

Year 3 Knowledge Organiser

Design and Technology

Mechanics

Levers

The **lever** is one of the most basic forms of a machine. They help us lift loads with lesser effort.

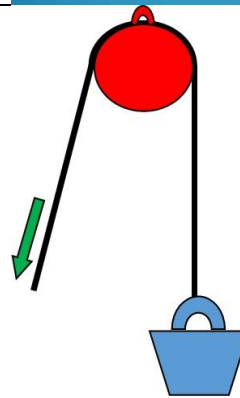


Winding mechanisms



Pulleys

Pulley is a simple machine and comprises of a wheel on a fixed axle. **Pulleys** are used to reduce the time and energy taken to lift heavy objects.



Gears

Gears are wheels with teeth that **slot** together. When one gear is turned the other one turns as well. If the gears are of different **sizes**, they can be used to increase the power of a **turning** force.

