



Key facts to learn:

- Topic – Castles
 - What is a **Structure**? How to make a strong structure to make a chair for King Arthur
 - How to generate and communicate ideas using sketching and modelling
 - Learn about different types of structures, found in the natural world and in everyday objects
 - How to make a structure according to design criteria
 - To create joints and structures from paper/card and tape

Key skills to do:

- Explore the features of structures
- Compare the stability of different shapes
- Test the strength of own structures
- Identify the weakest part of a structure
- Evaluate the strength, stiffness and stability of own structure
- Identify natural and man-made structures
- Identify when a structure is more or less stable than another
- Know that shapes and structures with wide, flat bases or legs are the most stable
- Understand that the shape of a structure affects its strength
- Know that materials can be manipulated to improve strength and stiffness
- Build a strong and stiff structure by folding paper

Words to know and spell (Tier 2 Vocabulary)

King Arthur	Design	Chair
Sketching	Paper	Glue
Card	Wide	Flat



Jellyfish– Structure

Words to understand and spell (Tier 3 Vocabulary)

Structure	Structure made up of several parts
Generate	Produce or create
Modelling	Making 3D models
Joints	A point at which parts of a structure are joined
Strength	The capacity of an object to withstand great force
Stiffness	The quality of being strong
Stability	The state of being stable (not moving easily)
Strong	Able to withstand force or pressure
Folding	Equipment that you can bend or rearrange
Bases	A thig or a part on which something rests

Concept check questions. Test yourself:

How does the shape of a structure affect its strength?

What types of shapes and structures are best for stability?

How do you create joints?

How do you make a structure strong and stiff?