

**Corvedale Church of England Primary School
Design & Technology Scheme of Work 2023 onward**

Cycle 1	Mechanisms Sliders and levers	Structures Freestanding structures	Food Preparing fruit and vegetables (including cooking and nutrition requirements for KSI)
Projects	Animated face /Greetings card Design, test, make rockets and boats	Enclosures for farm or zoo animals Make a cage for Nibbles Bridge for Billy Goats Gruff Furniture for the Three Bears	Vegetable salads Vegetable kebabs Fruit salads A sandwich for the journey to the South Pole
Cycle 2	Mechanisms Wheels and axles	Food Healthy and varied diet (including cooking and nutrition requirements for KS2)	Textiles Templates and joining techniques
Projects	Push/pull toys e.g. emergency service vehicle, farm vehicle. Vehicle for imaginary/story character	Sandwiches/wraps/rolls/pitta pockets Blinis Toasties	Glove puppet /finger puppet Simple bag Clothes for teddy Fabric placemat

	Design	Make	Evaluate	Technical knowledge	Cooking & nutrition
EYFS	Represent their ideas verbally or as pictures	Change and effect materials using simple tools Use scissors safely Use different materials for different purposes	Describe what they have made and its purpose	Know that different materials might be needed for different tasks	Understand the need for a healthy diet Give an example of healthy / unhealthy food Have food outdoors
Year 1	As <i>EYFS</i> , and: Design products that appeal to themselves Discuss their thought-out plans and draw them before making	As <i>EYFS</i> , and: Use simple tools to effectively cut and shape materials needed for their products Choose materials and components they need from those provided	As <i>EYFS</i> , and: Explore existing products to inform their own Discuss how successful their own project has been	As <i>EYFS</i> , and: Build structures and discuss how they can be made better (more stable) Make a simple moving mechanism	As <i>EYFS</i> , and: Know about healthy diets Prepare food including outdoors
Year 2	As <i>previous years</i> , and: Design products with a user in mind Design according to agreed criteria Annotate diagrams of proposed designs	As <i>previous years</i> , and: Use saws to cut wooden components, taking into account safe and proper use Select the appropriate material (at the design stage)	As <i>previous years</i> , and: See features and properties of existing products and how they fulfil their intention Use those observations in their designs Evaluate the success of their project against success criteria	As <i>previous years</i> , and: Explore ways to make structure safer, stronger and more stable Produce a range of different moving mechanisms including: levers, pivots, rotary motion (wheels and axles)	As <i>previous years</i> , and: Design a healthy meal using scientific knowledge Know about where food comes from Cook a range of simple foods including outdoors

**Corvedale Church of England Primary School
Design & Technology Scheme of Work**

Cycle 3	Mechanical Systems Levers and linkages – hydraulics & pneumatics	Electrical Systems Simple circuits and switches (including programming and control)	Food Healthy and varied diet (including cooking and nutrition requirements for KS2)
Projects	Levers, sliders A moving monster Animated/Pop-up books/cards	Siren for a toy vehicle Noise-making toy Buzzer for school office	Making bread
Cycle 4	Mechanical Systems Pulleys or gears	Electrical Systems More complex switches and circuits (including programming, monitoring and control)	Textiles Combining different fabric shapes (including computer-aided design)
Projects	Siege machines Cranes	Controllable vehicle e.g. dragster, off-road vehicle	Cloth shopping bag (batik, patchwork)

	Design	Make	Evaluate	Technical knowledge	Cooking & nutrition
Year 3	As previous years, and: Generate realistic designs Generate their own simple design criteria Draw a cross section diagram of their design	As previous years, and: Use recycled materials to create structures to house a pneumatic system Cut, join and incorporate materials safely	As previous years, and: Investigate and evaluate pneumatic systems Evaluate how well their system works in own design Reflect on the combination of ingredients and how well these work together or satisfy the design criteria	As previous years, and: Understand how to use a pneumatic system in their work Apply their understanding to strengthen their design	As previous years, and: Know food can be fresh, pre-cooked and processed Know about food groups Make a healthy lunch snack
Year 4	As previous years, and: Design a practical product Draw an expanded labelled diagram with some measurements	As previous years, and: Make a mock-up of design Practise different sewing techniques Make different mechanisms that work smoothly	As previous years, and: Evaluate own product and suggest changes where changes could be made Ask another user to evaluate their product against success criteria	As previous years, and: Know about the qualities of different textiles and how to fasten these together Use a variety of mechanical mechanisms to create movement How an electrical circuit can be incorporated into a working design How to use a program to make a light go on/off e.g. Purple mash	As previous years, and: Research traditional dishes Know food can differ depending on country of origin Make a typical dish of a country

**Corvedale Church of England Primary School
Design & Technology Scheme of Work**

Class 3

Cycle 5	Textiles Combining different fabric shapes (including computer-aided design)	Mechanical Systems Pulleys or gears	Food Celebrating culture and seasonality (including cooking and nutrition requirements for KS2)
Projects	Apron Fashion accessory hat/cap/slippers/waistcoat Tablet case / mobile phone carrier	Fairground ride with gears or pulleys e.g. carousel, Ferris wheel etc	Savoury scones/savoury biscuits Pizza
Cycle 6	Structures Frame structures	Food Celebrating culture and seasonality (including cooking and nutrition requirements for KS2)	Electrical Systems More complex switches and circuits (including programming, monitoring and control)
Projects	Bridges Chairs	Vegetable Soup	Alarm for valuable artefact Security lighting system Electrical board game

	Design	Make	Evaluate	Technical knowledge	Cooking & nutrition
Year 5	As previous years, and: Design a product that takes into account another user's design criteria Design a product with specific ingredients or substitute appropriately	As previous years, and: Use construction kits to make model structures and analyse strengths and weaknesses Gather, assemble and join structures safely and securely Make a product that uses a hydraulic to create movement successfully	As previous years, and: How to use more complex mechanisms to make interesting products Reflect on other user's comments on own designs Suggest changes that could be made next time	As previous years, and: Understand how to use a hydraulic system in their work Explore ways outdoor structures can be reinforced using what is in the vicinity Know about combining ingredients and the different processes to make bread	As previous years, and: Know how food is processed Know a recipe can be adapted depending on seasons Use a range of techniques to prepare and cook bread products
Year 6	As previous years, and: Generate detailed designs and explain their choices Select appropriate materials and explain choices	As previous years, and: Make a working prototype to solve problems first Make well finished attractive products	As previous years, and: Evaluate critically and adapt as necessary Reflect on how technology has had an impact on designing and making products	As previous years, and: Know how to use a variety of mechanical and electrical systems in their designs and products Use coding to create a programme to incorporate into design Know about different joints and ways to strengthen joints	As previous years, and: Prepare and make a whole meal using selected ingredients Know about other conditions that may affect food availability