Burwell Village College Primary

Mechanisms - Complex Levers

Key Vocabulary	
prototype	a working model of a product used to test and evaluate
mechanism	a set of moving parts which work together to create movement
lever	a bar or rod that moves about a pivot or a fulcrum
pivot/fulcrum	the central point upon which a mechanism turns
counter-weight	a weight on the opposite end to the load

What are levers?

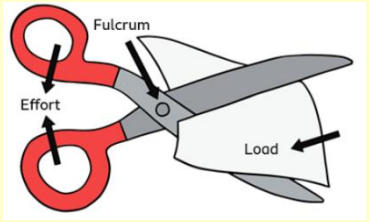
A lever is a type of mechanism that controls motion or transfers power.

A lever has a stiff bar which sits upon a fulcrum or a pivot point.

The lever moves on this point.

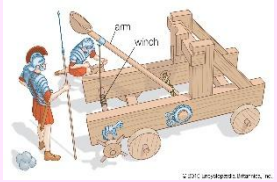
Examples of products including levers include: scissors, car jack, crow bar and a seesaw.





What is a catapult?

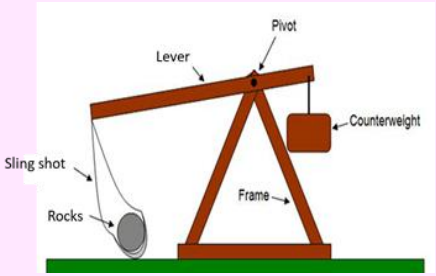
A catapult is **a** machine that throws objects through the air using **a** lever and force.



The Romans used catapults about 2,000 years ago to throw stones at enemy walls during battles.

What is a trebuchet?

The trebuchet was a type of catapult first made in China about 2,300 years ago. It used a sling to throw stones at targets.

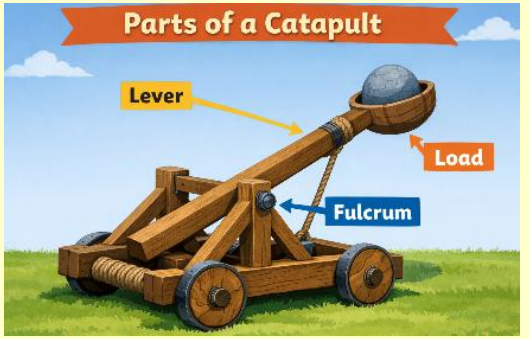


Fulcrum, Load and Effort

The object lifted by a lever is called the **load.**

The **fulcrum** is the point of support of a lever, around which it moves.

The force applied to the **load** through the arm is called the **effort.**



The position of the fulcrum will change the relationship between the force and the load.

