

Knowledge Organiser Design & Technology Year 3 Summer

Structures - Castles



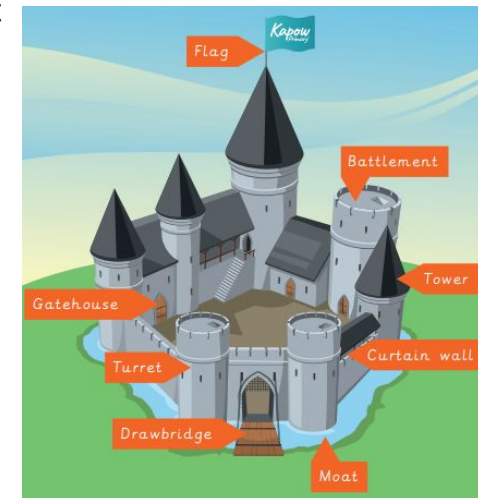
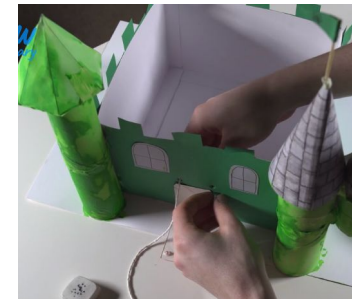
St Elizabeth's Catholic Primary School
"Love one another as I have loved you"

2D shapes	Flat objects with 2-dimensions, such as square, rectangle and circle.
3D shapes	Solid objects with 3-dimensions, such as cube, oblong and sphere.
Castle	A type of building that used to be built hundreds of years ago to defend land and be a home for Kings and Queens and other very rich people.
Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Façade	The front of a structure.
Feature	A specific part of something.
Flag	A piece of cloth used as a decoration or to represent a country or symbol.
Net	A 2D flat shape, that can become a 3D shape once assembled.
Recyclable	Material or an object that, when no longer wanted or needed, can be made into something else new.
Scoring	Scratching a line with a sharp object into card to make the card easier to bend.
Stable	Object does not easily topple over.
Strong	It doesn't break easily.
Structure	Something which stands, usually on its own.
Tab	The small tabs on the net template that are bent and glued down to hold the shape together.
Weak	It breaks easily.

Design → **Make** → **Evaluate**

Knowledge and skills covered in this topic

- ❑ Children will be able to identify the features of a castle and design their own castle based on these features.
- ❑ Children will know how to modify their design to meet the needs of a person or a purpose.
- ❑ Children will know how to draw their castle using 2D shapes.
- ❑ Children will know which 3D shapes will be represented by the 2D shapes in their drawing and appropriately label these in their design.
- ❑ Children will know how to construct a 3D shape from a net.
- ❑ Children will construct their own castle using 3D shapes and ensuring that it meets their design brief.



Prior knowledge

Year 1: Learning the importance of a design criteria. Creating structures with paper and glue. Creating rotating parts using axles.

Year 2: Creating sketches and models to communicate ideas. Beginning to identify materials. Connecting structures using joints and glue.