

FORCES

What are forces?

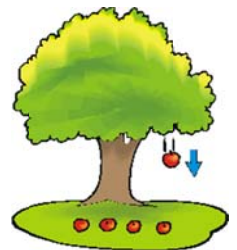
Forces are the things that allow us to move like we do. There are many forces such as gravity, magnetism, friction, static, up thrust, air resistance and water resistance.

Weight and mass are **DIFFERENT!**

Your weight is the force of gravity pulling on you. Weight is measured in newtons (N). Mass is the amount of matter which makes something up. Mass is measured in grams and kilograms (g, kg). $1 \text{ kg} = 10 \text{ N}$.

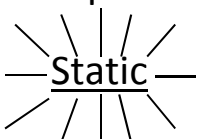
Gravity

Gravity is the force which keeps us on the ground and stops us from floating away. Isaac Newton founded gravity.



Magnetism

Magnets produce fields that allow other objects to attract or repel the magnet. Magnets most commonly have two sides, North and South. North attracts South, and South attracts North, but North repels North and South repels South.



Static force is too weak to move an object because the forces countering it are just as strong. Balloons create static.



Friction

Friction happens when two things rub together. Friction can slow down moving objects, wear away objects and friction creates heat and noise.

