

	<p>Year group: Year 2</p>	<p>Area/topic: Structures- A lighthouse</p>
	<p>(objectives from NC/ELG/Development matters)</p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>➤ design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>➤ generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>➤ select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>➤ select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>➤ explore and evaluate a range of existing products</li> <li>➤ evaluate their ideas and products against design criteria</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>➤ build structures, exploring how they can be made stronger, stiffer and more stable</li> </ul>	

Prior learning	Future learning
<ul style="list-style-type: none"> <li>➤ Know how to use basic tools e.g. scissors or hole punches with construction materials e.g. plastic, card.</li> <li>➤ Know different methods of joining card and paper - glue and tape.</li> <li>➤ Know how to use various construction materials.</li> <li>➤ Know how to construct, stacking blocks vertically and horizontally, making enclosures and creating spaces.</li> <li>➤ Know how to join construction pieces together to build and balance.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Children should begin to plan out what each stage of construction might look like.</li> <li>➤ They will need to think about the steps of planning and what they think each stage might look like - this might be done through small sketches, notes etc.</li> <li>➤ design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>➤ Explore and evaluate a range of existing products</li> <li>➤ select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> </ul>

What pupils need to know or do to be secure	
Key knowledge and skills	Possible evidence
<ul style="list-style-type: none"> <li>➤ Know how to design a structure and can explain the user and purpose.</li> </ul>	

<ul style="list-style-type: none"><li>➤ Know how to draw an annotated sketch of their free-standing structure and can label it with materials.</li><li>➤ Know how to select from PVA glue, glue sticks and scissors to cut and join materials (card and cardboard).</li><li>➤ Know how to name free-standing structures: Eiffel tower (European. More familiar example) and The Burj Khalifa in Dubai (tallest example)</li><li>➤ Know how to make a freestanding structure stronger, stiffer and more stable.</li><li>➤ Know if their structure is suitable for the intended user and purpose.</li><li>➤ Evaluate their ideas throughout and they can offer a way to improve their structure with some guidance.</li><li>➤ Know how to strengthen a structure using stronger materials, like card instead of paper or lollipop sticks instead of cardboard</li></ul>		<p>Photos in DT books and quotes from the children of them exploring different current structures.</p> <p>Design opportunities.</p> <p>Photos and quotes of them creating their own designs.</p>
Key vocabulary		
Stable, strengthen, design, make, evaluate, tower, framework, tools, marking out, joining		
Common misconceptions	Books linking to this area	
<ul style="list-style-type: none"><li>➤ That any structure can be glued down to make it stable</li><li>➤</li></ul>	<ul style="list-style-type: none"><li>➤ The lighthouse keepers lunch</li><li>➤ Iggy Peck Architect</li></ul>	
Memorable first hand experiences	Opportunities for communication	
<ul style="list-style-type: none"><li>➤ Building their own lighthouse</li><li>➤ Exploring buildings in the local community or at the seaside</li></ul>	<ul style="list-style-type: none"><li>➤ Discussions throughout the sessions</li><li>➤ Exploring and evaluating existing structures</li></ul>	

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Reasonable adjustments for pupils with SEND

Communication and Interaction	Cognition and Learning
<p>Visual aids</p> <p>Modelling - through the use of visualiser or I:I</p> <p>Simple instructions</p> <p>Use of WAGOLL</p> <p>Pre-teaching vocabulary</p> <p>Coloured paper</p>	<p>Repetition of skills</p> <p>Photo examples</p> <p>Check understanding regularly</p> <p>Verbal responses being scribed by adults</p> <p>Large scale if fine motor is a barrier</p>

### Social, Emotional and Mental health

Allow access to a quiet area  
Give them a special role to boost their self-esteem  
Seat pupil with more confident friend - talking partners  
Now and next board  
Sand timer  
Step by step guides with visuals/pictures/photos

### Sensory and Physical

Chunky pencils  
A range of tools/scissors  
Gloves for sensory issues  
Explore new materials  
Carpet space position  
Reduce background noise