



Wessex Gardens Primary School –Design and Technology Curriculum Map 2024– 2025



Year group	Autumn	Spring	Summer
RECEPTION	<p>Structures: "Build It with Bits and Bobs!"</p> <p>In this DT project, Reception pupils will have fun exploring and creating in the junk modelling area. They will use boxes, tubes, and other recycled materials to build their own models. Pupils will learn how to join things together using glue, tape, and other tools, and try out different ways to make their models strong and stable. They will be encouraged to tinker, explore, and use their imagination while learning how to build and create with a variety of materials.</p>	<p>Textiles: "Bookmarks Through Time!"</p> <p>In this DT project, Reception pupils will learn how to make their own bookmarks using threading and weaving. They will use different materials like wool, ribbons, and paper to practice these skills. Pupils will look at old-fashioned bookmarks from Victorian times and compare them to modern ones. Then, they will design and decorate their own special bookmark to use in their favourite book.</p>	<p>Structures: "Ahoy, Captain! Your Boat Awaits!"</p> <p>In this DT project, Reception pupils will explore boats as part of their summer 'On the Beach' theme. They will learn what waterproof, floating, and sinking mean by testing different materials in water. Pupils will look at pictures of boats and ships, talk about their parts, and see how they float. Then, they will use a variety of materials to build their own boat, thinking about how to make it float and stay dry. They will have fun testing their boats in water, just like being at the beach.</p>
YEAR 1	<p>Structures: "Whirly Windmill Builders!"</p> <p>In this DT project, Year 1 pupils will design and build their own windmill to help someone who needs it. They will learn about real windmills, how they spin in the wind, and what makes them strong. Pupils will use their cutting and joining skills to make sure their windmill stands up and works properly. They will also link this to their science topic on seasonal changes, by thinking about how the wind blows more in some seasons and how the weather can affect how windmills move.</p>	<p>Textiles: "Once Upon a Puppet!"</p> <p>In this DT project, Year 1 pupils will design and make their own hand puppet based on a character from a fairy tale. They will explore different ways to join fabrics, such as glueing, stapling, pinning, and cutting. Pupils will also link this to their science topic on everyday materials by looking at different fabrics and talking about what they are made from and why they are good for puppets. They will choose materials that are soft, strong, or flexible to help bring their puppet to life.</p>	<p>Cooking and nutrition: "Super Smoothie Makers!"</p> <p>In this DT project, Year 1 pupils will learn all about fruits and vegetables. They will touch, smell, and look closely at different types, and learn how to name and sort them. Pupils will take part in a taste test to find out which fruits they like best. Then, they will choose their favourite ingredients to make a smoothie and design fun packaging to go with it. They will learn how to be healthy and safe when preparing food.</p>
YEAR 2	<p>Mechanisms: "Build a Beast Buddy!"</p> <p>In this DT project, Year 2 pupils will design and make a moving monster, inspired by the story The Lonely Beast. They will learn how to use pivots, levers, and linkages to make parts of their monster move, such as its arms or mouth. Pupils will practice creating different types of moving parts and choose the best materials to bring their new monster to life. Their monster will be a friendly companion for the Lonely Beast, with fun features and imaginative movements.</p>	<p>Structures: "Tall, Strong, and Magical!"</p> <p>In this DT project, Year 2 pupils will use the story of Rapunzel as inspiration to design and make her a new tower. They will think about what Rapunzel needs, like a strong and tall tower that can keep her safe but also let her see outside. Pupils will explore different ways to build strong structures using paper, card, and other materials. They will design their tower carefully and make sure it is stable, creative, and just right for Rapunzel to live in.</p>	<p>Mechanisms: "Wheels of Wonder!"</p> <p>In this DT project, Year 2 pupils will design and make their own fairground wheel that can spin and stand up on its own. They will learn how to join materials carefully and choose the right ones to make their wheel strong. Pupils will look at real fairground rides to get ideas and think about how the parts fit together. They will also practice cutting, joining, and building skills to create a fun and working model of a fairground wheel.</p>
YEAR 3	<p>Cooking and nutrition: "Eat the Seasons!"</p> <p>In this DT project, Year 3 pupils will learn about seasonal fruits and vegetables and when they are grown in the UK. They will explore why eating fresh, in-season food is good for our health. Linking to their science topic on nutrition, pupils will discuss the different types of food our bodies need to stay healthy. Then, they will design and help make a seasonal fruit or vegetable tart using ingredients grown in the UK during May and June.</p>	<p>Digital world: "Glow and Go!"</p> <p>In this DT project, Year 3 pupils will design a piece of wearable technology that can be used in low light, such as a badge or wristband with lights. They will learn how to use simple coding to control the lights and make their product work. Pupils will think about how their design can help keep people safe in the dark. They will also create a poster or advert to promote their product and explain how it works and why it is useful.</p>	<p>Structures: "Create Your Kingdom!"</p> <p>In this DT project, Year 3 pupils will learn about the different parts of a castle, such as towers, turrets, and walls. They will use recycled materials and nets (flat shapes that fold into 3D shapes) to build their own model castle. Pupils will carefully design their castle and make sure all the parts are strong and stable by creating a steady base to hold everything together.</p>
YEAR 4	<p>Structures: "Strong Structures, Smart Settlements!"</p> <p>In this DT project, Year 4 pupils will learn about pavilions – special buildings often used in parks or towns for shelter or events. They will explore how to make strong and stable structures using different materials and shapes. Then, linking to their geography topic on types of settlements, pupils will design and build their own pavilion for a village, town or city. They will also add cladding (the outside covering) to make it strong.</p>	<p>Mechanical systems: "Fast Track Engineers!"</p> <p>In this DT project, Year 4 pupils will design and make their own slingshot car that can move. They will use materials such as lollipop sticks, wheels, straws and dowels to build the car and create a launch mechanism to make it go. Pupils will learn how to safely use a glue gun and will design the car's body using nets (flat shapes that fold into 3D shapes). Finally, they will put all the parts together to build and test their vehicle.</p>	<p>Electrical systems: "Power Up with Torches!"</p> <p>In this DT project, Year 4 pupils will use their science knowledge about electricity to help them design and make a working torch. They will build a simple electrical circuit using a battery, wires, and a bulb to make the torch light up. Pupils will also design the outside of the torch so that it is strong, useful, and easy to hold. They will test and evaluate their torches to see how well they work and whether they meet the design criteria.</p>
YEAR 5	<p>Electrical systems: "Doodle-Bot Designers!"</p> <p>In this DT project, Year 5 pupils will learn more about electrical circuits and be introduced to motors. They will explore an existing product that moves using a motor, such as a doodling robot, and investigate how it has been made. This will help them understand how motors and circuits work together. Pupils will then use their own ideas to design and build a moving doodler, using their problem-solving skills and creativity to bring their design to life.</p>	<p>Mechanical systems: "3D Story Creators!"</p> <p>In this DT project, Year 5 pupils will design and make their own four-page pop-up book. They will learn how to use moving parts such as levers, sliders, layers, and spacers to make pictures pop out or move on the page. Pupils will decorate each page and think carefully about how to make their book fun, creative, and enjoyable to read. They will use their imagination and design skills to bring a story to life with exciting pop-up features.</p>	<p>Cooking and nutrition: "The Great Sauce Makeover!"</p> <p>In this DT project, Year 5 pupils will learn how to make a healthier version of a Bolognese sauce. They will explore the ingredients in a traditional recipe and think about how to improve it, such as by adding more vegetables. Pupils will help cook their improved version and design eye-catching and useful packaging for it. They will also learn where beef comes from and how food travels from farm to fork.</p>
YEAR 6	<p>Textiles: "Make Do and Design!"</p> <p>In this DT textiles project, Year 6 pupils will design and make a waistcoat linked to the WW2 theme of 'Make Do and Mend'. They will explore how people reused and repurposed old materials during wartime, using recycled fabrics to create a waistcoat for a chosen person or purpose. Pupils will develop key skills such as selecting suitable materials, using templates, pinning, stitching, and decorating, while reflecting on the importance of creativity and resourcefulness during times of need.</p>	<p>Digital world: "Design a Digital Guide!"</p> <p>In this DT project, Year 6 pupils will design and create a navigation tool to help trekkers find their way. Using simple 3D modelling software, they will combine shapes to build a complete product on the computer. Pupils will think carefully about what features their tool needs, like a compass or map screen, and how it can help someone on a journey. At the end, they will present and 'sell' their idea by sharing what their product does and why it's useful.</p>	<p>Structures: "The Ultimate Playground Challenge!"</p> <p>In this project, Year 6 pupils will design and build a model of their own playground. They will include at least five different pieces of playground equipment, using three types of structures such as frames, towers, and bridges. Pupils will create a footprint or base to plan their layout, thinking about where everything should go from a bird's-eye view. They will also get creative by adding natural features like trees, grass, or rocks to make their playground fun, safe, and exciting to use.</p>