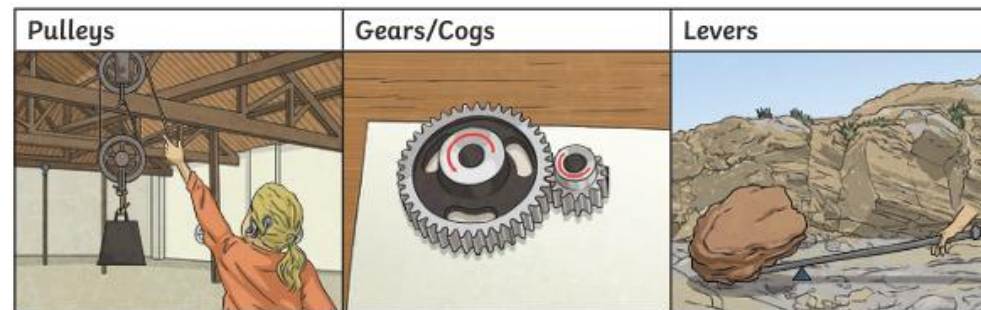
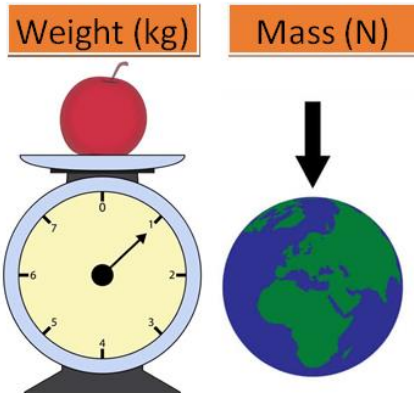


Key vocabulary

gravity	an invisible, non-contact, pulling force caused by the earth's mass
weight	the measure of the force of gravity on an object (kg - kilograms)
mass	a measure of how much matter (stuff) an object contains (n - newtons)
upthrust	a force that pushes objects up, usually in water
motion	something that is moving is in motion
pivot	the central point, pin, or shaft on which a mechanism turns or moves back and forth

Key knowledge

- A **force** causes an object to start moving, stop moving, speed up, slow down or change direction.
- Everything is pulled to the earth by **gravity**. This causes unsupported objects to fall.
- Water resistance and air resistance are forms of friction pushing against any moving object.
- If an object floats on water it is buoyant. This is because the **weight** is equal to the **upthrust**.
- A mechanism is a simple machine that allows a small force to be increased to a larger force giving it a greater movement.
- Pulleys, levers and gears are all mechanisms.
- Pulleys can be used to make a small force lift a heavier load.
- Gears can be used to change the direction, speed or force of a **motion**.
- Gears, when connected, always turn in the opposite direction to each other.
- Levers, which always rest on a **pivot**, can be used to make a small force lift a heavier load.



We are building our knowledge from Forces and Magnets (Year 3)