All Saints Church of England Primary School

'Playing our part in God's plan as we journey together to achieve the best for ourselves and others.'

Design Technology Long Term Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year R	• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function • Share creations, explaining the process they have used • Explore recycling for different purposes • Make use of props and materials when role playing characters in narratives and stories. • Measure, mix, cut, roll, chop, stir ingredients • Create with natural materials using a range of tools and techniques outdoors					
	Wonky vegetable and dips (parent café)		**Moving pictures – Hop bunny hop! Easter card (present for parents)**		**Sustained wheeled vehicles (Toys for Yr R)**	
Year 1	• Identify and explore vegetable groups (distinguish between those that can be eaten raw and cooked) • Design and plan your dish for a particular user • Tasting and Evaluating • design an appealing product for a particular user • communicate ideas through talk and drawings • use simple utensils and equipment for cutting, peeling, slicing, squeezing, grating and chopping safely • understand where food comes from and how we can become more sustainable • select vegetables according to their sensory characteristics • understand healthy dishes and link these to the eat well plate		• Explore and use sliders and levers. • Discuss and communicate ideas of moving cards / pop up cards • Understand that different mechanisms produce different types of movement. • Know and use technical vocabulary relevant to the project.		• Explore and use wheels, axles and axle holders. • Distinguish between fixed and freely moving axles. • Know and use technical vocabulary relevant to the project. ▪ use sustainable materials and understand how we can do our part	
	Under Construction! Recreate the streets of London 1666 (Builder visit)		**Pudding lane- Bakery (History Link)** (Dolphin Bakery)		**Summer Holidays! Cross-stitch shell gift** (Mrs Naylor) Mary Anning	

Year 2	• Design a 3D house collaboratively using historical evidence • Model and communicate ideas through talking, mock ups and drawings • Know how to make freestanding structures stronger, stiffer and more stable. • Select and use tools explaining choices • Explore existing freestanding structures in the school and local environment • Cut, assemble, join and test stability • Know and use technical vocabulary relevant to the project. • Evaluate the product discussing how well it works for its purpose and design criteria	• Measure and scale up ingredients • Mixing, rolling and cutting. • use icing, edible decorations to finish Design appealing functional packaging • Know and use technical vocabulary relevant to the project. Analyse and evaluate taste and appearance of finished designs and effectiveness of packaging Understand the importance and follow food safety	• Explore different gift cards Identify different types of stitches Explore stitching for purpose and decorative desing. • Know and use technical vocabulary relevant to the project. Use design a simple ice-lolly pattern counting squares on the binca Tie a simple knot to hold the stitch Use cross-stitch technique to complete a pattern Mount on card to create a gift card Analyse and evaluate stitching
	Twisting Xmas Trees **(RE link)** **(Christmas gifts)** **Queen Charlotte**	**Pizza in the Piazza!** **(Geography Link)** **(Lion's restaurant)** **Raffale Espositto**	**Let's go travelling!** **Upcycled bag** **(Geography Link)** **(Fashion show)** **Megan Markle**
Year 3	• Design a product focusing on the user • Develop ideas through analysing existing products using annotated sketches and prototypes to model ideas • Measure, cut, spacing • Develop and use knowledge of how to construct strong, stiff structures. • Develop and use knowledge of 3D shapes. • Know and use technical vocabulary relevant to the project.	• **develop innovative design criteria** understand fresh and processed ingredients Measure and scale up ingredients • Chop and slice ingredients • Understand how yeast affect the dough making process • to work safely and accurately with a range of simple tools • Know and use technical vocabulary relevant to the project. Analyse and evaluate taste and appearance of finished product Understand food hygiene	• Know that pre-used products can be altered and adjusted to create new products for different purpose • Understand how to strengthen, stiffen and reinforce existing fabrics. • Understand how to securely join two pieces of fabric together. • Understand the need for patterns and seam allowances. • Know how to use different stitches including running, overstitch or cross stitch to reinforce or decorate. • Know how to stitch on a button. • Know and use technical vocabulary relevant to the project.

	Light box / Lanterns **(History/Geography Link)** **(Christmas gifts)** **Thomas Edison**	**Warming up in the Alps!** **French Onion Soup** **& French Baguette** **(Geography Link)** **(Mr Bear)** **Hilary and Norgay**	**Putting on a Show!** **Puppets** **(Puppet show to Year 1)** **Pinocchio**
Year 4	• communicate differences and similarities between products • Measure, mark out and score • Assemble a 3D net of a box • Understand and use an electrical circuit with bulb and switch • Understand transparency to create a stained glass window effect frontage • Plan a product using previous research and techniques • Use appropriate tools to assemble product	• Know how to use appropriate equipment and utensils to prepare and combine food. • Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. • Measure and scale up ingredients accurately • Using electrical equipment safely to blend • Know the purpose of yeast • Understand proving process • Know and use relevant technical and sensory vocabulary appropriately. Follow food hygiene rules	• Know how to strengthen, stiffen and reinforce existing fabrics. • Understand how to securely join two pieces of fabric together. • Understand the need for patterns and seam allowances. • Use a range of stitches to add detail and features to your puppet • Know and use technical vocabulary relevant to the project.
	Bridging the gap **Bridges (Brunel)** **(Testing)**	**Cooking with rations during the War** **Turnovers with leftovers!** **(Gurkhas)** **Tea Party**	**Moving toys** **Ancient Civilisations** **(Year R toys)**
Year 5	• Identify how computer scientists have helped shape the world • (Tesla etc) • Understand how to strengthen, stiffen and reinforce 3-D frameworks. • Explain the importance of testing processes • Know and use technical vocabulary relevant to the project.	• understand the significance of family's diets due to rationing • Identify foods that could be grown to 'put on the table' • Understand the use of propaganda during the war • Research and plan ingredients available • Write your own recipe and method with family favourites included in the ration list or can be grown • Prepare vegetables • Rub, crumble, roll to form a pastry dough • Fill, seal and glaze	• Understand that mechanical and electrical systems have an input, process and an output. • Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. • Know and use technical vocabulary relevant to the project.

	Plant plate showdown (Greta Thunberg) Panel of judges	Ride the code: Fairgrounds in Motion (Ancient Civilisations) Winchester Council
Year 6	• Write a step-by-step recipe, including a list of ingredients, equipment and utensils • Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. • Make, decorate and present the food product appropriately for the intended user and purpose. • Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements. • • Know how to use utensils and equipment including heat sources to prepare and cook food. • • Understand about seasonality in relation to food products and the source of different food products. • Understand sustainability and our impact we can make on this	• Understand complex electrical products are controlled using embedded computer systems, often with microcontrollers • Explain human language, the algorithms that monitor and control systems • Identify how computer scientists have helped shape the world • (Tesla etc) • Design and program a crumble robot • Develop and debug a computer controlled product • Use gears and pulleys