



Design and Technology

Year 2 Autumn 2- Towers, Tunnels and Turrets



Design and make a Drawbridge Tower Toy (with a winding mechanism) for young children to play with.

Structures and Mechanisms - Designers of structures and mechanisms need to think about the purpose (what does it do?), how to make it strong, stable and rigid (the structure) and ways to make it work (the mechanisms).

What we know so far

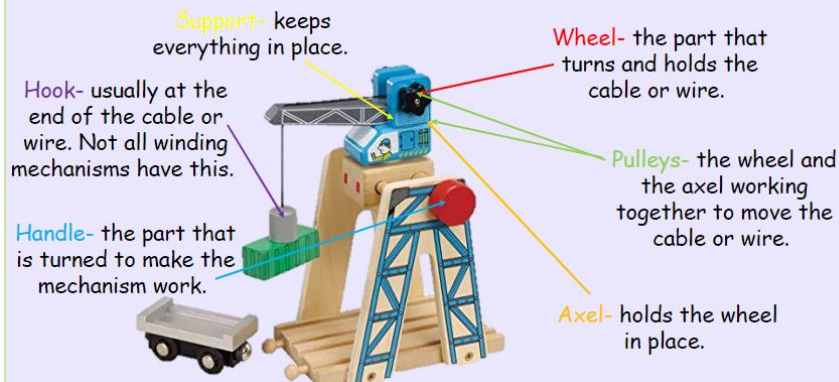
- In Year 1 we used junk modelling to create a moon buggy with a moving part. We explored how axels and wheels can make a moon buggy move.

Key Vocabulary

mechanisms – a system or structure of moving parts that performs a function.

winding – a twisting movement.

structure– a combination of materials and/or parts to create a 3D shape.



New Knowledge

A winding mechanism usually refers to a mechanical object, such as a toy or watch, that is **driven by** a mechanism that **must be wound and then released to make the object move**.

Examples of winding mechanisms:



A crane uses a winding mechanism to lift heavy objects.



A ship uses a winding mechanism to lift the anchor.



Some toys use a winding mechanism to make them move.