



## 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



## Flamingos– Structure

## Words to understand and spell (Tier 3 Vocabulary)

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