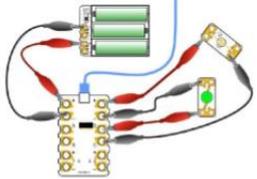
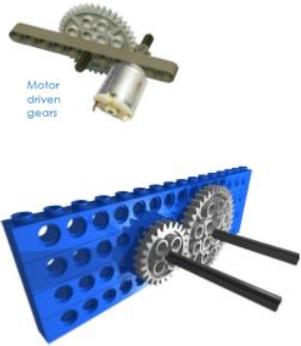
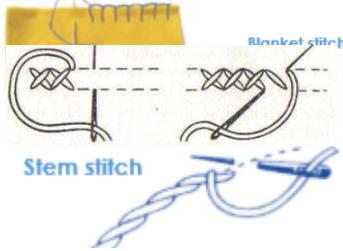


DESIGN & TECHNOLOGY UNIT OVERVIEWS 2020-2021

Developing, planning and communicating ideas		Can they use a range of information to inform their design? Can they use market research to inform plans? Can they work within constraints? Can they follow and refine their plan if necessary? Can they justify their plan to someone else? Do they consider culture and society in their designs?			
Working with tools, equipment, materials and components to make quality products		Can they use tools and materials precisely? Do they change the way they are working in needed?			
Evaluating processes and products		How well do they test and evaluate their final product? Is it fit for purpose? What would improve it? Would different resources have improved their product? Would they need more or different information to make it even better? Does their product meet all design criteria? Did they consider the use of the product when selecting materials?			
<u>Autumn</u> - Pulleys and Gears		<u>Spring</u> - Fabric Design using Computer Aided Design (CAD)		<u>Summer</u> – Monitoring and Control	
DT Skills	DT Content	DT Skills	DT Content	DT Skills	DT Content
Can they make a product which uses mechanical and electrical components? Can they refine their product after testing it? Are their measurements accurate enough to ensure that everything is precise? How have they ensured that their product is strong and fit for purpose?	Create a moving toy such as a fairground using their existing knowledge on circuits, pulleys and gears. 	Have they thought about how their product could be sold? Can they make a prototype first? Have they given considered thought about what would improve their product even more? Can they justify why the chosen material was the best for the task? Can they justify design in relation to the audience?	Children to design and create a functional pencil case using different stitches they have learnt throughout their textiles lessons.	Can they incorporate a switch into their product? Can they refine their product after testing it? Can they use different kinds of circuit in their product? Can they think of ways in which adding a circuit would improve their product?	Children to use their knowledge of electrical systems to create an electric money box. 

DESIGN & TECHNOLOGY UNIT OVERVIEWS 2020-2021

	 <p>Motor driven gears</p>	<p>Are their measurements accurate enough to ensure that everything is precise? How have they ensured that their product is strong and fit for purpose?</p>	<p>Technique – Running stitch and over sew stitch, back stitch, backwards running stitch, blanket stitch, cross stitch and stem stitch.</p> 		
<u>Vocabulary</u>		<u>Vocabulary</u>		<u>Vocabulary</u>	
<p>Circuit Fault Connection Battery Battery holder Switch Circuit diagram Axles Pulley Gear Rotation Drive belt Spindle Driver Follower Ratio Transmit Motor Mechanical system Electrical system Input</p>		<p>Cut Join Textile Fold Measure Model Structure Fabric Felt Glue Staple Stitch – running, over sew, back, backwards running, blanket, stem, cross. Needle Thread Template Pattern Decorate Compartment Template Seam</p>		<p>Circuit Fault Connection Battery Battery holder Switch Light emitting diode (LED) Bulb Wire Insulator Conductor Crocodile clip Input device Output device Read switch Toggle switch Push-to-make switch Push-to-break switch Light dependent resistor (LDR) Tilt switch Series circuit</p>	

DESIGN & TECHNOLOGY UNIT OVERVIEWS 2020-2021

Output	Design Reinforce Hem Fastenings	Parallel circuit
Helpful Resources		
https://www.bbc.co.uk/teach/class-clips-video/design-challenge-make-moving-shop-window-display/z7ytscw https://www.bbc.co.uk/bitesize/subjects/zyr9wmn	https://www.bbc.co.uk/bitesize/subjects/zyr9wmn	https://www.bbc.co.uk/bitesize/subjects/zyr9wmn