



Objectives and Sticky Knowledge

Previous Knowledge Recap:

To follow a design brief to create a windmill

To use templates and nets, selecting from basic crafting tools and materials (paper, card, scissors and glue) to create a functional windmill

Explore different form of windmill structures, testing the finishing windmill



Land Objectives and Sticky Knowledge:

Design and make a structure	Identify flaws in a pre-model design, fix or strengthen them, cut and assemble accurately.	Explore natural and manmade structures.	Know that different shapes can strengthen or weaken structures.
<ul style="list-style-type: none"> I know that the chair I design needs to be strong, stiff and stable I can build a strong and stiff structure by folding paper I can test the strength of my structure I know how to create joints and structures I can evaluate my structure according to the design criteria 	<ul style="list-style-type: none"> I understand what is meant by stability and can identify when a structure is more or less stable than another I know the meaning of the words strength, stiffness and stability 	<ul style="list-style-type: none"> I know that chairs are structures and need to be strong, stiff and stable I can identify natural and man-made structures 	<ul style="list-style-type: none"> I know that shapes and structures with wide, flat bases or legs are the most stable I know there are different ways paper can be folded to improve its strength and stiffness I know how to create joints and structures from paper/card and tape

Links with 'Sustainability and Stewardship' Golden Thread:

Links with CST and CKA Values Crown:





Structures - Baby bear's chair

Function	How something works.
Man-made	Made by people.
Mould	To form different shapes out of soft, squishy materials.
Natural	Found in nature e.g. spider's web, sheep's wool.
Stable	Object does not easily topple over.
Stiff	A material or object that does not bend easily (e.g. wood).
Strong	Something that is not easily broken (e.g. wood, brick, building).
Structure	Something that has been made and put together and can usually stand on its own (e.g. a building, a bridge, a chair).
Test	To find out whether something works as it should.
Weak	Something that is easily broken (e.g. paper, egg shells).

Key facts



Often **structures** have a certain **function**, they are made to do something. e.g. Chairs are for sitting on.



They should be **stable**, **strong** and comfortable.
Was baby bear's chair **stable** and **strong**?



Natural Objects



Man-made Objects



- Sky Objectives:**
- Generate and communicate ideas using sketching and modelling.
 - Make a structure according to a design criteria.
 - Evaluating own design against a design criteria given.