DT scheme of work (from Sep 2025) -

Christian values underpinning learning: Together we love and respect. We are creative, we are determined, we are confident, we are kind.

Intent

The National Curriculum (2014) forms the basis for all subject teaching ensuring continuity and progression in an age-related curriculum. In addition, teachers make sure the content is relevant and stimulating by delivering through themes and topics.
Our DT curriculum has been developed because we believe that:

- DT is an inspiring, rigorous and practical subject, which provides children with a real-life context for learning.
- Through DT children are able to create a range of structures, mechanisms, textiles, electrical systems and food products with a real-life purpose.
- DT encourages children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.
- DT encourages children to become independent problem solvers, thinkers and risk takers, as individuals and part of a team.
- Combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industry.
- DT allows children to reflect on and evaluate past and present technology, its uses and its effectiveness.

Implementation

All teaching of DT should follow the design, make and evaluate cycle. Products should be designed and made for a purpose. During the making stage, children should be practising techniques and refining their design as they go, teaching should highlight the importance of making on-going changes and improvements at this stage. Children should evaluate their own products against a design criteria. It is important that each stage of the process is valued, not just the end product. Teaching should develop technical knowledge and vocabulary. Progression of skills and technical knowledge should be evident as each year group builds on previous learning. We aim, wherever possible, to link DT learning to other subjects such as maths, science, computing and art.

September 2025

Class	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Oak (EAD)	Developing skills: cutting, tearing Cooking: hygiene, measuring, using equipment	Developing sewing skills, joining pieces of fabric, using stiches to add decoration Cooking	Construction: creating 3D models / structures from cardboard – cardboard town Cooking	Junk modelling: dragons, minibeasts Sewing stitches for decoration Cooking eggs	Cooking	Mechanisms: junk model cars, boats, robots Cooking
Poplar (Y1)	Structures: Constructing a Castle Learning about the features of a castle, children design and make one of their own. Using recycled materials to make towers and turrets and constructing a base to secure them.				Cooking and Nutrition: Fruit and Vegetables Handling and exploring fruits and vegetables and learning how to identify which category they fall into before undertaking taste testing to establish their ingredients for the smoothie that they will design the packaging for.	Textiles: Animal Puppets Exploring different ways of joining fabrics before creating their own hand puppets based upon characters from a well-known fairytale. Children work to develop their skills of cutting, pinning, stapling and glueing
Ash (Y2)	Structures: Baby Bear's Chair Using the tale of Goldilocks and the three bears as inspiration, children help Baby Bear by making him a brand new chair. They consider his needs and likes and explore ways of building it so that it is strong.			Mechanisms: Making an animal After learning the terms, pivot, lever and linkage children will design an animal which will move using a linkage mechanism. Children will practise making linkages of different types and varying the materials they use to bring their animals to life		Mechanisms: Hot air balloon/aeroplane Designing and creating their own hot air balloon/aeroplane, considering how the different components fit together so that there are moving parts and the structure stands freely. Pupils select appropriate materials and develop their cutting and joining skills.

Beech (Y3)		Structures: Round Houses Exploring structures of these houses' children learn about how they were built and investigate how to create strong stable structures before designing and creating their own round houses complete with traditional walls and rooves		Structures: Constructing a Greek temple/columns Learning about the features of a Greek temple children design and make one of their own. Using recycled materials to make different features and constructing a base to secure them.		Cooking and Nutrition: Eating Seasonally Discovering where and when fruit and vegetables are grown. Learning about seasonality within the UK and the relationship between colour of fruits and vegetables and the health benefits but making three dishes.
Willow (Y4)	Structures: Playgrounds Designing and creating a new model of playground featuring five apparatus, made from three different structures. Creating a footprint at the base, pupils visualise objects in plan view and get creative with their use of natural features.		Mechanisms: Pulleys – research how pulleys were used to lift bricks up when building the pyramids. Design and build their own pulley testing this out for the weight it can move and evaluating their structure.			Electrical systems: Torches Applying their scientific understanding of electrical circuits, children create a torch, designing and evaluating their product against set design criteria.

Maple (Y5/6) 2025/2026		Mechanical Systems: Slingshot car Transforming lollipop sticks, dowel, wheels, axles into a moving moon buggy complete with body and chassis. Design and build a launch mechanism.		Cooking and Nutrition: What could be healthier? Researching and modifying a traditional Mexican dish to make it healthier. Children cook their healthier versions thinking about presentation of their dishes.		Electrical system : Doodlers Explore series circuits and introduce motors. Explore how the design cycle can be approached at a different starting point by investigating an existing product with a motor and think about how this has been constructed to support them in designing, building and evaluating their own drawing machine.
Maple (Y5/6) 2026/2027	Textiles (Term 1 and 3) Creating Anglo Saxon Shoes (Term 1) and Leaver's Cushions (Term 3) – selecting suitable fabrics, using a pattern, pining, decorating and stitching to create their end product.		Digital World: Electronic Charm Designing, coding, making and promoting a Micro:bit electronic charm to use in low light conditions. Children developing their understanding of programming to monitor and control their product.		Mechanical Systems: Creating a four page pop up story book design incorporating a range of mechanisms and decorative features, including levers, sliders, layers and spacers	

DT Opportunities						
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts, such as the home and school, gardens and playgrounds, the local community, industry and the wider environment.						
EYFS	**KS1**		**KS2**			
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Design						
*Think about and discuss what they want to make. *Discuss problems and how they might be solved as they arise.	* design purposeful, functional, appealing products for themselves and other users based on design criteria. *I can use my own ideas to make something *I can explain to someone else how I want to make my product *I can choose appropriate resources and tools *I can make a simple plan before making	*I can think of an idea and plan what to do next *I can choose tools and materials and explain why I have chosen them	* 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. *I can design a project and make sure that it looks attractive	*I can use ideas from other people when I am designing *I can produce a plan and explain it *I can evaluate and suggest improvements for my designs *I can evaluate products for both their purpose and appearance	* 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 come up with a range of ideas after collecting information from different sources *I can produced a detailed step by step plan *I can suggest alternative plans; outlining the positive	*I can use market research to inform my plans and ideas *I can justify my plans in a convincing way *I can show that I consider culture and society in my plans and designs *I can explain how products should be stored and give reasons *I can work within a budget

					features and draw backs *I can explain how a product will appeal to a specific audience	
Make						
*Return to and build on their previous learning, refining ideas and developing their ability to represent them. *Create collaboratively sharing ideas, resources and skills. *Construct with a range of materials. **ELG - Creating with Materials:** **- 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;**	* select from and use a range of tools and equipment to perform practical tasks such as 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. *I can make a product that moves	*I can join materials and components in different ways	* select from and use a range of tools and equipment to perform practical tasks such as 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. *I can follow a step-by=step plan choosing the right equipment and materials *I can select the most appropriate tool and technique for a given task *I can work accurately to measure, make cuts and holes	*I can measure accurately	* select from and use a wider range of tools and equipment to perform practical tasks, such as 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 follow and refine my plans
Evaluate						
*Reflect together on how they have achieved their aims.	*explore and evaluate a range of existing products.	*I can explain what went well with my work	* explore and evaluate a range of existing products.	*I can explain how I improved my original design	* investigate and analyse a range of existing products.	*I show that I can test and evaluate my products

	*I can make my model stronger		* evaluate their ideas and products against design criteria. I can prove that my design meets some set criteria	*I can present my product in an interesting way *I can persevere and adapt my work when my original ideas do not work	* 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 evaluate appearance and function against original criteria *I can make a prototype before I make a final version	*I can evaluate my product against clear criteria
Technical knowledge						
	*build structures, exploring how they can be made stronger, stiffer and more stable. *explore and use mechanisms, such as levers, sliders, wheels and axles, in their products. *I can describe how something works				* apply their understanding of how to strengthen, stiffen and reinforce more complex structures. * understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages. * understand and use electrical systems in their products, such as series circuits incorporating	

					switches, bulbs, buzzers and motors. * apply their understanding of computing to programme, monitor and control their products.	
Cooking and nutrition						
	* use the basic principles of a healthy and varied diet to prepare dishes. * understand where food comes from		* use the basic principles of a healthy and varied diet to prepare dishes. * prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.		* 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.	

Master practical skills: Food						
EYFS	**KS1**		**KS2**			
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
*Use tools safely and hygienically (e.g. knives, grater, scissors. * Measure or weigh using measuring spoons and cups.	*Cut ingredients safely and hygienically. * Measure or weigh using measuring cups or electronic scales.	*I can describe the ingredients I am using	* Cut, peel or grate ingredients safely and hygienically. * Measure or weigh using measuring cups or electronic scales. * Follow a recipe	* I know how to be both hygienic and safe when using food	* Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).	

* Assemble ingredients, following a recipe.	* Assemble or cook ingredients, follow a recipe. *I can cut food safety		*I can describe how food ingredients come together		* Measure accurately and calculate ratios of ingredients to scale up or down from a recipe. * Demonstrate a range of baking and cooking techniques. * Create and refine recipes, including ingredients, methods, cooking times and temperatures. I show that I can be both hygienic and safe in the kitchen	

Master practical skills: Materials						
EYFS	**KS1**		**KS2**			
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
* Construct with a range of materials. * Practise different techniques for joining materials, such as adhesive tape and different sorts of glue. * Use a range of tools with care and precision. (e.g. scissors, knives, saws, needles).	* Cut materials safely using tools provided * Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).		* Cut materials safely using tools provided. *Measure and mark out to the nearest centimetre. * Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling). * Select appropriate joining techniques.		* Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape). * Measure and mark out to the nearest millimetre. * Show an understanding of the	

					qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper). I can use a range of tools and equipment competently	

Master practical skills: Textiles						
EYFS	**KS1**		**KS2**			
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
*Use needles carefully to make simple stitches. * Use stitches to join pieces of felt. *Use stitches and other features to add decoration to materials. *Sew pieces with a purpose in mind (e.g. masks, decorations).	* Join textiles using running stitch. * Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).	*I can explain why I have chosen specific textiles	* Shape textiles using templates. * Join textiles using running stitch. * Join textiles with appropriate stitching. * Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing). *I can choose a textile for both its suitability and its appearance		* Understand the need for a seam allowance. * Create objects (such as a cushion) that employ a seam allowance. * Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration). * Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a	

					soft decoration for comfort on a cushion).	

Master practical skills: Electricals & electronics						
EYFS	**KS1**		**KS2**			
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
	* Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage).		* Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage). * Create series and parallel circuits *I can make a product which uses both electrical and mechanical components		* Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).	

Master practical skills: Computing						
EYFS	**KS1**		**KS2**			
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
	* Model designs using software. * Control and monitor models using software designed for this purpose.		* Model designs using software. * Control and monitor models using software designed for this purpose.		* Model designs using software. * Control and monitor models using software designed for this purpose * Write code to control and monitor models or products.	

Master practical skills: Construction

EYFS	KS1		KS2			
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
*Use a variety of materials to construct with a purpose in mind (e.g. junk, wood) *Use tools safely and accurately to shape materials. *Join materials using glue and tape.	*Use materials to gluing and nailing materials to make and strengthen products.		* Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products. * Choose suitable techniques to construct products or to repair items. * Strengthen materials using suitable techniques.		*Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding). * Choose suitable techniques to construct products or to repair items. * Strengthen materials using suitable techniques	

Master practical skills: Mechanics						
EYFS	**KS1**		**KS2**			
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
*Explore toys with gears, levers and pulleys.	* Use construction kits that include gears, levers and wheels		* Use construction kits that include gears, levers and wheels * Create products using levers, wheels and winding mechanisms.		* Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears). * Convert rotary motion to linear using cams. * Use innovative combinations of electronics (or	

					computing) and mechanics in product designs.	

To design, make and improve						
EYFS	**KS1**		**KS2**			
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
*Design products that have a clear purpose and an intended user. * Talk about ways in which a product can be improved.	*Design products that have a clear purpose and an intended user. * Make products through stages of mock ups, making continual refinements.		* Design with purpose by identifying opportunities to design.* Make products, refining the design as work progresses, evaluate work. * Use software to design. * Make products through stages of prototypes, making continual refinements.		* Make products by working efficiently (such as by carefully selecting materials). * Design with the user in mind, motivated by the service a product will offer (rather than simply for profit). * Ensure products have a high quality finish, using art skills where appropriate. * Use prototypes, cross-sectional diagrams and computer aided designs to represent designs. * Use software to design and represent product designs.	

Impact

Long term:

- That children will be able create structures, mechanisms, textiles, electrical systems and food products with a real life purpose.
- That children will use their creativity and imagination, to design and make products that solve real and relevant problems.
- That children will become independent problem solvers, thinkers and risk takers, as individuals and part of a team.
- That children will be able to combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industry.
- DT allows children to reflect on and evaluate their designs.

Assessment in DT:

- Pupil voice – to check understanding, understanding of key techniques, progression, confidence in discussing their designs and techniques
- Display and books – opportunity to practise skills, varied and engaging curriculum, showcased final pieces, clear progression in skills
- Feedback from parents and guests who attend show case events

Role of the co-ordinator:

- Highlight / Celebrate successes
- Collate appropriate evidence over time – this should show that pupils' skills and understanding develop over time
- Monitor the standards in the subject to ensure that outcomes are at expected levels

Provide ongoing support to colleagues