

Knowledge Organiser

Year 5/6 -Science
 Summer 1

Prior Learning

Compare how things move on different surfaces.)

- Notice that some forces need contact between two objects, but magnetic forces can act at a distance.
- Observe how magnets attract or repel each other and attract some materials and not others.
- Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet and identify some magnetic materials.
- Describe magnets as having two poles.
- Predict whether two magnets will attract or repel each other, depending on which poles are facing.

Key Scientific skills taught

- Ask questions
- Use the scientific understanding gained from scientific enquiry to make predictions they can investigate using further comparative and fair tests.
- Recording data and presenting the recorded data in a different way in order to help answer the question.
- Select measuring equipment to give appropriately precise results.
- Describe the method they would use to gather data to answer a scientific enquiry question.



Vocabulary

Air resistance	The force that slows things down when they move through air, like when a parachute opens
Earth	The planet we live on, made of land, water, and air, and surrounded by space.
Force	A push or pull that makes something move, stop, or change direction.
Friction	A force that happens when two surfaces rub together and slow things down, like when you slide on the ground
Gears	Wheels with teeth that fit together and turn to help machines work.
Gravity	The force that pulls objects down toward the Earth.
Lever	A bar that moves around a fixed point to help lift or move things, like a seesaw.
Mechanisms	Systems of moving parts that help make work easier, like wheels and gears.
Pulleys	A wheel with a rope that helps lift heavy objects with less effort.
Water resistance	The force that slows things down when they move through water, like when you swim.

Key Knowledge Taught

Force causes an object to start moving, stop moving, speed up, slow down or change direction.

Gravity is a force that acts at a distance.

Everything is pulled to the Earth by gravity. This causes unsupported objects to fall.

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

A mechanism is a device that allows a small force to be increased to a larger force. The pay back is that it requires a greater movement. The small force moves a long distance, and the resulting large force moves a small distance, e.g. a crowbar or bottle top remover.

Pulleys, levers and gears are all mechanisms, also known as simple machines.

Extra Information: This can be added to by teacher, parent or child