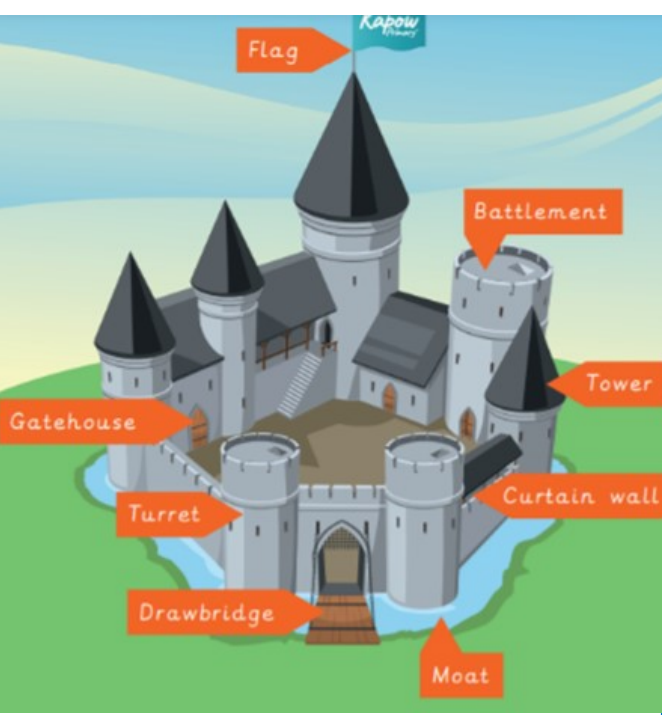


# Y3— Mechanisms—Pneumatic Toys

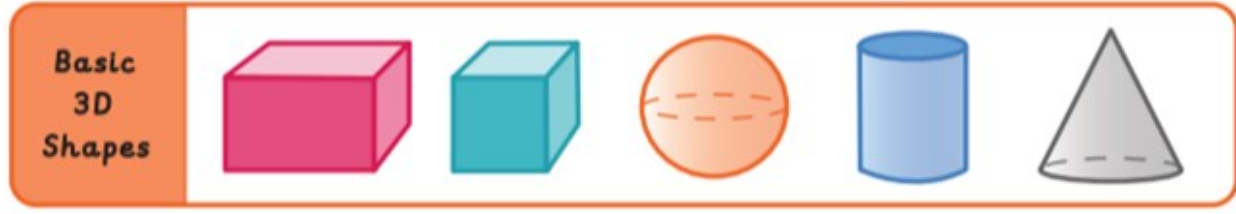


## What I will know:

- I will be able to identify different features of castles.
- I will be able to design and label my own castle using 2D shape labels.
- I will be able to add design points to a Design Specification.
- I will understand nets and construct a range of 3D shapes using nets by cutting, folding and constructing.
- I will be able to construct my castle to meet the requirements of my brief using nets, stacking shapes and materials, creating a castle base and adorning my castle with decorate features.

## Vocabulary

- 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 rich people.
- 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.
- Recyclable**—Material or an object that when no longer wanted or needed can be made into something else.
- Scoring**—Scratching a line with a sharp object into card to make the card easier to bend.
- Stable**—Object does not easilt topple over.
- Strong**—It doesn't breqak easily.
- Structure**—Soemthing 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.



## Did you know?

Windsor Castle is the largest castle in England.

It is one of the three homes owned by Queen Elizabeth II.



## What I already know:

- design purposeful, functional, appealing products for themselves and other users based on design criteria.
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.
- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
- explore and evaluate a range of existing products.
- evaluate their ideas and products against design criteria
- build structures, exploring how they can be made stronger, stiffer and more stable.