## Fritwell Primary School Design and Technology LTP 2019/20



## **Coverage of techniques and topics**

Threshold concepts: Master practical skills, design, make, evaluate and improve, take inspiration from design throughout history

	Autumn term	Spring term	Summer term
EYFS	All Around Me/ Robots Food: biscuits, sandwiches for picnic	Wonderful World/ Transport Textiles: stitching	Mini-beasts/ Heroes Construction: junk modelling
Y1/2 Sticklebacks	Fire and Ice Food: Design and make your own bread rolls  • Explore, research, design • Assemble and cook ingredients • Measuring and weighing • Mix hygienically and safely • Evaluate	No Place Like Home Textiles: Create a Binca collage of your house (stitching)  Explore, research, design Shape textiles using templates Join textiles with running stitch Decorate using range of techniques (sequins, dyeing) Evaluate	Secret Garden Structures: Build a Fairy House  Explore, research, design Cut materials safely Measure and mark in cms Tear, cut, fold, curl Joining techniques (gluing, hinges) Drilling, screwing and nailing to strengthen Evaluate

Y2/3 Seahorses  Split milestone objectives are in	The Stone Age Mechanisms: How to Make Stone Age Life Easier? (Lifting boulders – levers/pulleys)	Australia Food: Design a Typical Australian Dessert (lamingtons)	Extinction Textiles: Picasso style wall hanging (applique)
red	<ul> <li>Explore, research, design</li> <li>Identify some of the great pioneering techniques to generate ideas for design (M2)</li> <li>Disassemble products to understand how they work (M2)</li> <li>Cut, measure in cms</li> <li>Gluing and hinges for joins</li> <li>Use slots and cut outs to shape (M2)</li> <li>Evaluate, suggest improvements</li> </ul>	<ul> <li>Explore, research, design</li> <li>Cut, peel and grate</li> <li>Measure and weigh (M2 weigh to the nearest gram)</li> <li>Mix hygienically</li> <li>Follow recipe (M2)</li> <li>Evaluate, suggest improvements</li> <li>Refine for future products (M2)</li> </ul>	<ul> <li>Explore, research, design</li> <li>Shapes textiles using templates</li> <li>Join textiles using appropriate stitch (M1 running stitch only)</li> <li>Select appropriate techniques to decorate (M2)</li> <li>Evaluate, suggest improvements</li> <li>Refine for future products (M2)</li> </ul>
Y3/4 Stingrays	Water Mechanisms: Design a Well (winding mechanisms)	Romans Food: Your very own 'Roman' pizza	Disasters Textiles: Safety blanket for survival kit
	<ul> <li>Explore, research and design</li> <li>Use scientific knowledge of forces to choose appropriate mechanisms such as levers, pulleys and gears</li> <li>Suitable materials to construct product</li> <li>Select materials carefully, continually evaluating the design</li> <li>Evaluate, suggest improvements giving reasons for choice</li> </ul>	<ul> <li>Explore, research and design</li> <li>Prepare ingredients hygienically</li> <li>Measure to nearest gram</li> <li>Assemble and cook ingredients</li> <li>Evaluate, suggest improvements giving reasons for choice</li> </ul>	<ul> <li>Explore, research and design</li> <li>Join textiles with appropriate stitching</li> <li>Select appropriate techniques to decorate textiles</li> <li>Evaluate, suggest improvements giving reasons for choice</li> </ul>

Y5/6 Sharks	Evolve Textiles: Design a Christmas cushion (back stitching)	Alpha and Omega Food: Greek salad	<b>Diversity</b> Structure: Create a sun shelter with electrical switch/bulb
	<ul> <li>Explore, research and design</li> <li>Research a range of designers</li> <li>Join textiles with a combination of stitching techniques including a back stitch</li> <li>Create a high quality finish using art skills</li> <li>Design with a user in mind</li> <li>Evaluate and suggest improvements for user experience</li> </ul>	<ul> <li>Explore, research and design</li> <li>Research a range of designers</li> <li>Understand the importance of correct storage (knowledge of micro-organisms)</li> <li>Measure using ratios</li> <li>Create and refine ingredients</li> <li>Create a high quality finish using art skills</li> <li>Design with a user in mind</li> <li>Evaluate and suggest improvements for user experience</li> </ul>	<ul> <li>Explore, research and design</li> <li>Research a range of designers</li> <li>Practical skills: cutting, drilling, screwing, nailing, sanding</li> <li>Electrical circuit which uses a switch</li> <li>Create a high quality finish using art skills</li> <li>Design with a user in mind</li> <li>Evaluate and suggest improvements for user experience</li> </ul>