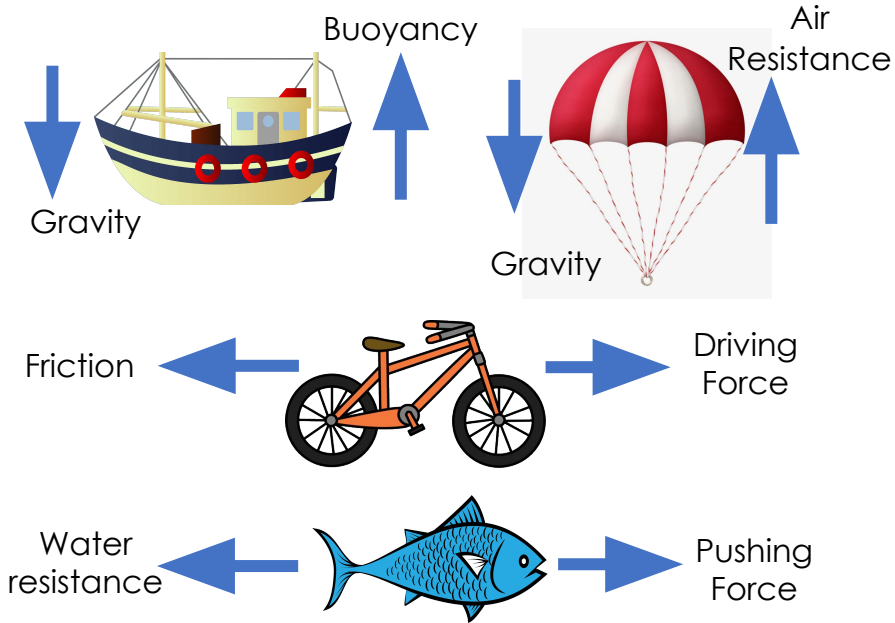




Science – Year 5 Spring 2
Forces

Examples of Opposing Forces Acting on Objects:



- Useful Resources
- Force meters.
 - Different materials to investigate the effects of friction, such as sandpaper, stone, grass and ice.
 - Different mechanisms, including levers, pulleys and gears.

Vocabulary		
Tier 1	Tier 2	Tier 3
Force	Gravity	Buoyancy
Surface	Mechanisms	Water resistance
Gears	Levers	Air resistance
Speed	Pulleys	Friction

● don't know
 ● I know this word
 ● I can use it in a sentence

Scientific Enquiry Skills

- Asking questions**
 Asking questions that can be answered using a scientific enquiry.
- Making predictions**
 Using prior knowledge to suggest what will happen in an enquiry.
- Setting up tests**
 Deciding on the method and equipment to use to carry out an enquiry.
- Observing and measuring**
 Using senses and measuring equipment to make observations about the enquiry.
- Recording data**
 Using tables, drawings and other means to note observations and measurements.
- Interpreting and communicating results**
 Using information from the data to say what you found out.
- Evaluating**
 Reflecting on the success of the enquiry approach and identifying further questions for enquiry.

Key Questions/Facts

What are forces?

- Forces affect the movement or shape of an object.
- They can make an object start to move, stop moving, move faster or move more slowly.
- They could also make an object change its shape or cause a moving object to change direction.

What is gravity?

- Gravity is a pulling force exerted by the Earth. The gravitational force from the Earth pulls in a direction towards the centre of the Earth.
- All objects exert a gravitational pull. However, the strength of an object's gravitational pull depends on its mass.

What is friction?

- Friction is a force between two surfaces that are sliding, or trying to slide, across each other.

What is the difference between mass and weight?

- Mass is how much matter is inside an object. It is measured in kilograms (kg).
- Weight is how strongly gravity is pulling an object down. It is measured in newtons (N).