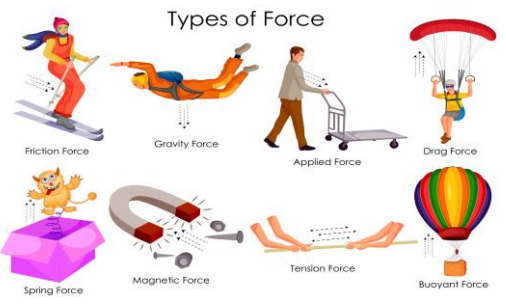




Science Knowledge Organiser

Forces

Physics



What should I know already

- 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 having two poles.
- Predict whether two magnets will attract or repel each other.

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Vocabulary

Gravity	A pulling force exerted by the Earth (or anything else which has mass).
Earth's gravitational pull	The pull that Earth exerts on an object, pulling it towards Earth's centre. It is the Earth's gravitational pull which keeps us on the ground.
Mass	A measure of how much matter (or 'stuff') is inside an object.
Friction	A force that acts between two surfaces or objects that are moving, or trying to move, across each other.
Air resistance	A type of friction caused by air pushing against any moving object.
Water resistance	A type of friction caused by water pushing against any moving object.
Weight	The measure of the force of gravity on an object.
Newton	A unit of measurement named after Sir Isaac Newton. It measures force.
Buoyancy	An upward force that a liquid applies to objects.

By the end of the unit, I will know that:

1. That unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
2. The effects of air resistance on a moving object.
3. The effects of water resistance on a moving object.
4. The effect of friction that act between moving surfaces.
5. Some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

