

Science Knowledge Organiser **Forces and Magnets (Term 4)** **Year 6**

Our learning

In our science lessons this term, we will be learning about forces and magnets. This is part of the **physics** aspect of science. Through our learning we will be considering the **cause and effect** of forces.

This unit links to the last as gravity is a key force that acts on Earth.

Information

Forces either make something start to move, speed up, slow down or stop.

The force of gravity causes everything to be pulled towards the Earth.

On Earth, **unsupported** objects fall due to gravity.

Air resistance, water resistance and friction are **contact forces** that act between moving surfaces.

A pulley system could be used to lift something heavy from the ground.

Vocabulary

Gravity— An invisible force that pulls objects towards each other

Force— An action that changes or maintains the motion of a body or object

Air resistance— A force that acts in the opposite direction of moving objects

Water resistance— A type of force that uses friction to slow things down that are moving through water

Friction— The resistance of motion when one object rubs against another

Newton— unit of force

As a scientist I will...

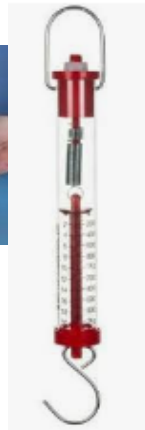
- Choose the most appropriate equipment and explain how to use it to take accurate measurements.
- Select and plan a suitable enquiry and explain the variables that need to be controlled.



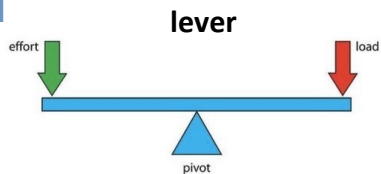
Pulley



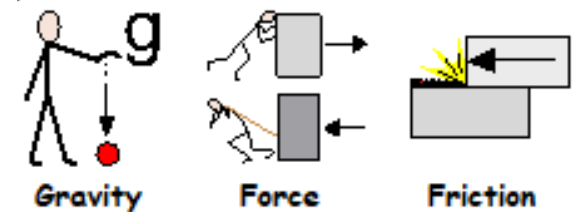
Gears



A newton meter to measure force



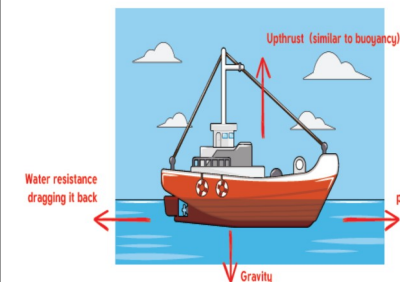
lever



Gravity

Force

Friction



Some objects have more than one force acting on them

