

Enquiry Skills

Enquiry Types



**Explaining
Science**

**Data, Tables
& Graphs**



Research



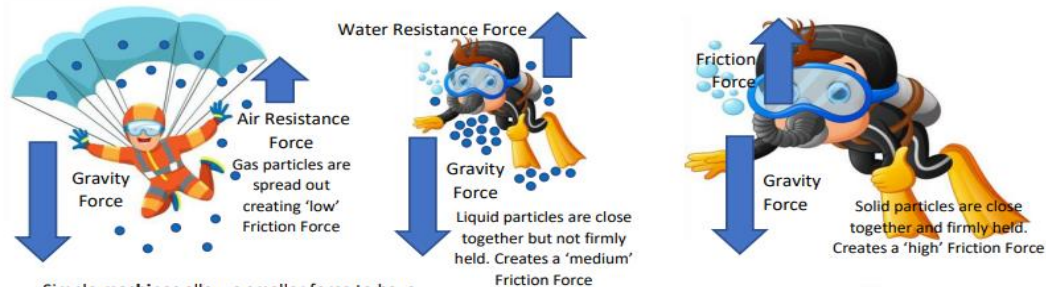
Classify

Problem
SolvingFinding
patternsFair
testing

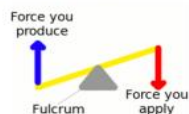
Key Knowledge

- Know that opposing forces can be in balance or unbalanced (cause change).
- Know that contact forces such as friction and air/water resistance act to slow moving objects down.
- Know that gravity force (non-contact) pulls objects towards earth.
- Levers, pulleys and gears act as force multipliers (reduce force needed).

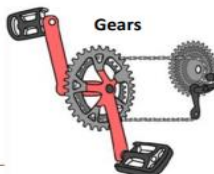
Force Arrow Model (Particle Model) (Make sure you describe opposite forces correctly (**direction**, **size** and **label** of each force). Explain the effect by describing how balanced / unbalanced the forces are)



Simple **machines** allow a smaller force to have a greater effect.



Pulleys



Gears

Vocabulary

Word	Definition
Force	something that changes the motion of an object.
Friction	the resistance that an object has when moving over a surface.
Air Resistance	Forces that are against the motion of an object as it passes through the air.
Water Resistance	Forces that are against the motion of an object as it passes through water.
Balanced Force	Forces in opposite direction are equal.
Unbalanced Force	Forces in opposite direction are not equal.
Gravity	a force pulling an object towards the centre of the Earth.