



## Design and Technology Overview

### Reception

Autumn		Spring		Summer	
<i>Creating with Materials</i> <i>Drawing</i>	<i>Creating with Materials</i> <i>Painting</i>	<b><i>Creating with Materials</i></b>  <b><i>DT Structures</i></b> <b><i>Junk Modelling</i></b>	<b><i>Creating with Materials</i></b>  <b><i>DT Sliders</i></b> <b><i>Cards for Mother's Day and Easter</i></b>	<i>Creating with Materials</i> <i>Sculpture</i>	<i>Creating with Materials</i> <i>Props (textiles)</i>
	<b>Cooking</b>			<b>Cooking</b>	

### Year 1 and Year 2

A	<b>Cooking</b> Picnic Party	<b>Structures</b> Playground Equipment	<b>Mechanisms – Levers and Linkages</b> Puppets	<b>Mechanisms – Wheels and Axles</b> Transporting People
B	<b>Cooking</b> Seaside Snacks	<b>Structures</b> Furniture	<b>Structures</b> Bridges	<b>Mechanisms – Wheels and Axles</b> Transporting Goods




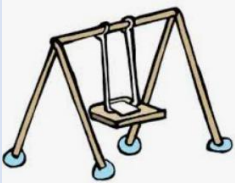



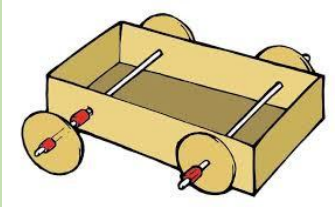







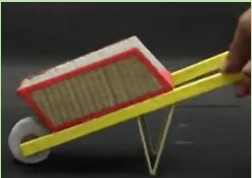

### Year 3 and Year 4







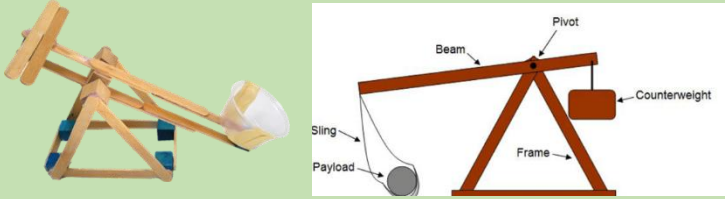

A	<b>Cooking</b> Bread	<b>Complex Structures</b> Shelter	<b>Mechanisms – Cams</b> Victorian Toys	<b>Textiles</b> Personalised Pouch
B	<b>Cooking</b> Marvellous Mornings	<b>Complex Structures</b> Animal Enclosure	<b>Mechanisms – Complex Levers</b> Catapults	<b>Textiles</b> Comfort

### Year 5 and Year 6

A	<b>Cooking</b> Delicious Desserts	<b>Electrical Systems</b> Buzzer Games	<b>Computing to Program, Monitor and Control</b> Safety	<b>Textiles</b> Sustainable Bags
B	<b>Cooking</b> Italian Sauces	<b>Electrical Systems</b> Interactive Cards	<b>Computing to Program, Monitor and Control</b> Secret Communications	<b>Textiles</b> Clothing

*Mechanisms – Y5 science objectives covered in Y6 science lessons focusing on levers, pulleys and gears. Knowledge following science lessons to be applied during a DT unit (block of days/afternoon sessions following SATs week and writing).*

Year 1 and Year 2 Cycle A	<div>Cooking</div> <div>Focus: <b>Picnic Party</b></div> <div>Famous Person: Mary Berry (biscuits)</div> <div></div> <div>Outcome: Create mini pizzas, pasta salad and biscuits to be shared with others at a picnic.</div>	<div>Structures</div> <div>(Include textiles within making material.)</div> <div>Focus: <b>Playground Equipment</b></div> <div>Technology: BVC equipment, local park</div> <div></div> <div>Outcome: Individuals create a piece of playground equipment that will be combined with others to complete a whole new playground.</div>	<div>Mechanisms – Levers &amp; Linkages</div> <div>Famous Person: Lotte Reiniger</div> <div></div> <div>Outcome: Create a puppet based on a well-known story and use it whilst story telling with others in the phase or Reception.</div>	<div>Mechanisms – Wheels and Axles</div> <div>Focus: <b>Transporting People</b> - (axles fixed or through chassis with loose fitting wheels)</div> <div>Famous person: Henry Ford</div> <div>Technology: variety of toys featuring wheels and Axles (three-wheeler, skates etc.)</div> <div></div> <div>Outcome: Create a vehicle to transport William across the rocky surface of an unknown planet.</div>
	<div>Cooking</div> <div>Focus: <b>Seaside Snacks</b></div> <div>Famous Person: Nadiya Hussain (cakes)</div> <div></div> <div>Outcome: Create sandwiches, mini fruit/veg kebabs and fairy cakes to be shared with others.</div>	<div>Structures</div> <div>(Include textiles within making materials.)</div> <div>Focus: <b>Furniture</b></div> <div>Technology: variety of chairs, tables, beds etc. on the market.</div> <div></div> <div>Outcome: Create a piece of furniture for a teddy bear/Little Red Riding Hood doll.</div>	<div>Structures</div> <div>(Include textiles within making materials.)</div> <div>Focus: <b>Bridges</b></div> <div>Famous Person: Isambard Kingdom Brunel (link to Y2 autumn history)</div> <div></div> <div>Outcome: Create a bridge and test whether it will take the weight of the target market.</div>	<div>Mechanisms – Wheels and Axles</div> <div>(Include textiles within making materials.)</div> <div>Focus: <b>Transporting Goods</b> of a given weight (include axles through a fixed straw with wheels tightly fitted)</div> <div>Technology: BVC trolleys, sack barrow, wheel barrow</div> <div></div> <div>Outcome: Create a vehicle to transport goods collected whilst shopping.</div>

Year 3 and Year 4 Cycle A	<div><div>Cooking</div><div>Focus: <b>Bread</b></div><div>Famous Person: Paul Hollywood</div><div></div><div>Outcome: Create a variety of bread from around the world.</div></div>	<div><div>Complex Structures</div><div>Focus: <b>Shelter</b> - wooden frame structure (for humans)</div><div>Technology: existing products – BVC bike shelter, sun shelter</div><div></div><div>Outcome: Create a wooden frame shelter for a group of pupils.</div></div>	<div><div>Mechanisms – Cams</div><div>Focus: <b>Victorian Toys</b></div><div>Famous company: Roullet and Decamps – automaton toys</div><div></div><div>Outcome: Create an automata toy with one or more moving parts.</div></div>	<div><div>Textiles</div><div>Focus: coin <b>Personalised Pouch</b></div><div>Ancient/historic Technology: Ancient Egyptians, Romans</div><div></div><div>Outcome: Create a personalised purse/pocket to keep valuables safe.</div></div>
Year 3 and Year 4 Cycle B	<div><div>Cooking</div><div>Focus: <b>Marvellous Mornings</b></div><div>Famous Person: Marcus Wareing (chef and advocate of ‘Magic Breakfast fuel for learning’)</div><div></div><div>Outcome: Create a make a balanced breakfast.</div></div>	<div><div>Complex Structures</div><div>Focus: <b>Animal Enclosure</b> - wooden frame structure (for animals)</div><div>Technology: existing products</div><div></div><div>Outcome: Create a wooden frame animal run/enclosure.</div></div>	<div><div>Mechanisms – Complex Levers</div><div>Focus: <b>Catapult</b> v trebuchet</div><div>Historic technology: Romans <a href="https://segedunumromanfort.org.uk/catapults">https://segedunumromanfort.org.uk/catapults</a></div><div></div><div>Outcome: Create a catapult/trebuchet to move a given weight.</div></div>	<div><div>Textiles</div><div>Focus: <b>Comfort</b>/calming/relaxation</div><div>Award winning designer: Andrew Martin (cushions)</div><div></div><div>Outcome: Create a cushion, comforter e.g. mini blanket, soft toy</div></div>



Year 5 and Year 6 Cycle A	<p><b>Cooking</b></p> <p>Focus: <b>Delicious Desserts</b></p> <p>Famous Person: Nigella Lawson <i>(do not include Paul Hollywood as he's covered elsewhere)</i></p>  <p>Outcome: Produce a healthy dessert for the school menu.</p>	<p><b>Electrical Systems</b></p> <p>Focus: <b>Buzzer Games</b> <a href="https://www.bbc.co.uk/programmes/p0119ttp">https://www.bbc.co.uk/programmes/p0119ttp</a></p> <p>Technology: Operation game, Buzz Wire game</p>  <p>Outcome: Create a buzzer game that will increase children's attention span/concentration.</p>	<p><b>Computing to Program, Monitor and Control</b></p> <p>Focus: Micro:bit - <b>Safety</b></p> <p>Famous Person/technology: Nick Holonyak, inventor of LED lights</p>  <p>Outcome: Create a moving, warning sign to assist Mr Bish when parking a bus safely.</p>	<p><b>Textiles</b></p> <p>Focus: <b>Sustainable Bags</b></p> <p>Famous brand: Bags of Ethics – reusable bags</p>  <p>Outcome: Create an eco-friendly, sustainable bag that appeals to a target audience e.g. boys</p>
Year 5 and Year 6 Cycle B	<p><b>Cooking</b></p> <p>Focus: <b>Italian Sauces</b></p> <p>Famous Person: Gennaro Contaldo</p>  <p>Outcome: Create a versatile sauce that could be used for a variety of dishes (pizza base, pasta, dip etc.)</p>	<p><b>Electrical Systems</b></p> <p>Focus: <b>Interactive Cards</b> <a href="https://www.bbc.co.uk/programmes/p0119ttp">https://www.bbc.co.uk/programmes/p0119ttp</a></p> <p>Technology: parallel series holiday lights <a href="https://www.energy.gov/articles/how-do-holiday-lights-work">https://www.energy.gov/articles/how-do-holiday-lights-work</a></p>  <p>Outcome: Create a card that has interactive functions e.g. lights on a cake, buzzer when open and closed card or press clown's nose.</p>	<p><b>Computing to Program, Monitor and Control</b></p> <p>Focus: Micro:bit – <b>Secret Communications</b> (paired work)</p> <p>Famous Person/technology: Samuel Morse - Morse code machine</p>  <p>Outcome: Create a secret code (symbols) to send messages to a friend to decipher.</p>	<p><b>Textiles</b></p> <p>Focus: <b>Clothing</b> <i>(not actual size – doll/drawing figure)</i></p> <p>Historic/Famous Person: Charles Fredrick Worth (considered to the father of Haute Couture – exclusive custom fitting fashion).</p>  <p>Outcome: Individuals create an item of clothing that will form part of a complete outfit when combined with others' work.</p>