



Objectives and Sticky Knowledge

Previous Knowledge:

Prove that a design meets set criteria.
 Choose a material for both its suitability and its appearance.
 Know that different shapes can strengthen or weaken structures.
 Design a structure
 Identify flaws in a pre-model design, fix or strengthen them, cut and assemble accurately.



Land Objectives and Sticky Knowledge:

<p>- To create a freestanding base structure.</p>	<p>- To select appropriate materials to reinforce corners and attach materials.</p>
<p>1. Select appropriate materials to create a sturdy base. 2. Measure and cut materials accurately, including 45 degree angles to create right angles. 3. Join materials to create a balanced base.</p>	<p>1. I know that reinforcing corners will add strength to the base. 2. I know that attaching cardboard triangles to wood joined at a right angles will ensure that corners are further stabilised.</p>

Sea:

Links with 'sustainability and stewardship' Golden Thread

Links to CST and CTK Values:

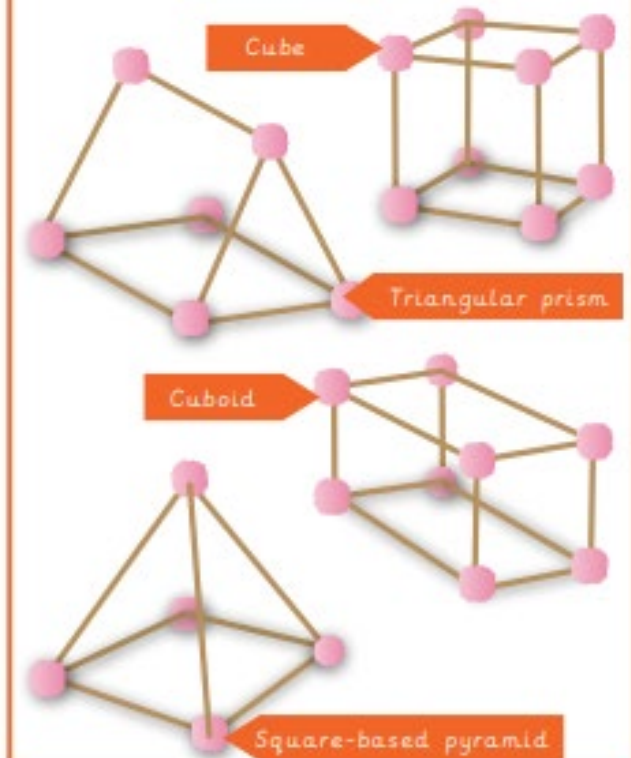
Year 4 Design Technology Knowledge Organiser

Key Vocabulary

Frame Structure	A way of building something so that the inside supports are built first and the outside covering is added as cladding.
Stable	The object does not easily topple over.
Structure	Something that has been made and put together and can usually stand on its own.
Evaluation	When you look at the good and the bad points of something and how you can improve it.

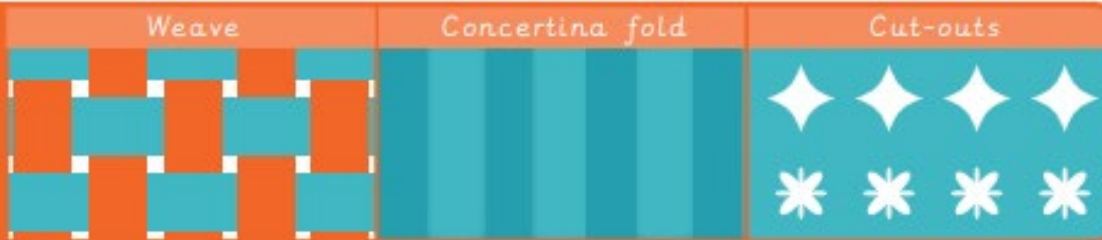


There are variety of ways to assemble a **frame structure**.



What materials and equipment could you use to make your **structure**?

You can create all sorts of **textures** for your **cladding** designs using different materials and techniques.



Sky Objectives:

1. Designing a stable structure that is aesthetically pleasing and selecting materials to create a desired effect
2. Measuring, marking, cutting and assembling with increasing accuracy.
3. Describing what characteristics of a design and construction made it the most effective