



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



Design Technology Long Term Planning						
Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1		Construction - Toy Makers' Workshop <i>How can we make a toy from recycled materials that is fun and safe to play with?</i> • Explore and test different toys to identify fun, safe and functional features • Cut, join, and assemble materials to build a stable, moving toy; decorate to make it appealing • Sketch and label a simple toy plan using recycled, safe and strong materials • Practise cutting and joining techniques; explore simple mechanisms like wheels and axels • Test the toy's function and appearance; suggest one improvement			Food & Nutrition - Plant Power: Snack Like Jack <i>What tasty plant snacks help us grow strong like Jack?</i> • Researching fruits and vegetables by exploring where they come from and tasting a range of healthy plant-based snacks • Building technical knowledge through learning and practising basic food hygiene and safe preparation skills, such as washing hands and cutting carefully • Designing a simple sweet and savoury snack for Jack by choosing fruits or	Textiles - Seaside Adventures <i>What shapes and colours will bring my seaside collage to life?</i> • 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 • 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



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



					vegetables based on colour, shape and personal preference • Making the snacks by preparing ingredients safely and arranging them to create an appealing final product • Evaluating the finished snack by tasting it, explaining what worked well and suggesting one simple improvement	components, including construction materials, textiles and ingredients, according to their characteristics • Explore and evaluate a range of existing products • Evaluate their ideas and products against design criteria
Year 2	Textiles - Buzzing Bookmarks <i>How can you make a bookmark that's both fun and useful?</i> • Investigate various types of bookmarks and their functional and aesthetic features Research bookmark features that are both		Food & Nutrition - Super Veggies to the Rescue <i>How can we make veggies fun and delicious?</i> • Exploring different cooked potatoes and vegetables, comparing taste, texture and appearance and learning where			Construction - Rebuilding History <i>How can we build strong and stable houses like those from the time of the Great Fire of London?</i> • Investigating how materials and structural features affected the strength and



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



	functional and visually appealing • Sketch and plan product designs • Practise threading needles and tying knots in thread • Discover how stitching techniques enhance the strength and appeal of a product Evaluate products for appearance, durability and function		potatoes come from • Planning a potato snack by choosing flavours, seasonings and vegetables for wedges and dip, considering taste and health Practising food hygiene and safe preparation skills, including hand washing, safe cutting and correct use of tools • Using preparation and cooking skills to follow a recipe step by step and prepare potato wedges and a dip safely • Testing and evaluating the finished dish by considering taste, safety and skills used and suggesting improvements			safety of houses in 1666, comparing them with the changes made after the Great Fire of London • Using a design checklist to plan a strong and stable 1666 house model that includes a simple hinge mechanism • Constructing a strong, stable and historically accurate 1666 house model by joining cardboard boxes, adding cross-bracing beams and creating a simple moving part using a hinge mechanism • Testing, improving and evaluating the house model's mechanism, strength, stability and appearance against the
--	--	--	---	--	--	---



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



						design criteria, and suggesting realistic improvements • Developing construction skills by measuring accurately and using cross-bracing to increase structural stability
Year 3		Textiles- Stone Age Mysteries <i>How can you make the perfect pouch for a Stone Age adventure?</i> • Investigate different types of pouches and their features (functional and appealing) • Practise key stitching techniques (running stitch, cross stitch, and overstitch) • Sketch and plan product designs • Use a template to cut fabric accurately • Sew fabric pieces together to construct a functional product • Attach fasteners such as buttons, toggles or ties to		Construction- Magnetic Mysteries <i>How can we use magnets to make a model move mysteriously?</i> • Investigate how magnets work and identify everyday uses of magnetic forces in toys and tools • Create design criteria and plan an Egyptian-themed model that uses magnets to create a surprising effect • Accurately measure, cut, join and assemble materials to build a functional Egyptian-		Food & Nutrition- Roots and shoots <i>What summer dishes can we make with root vegetables?</i> • Researching root vegetables by tasting them raw and cooked and learning how seasonality affects their flavour and use • Building technical knowledge through safe food preparation skills such as peeling, slicing and grating, and experimenting with herbs, citrus and dressings



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



		complete the pouch • Learn how stitching techniques contribute to a strong and appealing product Evaluate products for appearance, durability and function		themed model with magnetic effects • Explore how to join, reinforce, stiffen and strengthen materials using folds, slots, tabs, ties, flanges and L-braces • Test, improve and evaluate the model's function and appearance against design criteria, suggesting realistic improvements		• Designing a summer roll by selecting colourful, healthy fillings that balance flavour, texture and appearance • Making the dish by preparing ingredients safely and following a simple recipe to assemble a summer roll • Evaluating the finished roll by tasting it, reflecting on its success and suggesting one improvement
Year 4		Food & Nutrition - Chocolate that cares <i>How can we craft chocolate that's fair for people and kind to the planet?</i> • Understand Fairtrade's impact on farmers and the environment • Explore taste, texture, and aroma Identify steps in chocolate production Sketch and plan product designs		Textiles - Bag a story <i>How can we create a functional and creative book bag?</i> • Exploring different bags and materials, comparing how designers use shape, fabric and features to make products strong and appealing • Planning a book-themed bag by choosing decorations that		Construction - Roman Innovations: Bright Ideas <i>How can we use electricity to make a working model?</i> • Investigating how electricity and mechanical systems are used to create movement in vehicles and comparing modern powered movement with Roman transport



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



		•Melt, shape, and decorate chocolate safely •Learn tempering and melting processes •Evaluate products for appearance, texture, sustainability, and creativity		meet user needs and using materials sustainably •Practising and comparing stitches, understanding which are strongest and using tools and materials safely •Using seam allowance and stitching pieces and handles securely to create a functional bag •Testing the finished bag for strength and usability, judging how well it meets design goals and suggesting improvements		•Creating design criteria and planning a Roman chariot model that demonstrates how electrical components will power its movement •Constructing a strong, functional and appealing •Roman chariot model by accurately assembling a chassis, wheels, axles, motor and circuit •Developing construction skills by exploring how to build a strong, stable chassis with wheels and axles •Testing, improving and evaluating the chariot's movement, stability and appearance against the design criteria and suggesting realistic improvements
--	--	---	--	---	--	--



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



Year 5		Textiles - Moonlit Magic <i>How can fabric and stitching create atmosphere?</i> • Investigate different types of textile wall hangings and their atmospheric effects • Practise key stitching techniques (blanket stitch, running stitch, and appliqué) • Use a template to cut fabric accurately and plan layering • Sketch and plan product designs • Sew fabric pieces together, ensuring durability work and neat finishing • Attach decorative and functional elements securely, such as loops for hanging • Learn how texture, fabric choice, and stitching techniques contribute to		Construction – Fairytale Engineering <i>How can we use pulleys and levers to solve a problem?</i> • Investigate how mechanisms work in everyday life and how they can solve problems • Create design criteria and plan a maquette of a theatre model that uses mechanisms to solve a fairy-tale problem • Construct a strong, functional and appealing maquette of a theatre model that uses mechanisms to solve a fairy-tale problem • Develop construction skills and experiment with how to make their own simple mechanisms • Test, improve and evaluate the model's function and appearance		Food & Nutrition - Central America on a Plate <i>How can we cook a dish that celebrates its cultural flavours?</i> • 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 • Select from and use a wider range
--------	--	---	--	---	--	--



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



		atmosphere and storytelling • Evaluate wall hangings for aesthetic impact, durability, and success in creating a spooky effect		against design criteria, suggesting realistic improvements		of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • Select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities • Investigate and analyse a range of existing products • Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • Understand 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
--	--	---	--	---	--	--



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



Year 6		Construction - Electrifying Creations <i>How can we combine electricity and design to create a spooky, gothic-themed model?</i> • Investigate Gothic architecture and products to identify features that create a dramatic and spooky effect • Plan and build electrical circuits, selecting components to achieve desired effects • Create detailed, labelled sketches or CAD plans showing Gothic style, structure and electrical and mechanical components • Accurately measure, cut, join and assemble materials to build a stable Gothic-themed model with working electrical and mechanical features					Food & Nutrition - Mix it up <i>How can we mix recipes to invent an exciting new food?</i> • Investigating food trends, analysing hybrid products and identifying how flavour, texture, presentation and cultural influence contribute to success • Developing a clear design brief and criteria, producing annotated designs for a new sushi burrito variation and pitching ideas with justified ingredient choices • Exploring flavour pairings and refreshing key preparation skills such as peeling, slicing and grating, applying accuracy and control to improve
--------	--	---	--	--	--	--	---



St. George's Catholic Primary School

To learn with kindness, respect and friendship through God's love



		• Test and evaluate the model's function and appearance against design criteria, suggesting realistic improvements				outcomes • Preparing ingredients safely and accurately, following the agreed recipe independently and refining methods to improve flavour, texture or presentation • Assessing the finished product against design criteria, reflecting on balance, practicality and innovation, and suggesting reasoned improvements
--	--	--	--	--	--	--