
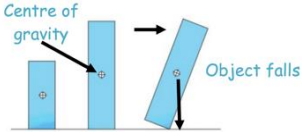

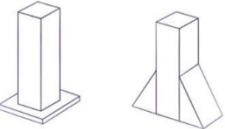
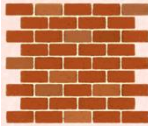
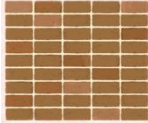









Year 2 – Spring – DT – Pupil Knowledge Organiser



What do I already know?		What am I learning now?	
<ul style="list-style-type: none"> The process we follow in DT is Design, Make, Evaluate. Designing is to think up and plan something based on a specific purpose. We develop several designs, so that we can select the most suitable. Evaluating explores how well something meets the purpose it was made for. We can join materials using a range of methods, e.g. glue, staples, stitching. 		<ol style="list-style-type: none"> What is a freestanding structure? What are different freestanding structures? How do we make freestanding structures stable? Can I apply my learning to design a product? How do I bring my design to life? Does my product meet the design criteria? 	
<p>Key Knowledge: Structures</p> <p>As a freestanding structure becomes taller its centre of gravity rises.</p>  <p>A freestanding structure is one that stands on its own foundation or base.</p>  <p>As the centre of gravity rises the structure becomes less stable.</p>  <p>Frame structures and shell structures can be freestanding.</p>  <p>Increasing the base of a structure helps to spread the weight.</p>		<p>Key Knowledge: Stability</p> <p>Arranging bricks in a wall in certain patterns can improve its stability.</p>  <p>A running pattern is much stronger than a stacking pattern.</p>   <p>Buttresses prevent a structure from collapsing under its own weight.</p>	
<p>Design, Make, Evaluate</p> <p>In Design and Technology, we follow a process:</p>  <p>design</p> <p>Come up with ideas based on who will use our product and what for.</p>  <p>make</p> <p>Safely assemble, join and combine materials.</p>  <p>evaluate</p> <p>Discuss what is good and what can be improved, based on who will use the product and what for.</p>		<p>Key Vocabulary</p> <p>structure Something made, built or arranged.</p> <p>freestanding structure A structure that stands on its own foundation or base without attachment to anything else.</p> <p>frame structure A structure made from thin components e.g. tent frame.</p> <p>shell structure A hollow structure with a thin outer covering.</p> <p>stability In relation to a freestanding structure, it is how likely to fall over if a force is applied.</p> <p>centre of gravity The spot where all of a structure's weight is balanced perfectly.</p> <p>buttress A structure added to a wall, tower or framework to make it more stable and/or reinforce it.</p> <p>brick bonding Arranging bricks in a wall to improve the performance of the structure or improve its appearance.</p> <p>mock-up 3-D representation of a product.</p> <p>construction The process of building something.</p>	
<p>Significant Structures</p> <p>Burj Khalifa</p>  <ul style="list-style-type: none"> Located in Dubai, United Arab Emirates. The tallest freestanding structure and the tallest building in the world. Stands at a staggering height of 828 meters (2,717 feet). 			