



Happisburgh CE VA Primary & Early Years School

Knowledge-rich Curriculum

Design Technology



Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
 <p>Let's Explore London Cycle 1 - Autumn Term</p>		 <p>Meets the Flintstones Cycle 1 - Autumn Term</p>		 <p>Greece Lightning Cycle 1 - Autumn Term</p>	
<p>Textiles <i>Design and make a coat for Paddington – linked with science.</i> Measuring a bear to make a paper pattern Selecting, cutting and joining fabrics using glue and stitching Exploring the waterproof qualities of materials</p>		<p>Structures and Mechanisms <i>Design and make a moving vehicle using wheels and axles – link to science</i> Measuring, cutting and joining wood and card Understanding how axles work Finding ways to power the vehicle</p>		<p>Textiles <i>Weaving and Spinning in Ancient Greece</i> Explore how the Ancient Greeks made their fabrics. Discover how fleeces were spun and woven into fabric. Look at a range of typical Greek patterns. Reproduce patterns using a simple loom.</p>	
 <p>Poles Apart Cycle 1 - Spring Term</p>		 <p>China Cycle 1 - Spring Term</p>		 <p>Invaders Cycle 1 - Spring Term</p>	
<p>Structures <i>Design and make a structure to protect someone from the Ice and Snow – link with history and science.</i> Explore materials that are good insulators (after studying how animals keep warm in the polar regions). Learn how to measure and join battons of wood using card, triangle corners. Cover the structure with warm materials.</p>		<p>Mechanisms <i>Design and make a moving shadow puppet – link to art</i> Investigate Chinese shadow puppets and their moving joints. Explore ways of joining card so the joints will allow movement Design and make a series of puppets</p>		<p>Structures <i>Design and make an Anglo- Saxon Village – link to maths and history</i> After exploring the layout of an Anglo-Saxon Village, explore the 3D shapes used and their nets. Construct a series of 3D shapes to make buildings. Food Technology <i>Anglo-Saxon foods.</i> Explore and design a Saxon-style bread, learn to prepare and cook.</p>	



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 <p>Seasides and Shipwrecks Cycle 1 – Summer Term</p>	 <p>Transport Cycle 1 – Summer Term</p>	 <p>Wild water Cycle 1 – Summer Term</p>
<p>Mechanisms <i>Design and pulley system to aid the Lighthouse Keeper's wife in sending the Lighthouse Keeper his lunch.</i> Read the Lighthouse Keeper's lunch and discuss how his wife sent him his lunch. Explore pulley systems and identify how they work. Plan and create a pulley system that will transport a small basket across a gap.</p>	<p>Mechanisms <i>To explore the use of gears on bicycles</i> Explore how force is transferred from the rider to the wheels on a bicycle. Experiment with gears to see how energy is transferred. Find out how gears are used in other products to enable movement.</p>	<p>Structures <i>Design and make a bridge to span a piece of water.</i> Study the different structures of bridges – cantilever, arch, suspension etc. Find out how each works and is built so withstand weight. Explore building bridges with paper and look for methods of reinforcement. Build bridges and test for strength.</p>
 <p>Memory Box Cycle 2 – Autumn Term</p>	 <p>Crime and punishment Cycle 2 – Autumn Term</p>	 <p>The Mayans Cycle 2 - Autumn Term</p>
<p>Structures / mechanisms <i>Design and make a pop-up puppet</i> Look at a range of pop-up puppets and evaluate. Design a pop-up puppet. Learn how to cut and join wood, plastic and fabric using glue and stitching.</p>	<p>Electronics <i>Design an alarm system – link to science.</i> Find out how we protect ourselves against criminals – including burglar alarms and sirens. Design and make an alarm system using switches and bulbs and buzzers.</p>	<p>Structures <i>Design and make a Mayan mask</i> Explore a range of Mayan masks. Identify materials that could be used to make a mask including paper, card, wood, modroc, papier mache etc. Measure features of the head that will wear the mask. Design a mask and make using chosen materials.</p>



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 <p>Pioneers Cycle 2 - Spring Term</p>	 <p>What a Wonderful World Cycle 2 - Spring Term</p> 	 <p>Rule Britannia Cycle 2 - Spring Term</p>
<p>Structures <i>Design and make a biome to grow plants in space – link to science</i> Following work on what plants need to grow, investigate what a biome is and how they work. Explore a range of mini-biomes. Design and make a biome that will self-irrigate.</p> <p>Mechanisms Explore wheeled vehicles and identify how wheels are attached onto axles. Using small, wooden boxes, attach axles and wheels to the turn the box into a moving vehicle</p>	<p>Food Technology <i>To design and create a new pizza</i> Taste a range of common pizzas and evaluate. Conduct research into popular ingredients and flavours. Learn how to make a simple pizza dough. Design and make an original pizza based on knowledge of popular foods from other countries eg. a curry pizza</p>	<p>Food Technology <i>Design and cook a Viking meal – link to history</i> Explore the food of the Vikings including breads and broths. Learn to prepare and cook a Viking meal on an open fire.</p>
 <p>Dragons, Castles and Kings Cycle 2 – Summer Term</p>	 <p>Romans Cycle 2 – Autumn Term</p>	 <p>Disaster Cycle 2 – Summer Term</p>
<p>Food Technology <i>Design and cook a medieval pottage – link to history and science</i> Explore what medieval people ate. After finding out what humans need to stay healthy (balanced diet) create an improved version of pottage. Prepare, cook and evaluate.</p>	<p>Mechanisms <i>Construct a Roman catapult</i> Investigate methods of catapulting objects across a distance e.g sling shot, use of elastic bands Explore how the Romans constructed catapults as weapons of war. Make a catapult using a wooden structure, elastic bands.</p>	<p>Mechanisms <i>To create a pop-up book with moving elements to tell the story of a natural disaster – link to history</i> Explore children's pop-up books that have moving components (using levers / tabs wheels etc – find out how they work. Design an interactive book or a page from a book that demonstrates what happened during a famous natural disaster.</p>