



As part of your Traders and Raiders learning you will find out about catapults and how they work. You will investigate different types of mechanisms and design and make your own catapult.

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

- How to design and make a simple plan.
- How to join materials together as part of a moving product.
- How to join materials together in different ways.
- Explore what went well and not so well with what we have made.
- How to work accurately to measure and make cuts.

Key Vocabulary



catapult – an item used to throw a payload a far distance

Fulcrum – Pivot point, where the arm attaches to the catapult.

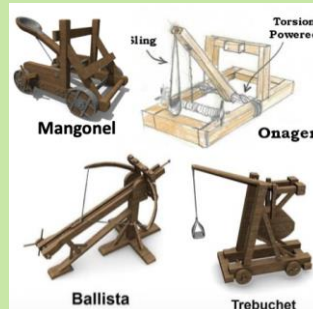
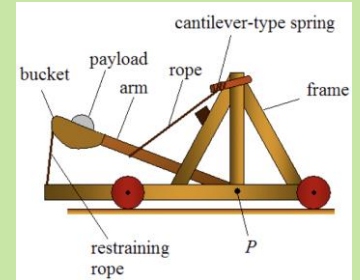
Counter-weight - A weight that balances another weight.

Tension - The state of being stretched: strain.

Tortion - The state of being twisted.

New Knowledge

A catapult is a **lever** propped up by a fulcrum (a pivoting point). The **catapult** magnifies your force to throw a payload. A catapult uses the sudden release of stored potential energy to throw its payload. Most use **tension** or **torsion** that was slowly built up via twisted rope, elastic, springs or another material.



There are different technologies that fall into the 'catapult' category.



Glue guns need to be used safely to join objects securely.

