

### What have I previously learned?

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.

### Vocabulary - Goldilocks words

Word	Definition
Force	A force causes an object to start moving, stop moving, speed up, slow down or change direction.
Friction	Friction is a resistance force between two surfaces that are sliding, or trying to slide, across each other.
Air Resistance	Air resistance is a type of friction that slows down things that are traveling through the air.
Water Resistance	Water resistance is a type of friction that slows down things moving in water.
Machine	A machine is a piece of equipment which uses electricity or an engine to do a particular kind of work.
Mechanism	In a machine or piece of equipment, a mechanism is a part, often consisting of a set of smaller parts, which performs a particular function.

### Useful links

Gravity in the solar system - Gravity and weight - 3rd level Science Revision - BBC Bitesize

What is Friction in Physics? - Science for Kids | Educational Videos by Mocomi (youtube.com)

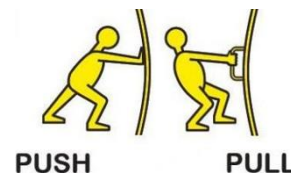
### Sticky Knowledge:

A 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. The object may be moving through the air or water, or the air and water may be moving over a stationary object.

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.

### Prompts to help me in my learning:

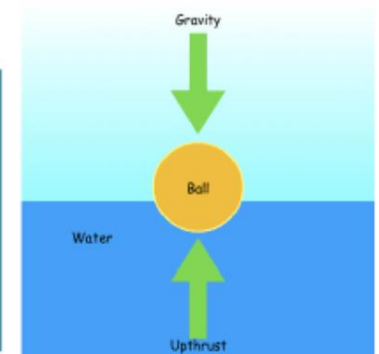


PUSH

PULL



Air resistance slows down the parachute as gravity pulls it to the ground.



Gravity is equal to up thrust, so the ball floats. The forces are balanced.

Pulley	Lever	Gear
