

The T-RF DT Curriculum Coverage KS1 Cycle B

Designing	Making	Evaluating	Technical Knowledge
NC: Pupils should be taught to : • ***Design - purposeful, functional, appealing products for themselves and other users based on design criteria*** • ***Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology***	***NC: Pupils should be taught to :*** • ***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***	***NC: Pupils should be taught to :*** • ***Explore and evaluate a range of existing products*** • ***Evaluate their ideas and products against design criteria***	***NC: Pupils should be taught to:*** • ***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.***

Structures - bed	• I know the names of different sizes of beds- single, bunk, double, king, super king, futon, sofafbed. • I know that beds are made from strong materials such as wood or metal. • I know that beds are a frame structure and are made from different parts, base ,legs, slats, headboard, mattress, • I know that beds need to support your body whilst you sleep. • I know that beds need to be stable and therefore the legs need to be the same length and strong. • I know that I need to replicate each leg for the bed so they are the exactly the same. This will involve careful measuring. • I know the legs are 3d shapes – either cuboid or cylinder. • I know that I can use a flange joint to join the legs to the frame – by cutting and fanning • I know that that slot joints, butt joints and L brace joints that can be used to make a frame. • I Know the properties of a rectangle and can use this knowledge to make a rectangle bed frame.
Textiles: hand puppet	• I know that there are different types of puppets - Finger Puppets. Hand Puppets, Glove Puppets. Shadow Puppets. Rod And Arm Puppets. Stick Puppets. Ventriloquist Puppets and that these are actioned in different ways • I know that puppets are used to tell stories and need to have character . • I know that a Template is a shape that has been drawn that we can draw around to help us to cut out our shapes or pattern pieces. • I know that when I am making a puppet it will have different components, • I know that I can use a mock up to help me practise techniques and amend my design, • Yr 2 I know that running stitch is a stich that goes up and down. I know that I need a needle and thread to sew. I know that I must tie a Knot at the end of my sewing so it doesn't come undone. • I know that when sewing I will need to leave a seam allowance which will make my puppet smaller. • I know that when I am joining my fabric I need to ensure there is enough space for my hand.

The T-RF DT KS1 Vocabulary Cycle B

Making Muffins Healthy Living week	Wheels and Axles Link to Art Playful making	Making Beds	Hand Puppets
Balanced diet Vitamins Ingredients Recipe Hygiene Bowl/ spatula/ wooden spoon/ cake tray / weighing scales Cooling rack/ paper cases/ tin Stir/ combine/ mix/ beat Muffin Fruit names Ingredient names Combine Change	Wheel Circular point Flat Point Metal/ wood/ plastic Heavy loads Forwards backwards Mechanisms Circular motion Rod Center Axle Chassis Cab	Single/ bunk,/double/ king/ super king /futon/ sofafbed Wood Metal frame structure base ,legs, slats, headboard, mattress, Replicate Exact cuboid cylinder. Flange joint Cut Fan slot joints/ butt joints / L brace Rectangle rectangular Freestanding Stable / stability Balance	Finger Puppets/ Hand Puppets/ Glove Puppets/ Shadow Puppets/ Rod And Arm Puppets/ Stick Puppets Ventriloquist Puppets Character Pattern Template Shapes Decorate Mock up Amend Running stitch Seam allowance Knot Needle Thread

The T-RF DT Curriculum Coverage LKS2 Cycle A

Community: Social aspect of eating together, sourcing food locally, staying healthy

Responsibility: Not producing food waste

Possibilities: Possible jobs in the food industry (baker)

Cooking and Nutrition

NC: To understand and apply the principles of a healthy and varied diet
To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

Cooking: Roman Bread	• I know how to design an adjusted recipe • I know how to create labelled and annotated sketches of their ideas	• I know how to follow the instructions in a recipe • I know how to make bread based on a plan and design • I know how to use measuring cups, spoons, and digital scales to measure out ingredients in grams and a jug to measure liquids in ml • Mixing to form a bread dough • Kneading & shaping dough	• I know how to evaluate a finished product • I know how to prove that a design meets a set criteria	• I know what a balanced diet is • I know what an appropriate portion size is • I know basic rules for hygiene and safety • I know how nutrients in food that keep the body healthy and active • I know how to describe the taste, texture and smell of a given food • I know which ingredients are needed to make bread and how ingredients can be altered and mixed to create different effects • I know the importance of kneading when making bread. • I know that yeast is a rising agent in bread

The T-RF DT Curriculum Coverage LKS2 Cycle A

Community: Teamwork

Responsibility: Sourcing the resources in a sustainable way

Possibilities: Understanding the value of being able to travel/exploring the world

	Designing	Making	Evaluating	Technical Knowledge
	NC: To 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 **To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	**NC: To select from and use a wider range of tools and equipment to perform practical tasks** **To 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**	**NC: To investigate and analyse a range of existing products** **To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** **To understand how key events and individuals in design and technology have helped shape the world**	**NC: To build structures, exploring how they can be made stronger, stiffer and more stable** **To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**
Structures: Viking Long ships	• I know how to use ideas from other people when designing • I know how to produce a plan and explain it • I know how to label and annotate a diagram • I know how to choose from a range of materials and tools to meet s design criteria	• I know how to select the most appropriate material, tools and techniques for a given task • I know how persevere and adapt work when original ideas do not work	• I know how to test my design against the criteria • I know how to prove that a design meets a set criteria.	• I know the key features and functions e.g. keel, sail, and prow. • I know how to strengthen a product by stiffening a given part or reinforce a part of the structure

The T-RF DT Curriculum Coverage LKS2 Cycle A

Community: Helping each other, asking helpers to come to school

Responsibility: Recycling/Upcycling/reusing

Possibilities: Jobs in the creative sector (seamstress/costume designers, …)

	Designing	Making	Evaluating	Technical Knowledge
	NC: To 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 **To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	**NC: To select from and use a wider range of tools and equipment to perform practical tasks** **To 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**	**NC: To investigate and analyse a range of existing products** **To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** **To understand how key events and individuals in design and technology have helped shape the world**	**NC: To build structures, exploring how they can be made stronger, stiffer and more stable** **To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**
Textiles: Sewing Ocean Creatures	• I know how to design an attractive product • I can use ideas from other people when designing • I know how to produce a plan • I know how to use annotated sketches and drawings to communicate ideas	• I know how to follow a step-by-step plan, choosing the right equipment and materials • I know how to choose material for its suitability and appearance • I know how to select the most appropriate tools and techniques for a given task • I know how to measure accurately • I know how to persevere and adapt work when original ideas do not work • I know how to present a product in an interesting way	• I can prove that a design meets a set criteria • I know why a model has, or has not, been successful/ evaluate products for both their appearance • I know how to explain how to improve a finished model	• I know that when two edges of fabric have been joined together it is called a seam • I know that some products are turned inside out after sewing so the stitching is hidden • I know that creating a prototype of my design is useful for checking ideas and proportions

The T-RF DT LKS2 Vocabulary Cycle A

Roman Bread	Viking Long ships	Sewing Ocean Creatures
bread recipe process knead ingredients packaging product bake cook hygiene method equipment flour yeast prove oven baker mould	design material tools technique measure model Reinforce dragon head Tail sail detachable shields steering paddle	design product material create appearance plan sketch draw measure adapt modify evaluate model stitch join fabric form padding Sew/ing detail texture

The T-RF DT Curriculum Coverage LKS2 Cycle B

Community: Aspect of community when settling

Responsibility: not wasting resources (like during the Stone Age)

Possibilities: Jobs like structural engineers and/or architects

	Designing	Making	Evaluating	Technical Knowledge
	NC: To 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 **To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	**NC: To select from and use a wider range of tools and equipment to perform practical tasks** **To 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**	**NC: To investigate and analyse a range of existing products** **To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** **To understand how key events and individuals in design and technology have helped shape the world**	**NC: To build structures, exploring how they can be made stronger, stiffer and more stable** **To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**
Structures: Stone Age Shelters	• I know how to design a suitable product • I know how to choose material for both its suitability and its appearance	• I know how to select the most appropriate tools and techniques for a given task	• I know how to prove that a design meets a set criteria. • I know why a model has, or has not, been successful/ evaluate products for both their purpose and appearance • I know how to explain how to improve a finished model	• I know how to strengthen a product by stiffening a given part or reinforce a part of the structure

The T-RF DT Curriculum Coverage LKS2 Cycle B

Community: Social aspect of eating together, sourcing food locally, experiencing different flavours and textures from a different culture, staying healthy

Responsibility: Not producing food waste

Possibilities: Possible jobs in the food industry (chef)

Cooking and Nutrition

NC: To understand and apply the principles of a healthy and varied diet
To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

Cooking: Vegetarian Curry	• I know how to design an adjusted recipe for vegetarian curry	• I know how to follow the instructions in a recipe • I know how to make vegetarian curry on a plan and design • I know safety rules for using, storing and cleaning a knife safely	• I know how to evaluate a finished product	• I know that not all fruits and vegetables can be grown in the UK • I know that climate affects food growth • I know that vegetables and fruit grow in certain seasons

The T-RF DT Curriculum Coverage LKS2 Cycle B

Community: Playing games together

Responsibility: using resources carefully and responsibly

Possibilities: Jobs like electricians/game designers

	Designing	Making	Evaluating	Technical Knowledge
	NC: To 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 **To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	**NC: To select from and use a wider range of tools and equipment to perform practical tasks** **To 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**	**NC: To investigate and analyse a range of existing products** **To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** **To understand how key events and individuals in design and technology have helped shape the world**	**NC: To build structures, exploring how they can be made stronger, stiffer and more stable** **To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**
Electrical systems: Games	• I know how to disassemble and investigate everyday products to see how they fit their purpose.	• I know how to use a prototype effectively • I know how simple electrical circuits and components can be used to create functional products • I know how to Use a wider range of materials and components than KS1, including electrical components • I know how to use tools with increasing accuracy	• I know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products • I know how to investigate and analyse: - How well products have been designed - how well products have been made - why materials have been chosen - what methods of construction have been used	• I know the name and uses of basic parts of a simple electric series circuit (cells, wires, bulbs, switches, buzzers, motors) • I know symbols are used when representing a simple circuit in a diagram. • I know how to associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells (batteries) used in the circuit • I know how to compare and give reasons for variations in how components function,

The T-RF DT LKS2 Vocabulary Cycle B

Stone Age Shelters	Vegetarian Curry	Electrical Games
Shelter Waterproof Windproof Natural materials Construct Fibres Woven Dwelling Thatch Turf Midden Skara Brae Palaeolithic Mesolithic Neolithic	Curry Kari Spices Ground spices Capsaicin Fry Chop Slice Peel Grate Drain Boil Simmer Stir Spit (oil) season	Electricity Current Series circuit Attract Component Repel Test Battery Bulb Buzzer Cell Conductor Series Switch electrostatic Motion Copper wire insulator

The T-RF DT Curriculum Coverage UKS2 Cycle A

Community: How did Victorians celebrate Christmas? How do we celebrate?

Responsibility: using resources carefully and responsibly

Possibilities: Designing a room, product designer

	Designing	Making	Evaluating	Technical Knowledge
	NC: To 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 **To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	**NC: To select from and use a wider range of tools and equipment to perform practical tasks** **To 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**	**NC: To investigate and analyse a range of existing products** **To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** **To understand how key events and individuals in design and technology have helped shape the world**	**NC: To build structures, exploring how they can be made stronger, stiffer and more stable** **To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**
Electrical system: Victorian Dioramas	• I know how to generate ideas by collecting and using information, from a number of sources, including ICT based sources. • I know how to carry out research • I know how to design a product to fit a design brief • I know how to use learning from science to help design products that work	• I know how to measure accurately to ensure precision • I know how to use learning from science to help make products that work • I know electrical systems have an input, process and output • I know how to reinforce and strengthen a 3D framework • I know how to strengthen, stiffen and reinforce 3-D frameworks • I know how finishing techniques can strengthen and improve the appearance of their product. • I know how to switch electrical circuits on and off with a switch	• I know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products • I know how explain how product meets design criteria • I know how to modify plans as I work • I know how to use my design criteria to evaluate	• I know that a diorama is a physical box built to showcase learning on a subject matter or topic • I know how to ensure product is strong and fit for purpose • I know that materials have both functional properties and aesthetic qualities

The T-RF DT Curriculum Coverage UKS2 Cycle A

Community: value of looking after our local environment

Responsibility: not wasting resources, using renewable resources

Possibilities: Jobs like structural engineers and/or architects

	Designing	Making	Evaluating	Technical Knowledge
	NC: To 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 **To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	**NC: To select from and use a wider range of tools and equipment to perform practical tasks** **To 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**	**NC: To investigate and analyse a range of existing products** **To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** **To understand how key events and individuals in design and technology have helped shape the world**	**NC: To build structures, exploring how they can be made stronger, stiffer and more stable** **To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**
Structures: Bird Boxes	• I know how to generate ideas by collecting and using information, from a number of sources, including ICT based sources. • I know how to carry out research • I know how to design a product to fit a design brief	• I know how to measure accurately to ensure precision • I know how to strengthen, stiffen and reinforce 3-D frameworks • I know how finishing techniques can strengthen and improve the appearance of my product.	• I know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products • I know how explain how product meets design criteria • I know how to modify plans as I work • I know how to use my design criteria to evaluate	• I know how to ensure product is strong and fit for purpose • I know that materials have both functional properties and aesthetic qualities

The T-RF DT Curriculum Coverage UKS2 Cycle A

Community: Value of playing together, bringing people together to enjoy a game

Responsibility: not wasting resources, using renewable resources

Possibilities: Creating and developing an idea, improving ideas

	Designing	Making	Evaluating	Technical Knowledge
	NC: To 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 **To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	**NC: To select from and use a wider range of tools and equipment to perform practical tasks** **To 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**	**NC: To investigate and analyse a range of existing products** **To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** **To understand how key events and individuals in design and technology have helped shape the world**	**NC: To build structures, exploring how they can be made stronger, stiffer and more stable** **To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**
Mechanical systems: CAM moving toys	• I know how to generate ideas by collecting and using information, from a number of sources, including ICT based sources. • I know how to carry out research • I know how to design a product to fit a design brief • I know how mechanical products function and meet user's needs	• I know how finishing techniques can improve the appearance of my product. • I know that mechanical and electrical systems have an input, process and output • I know how mechanical systems such as cams or pulleys or gears create movement	• I know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products • I know how explain how product meets design criteria • I know how to modify plans as I work • I know how to use my design criteria to evaluate • I know how well a product meets a users needs and wants	• I know how to ensure a product i fit for purpose • I know that materials have both functional properties and aesthetic qualities

The T-RF DT UKS2 Vocabulary Cycle A

Victorian Dioramas	Bird Boxes	CAM moving toys
model 3D museum exhibition history scene background represent scale material box layered mounted miniature display sketch design electrical circuit triangulation aesthetics purpose theme prototype function criteria	wooden frame decoration stable sturdy reinforce hacksaw sandpaper hammer nail wood glue clamp strong durable watertight accurate	mechanical system pulley drive belt gear gearing up or down driver follower mesh motor spindle

The T-RF DT Curriculum Coverage UKS2 Cycle B

Community: Helping each other, asking helpers to come to school

Responsibility: Recycling/Upcycling/reusing

Possibilities: Jobs in the creative sector (seamstress/costume designers, …)

	Designing	Making	Evaluating	Technical Knowledge
	NC: To 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 **To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	**NC: To select from and use a wider range of tools and equipment to perform practical tasks** **To 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**	**NC: To investigate and analyse a range of existing products** **To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** **To understand how key events and individuals in design and technology have helped shape the world**	**NC: To build structures, exploring how they can be made stronger, stiffer and more stable** **To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**
Textiles: Upcycling	• I know how to carry out research, using surveys, interviews, and web-based resources • I know how to design a product to fit a design brief • I know how to develop my own simple design specification to guide my thinking. • I know about the properties and qualities of materials that I will use • I know how to create exploded diagrams.	• I know how finishing techniques can improve the appearance of my product. • I know that materials have both functional properties and aesthetic qualities • I know how to measure, mark, cut out and shape a range of materials	• I know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products • I know how explain how product meets design criteria • I know how to modify plans as I work • I know how to use my design criteria to evaluate • I know why materials have been chosen	• I know how to ensure a product i fit for purpose • I know that materials have both functional properties and aesthetic qualities

The T-RF DT Curriculum Coverage UKS2 Cycle B

Community: Social aspect of eating together, sourcing food locally, experiencing different flavours and textures from a different culture, staying healthy

Responsibility: Not producing food waste

Possibilities: Possible jobs in the food industry (chef)

Cooking and Nutrition

NC: To understand and apply the principles of a healthy and varied diet
To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

Cooking: Greek Food	• I know how to generate ideas by collecting and using information from a number of sources, including ICT based sources to generate design ideas.	• I know essential procedures for safety and hygiene when handling food • I know how to use an oven with adult supervision • I know how to use a hand mixer or blender • I know how to use techniques that involve a number of steps • I know how to refer to my design criteria as I design and make • I know how to grate harder foods	• I know to refer to my design criteria as I design and make. • I know how to modify plans as I work and • I know how to use my design criteria to evaluate their completed products.	• I know the dietary needs of individuals • I know how a variety of ingredients are grown, reared, caught and processed • I know how bacteria develops

The T-RF DT Curriculum Coverage UKS2 Cycle B

Community: How did communities live together in the past?

Responsibility: not wasting resources, using renewable resources

Possibilities: Jobs like structural engineers and/or architects

	Designing	Making	Evaluating	Technical Knowledge
	NC: To 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 **To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design**	**NC: To select from and use a wider range of tools and equipment to perform practical tasks** **To 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**	**NC: To investigate and analyse a range of existing products** **To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** **To understand how key events and individuals in design and technology have helped shape the world**	**NC: To build structures, exploring how they can be made stronger, stiffer and more stable** **To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.**
Structures: Tudor Houses	• I know how to generate ideas by collecting and using information, from a number of sources, including ICT based sources. • I know how to carry out research • I know how to design a product to fit a design brief	• I know how to measure accurately to ensure precision • I know how to strengthen, stiffen and reinforce 3-D frameworks • I know how finishing techniques can strengthen and improve the appearance of my product.	• I know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products • I know how explain how product meets design criteria • I know how to modify plans as I work • I know how to use my design criteria to evaluate	• I know how to ensure product is strong and fit for purpose • I know that materials have both functional properties and aesthetic qualities

The T-RF DT UKS2 Vocabulary Cycle B

Upcycling	Tudor Houses	Greek Food
fashion textile fabric sewing applique suitability durability aesthetic recycle	Tudor house timber wattle and daub wooden beams steep roof jetty criss-cross/ lattice pattern	Traditional Ingredients Savoury Sweet Menu Balanced diet Diet Healthy Grains Wheat Barley Fruit Vegetables Olives Grapes Figs Source goat