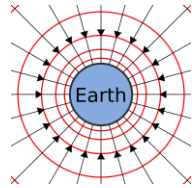


Earth

The earth has three main layers, we live on the outer layer surrounded by a mixture of gases and the atmosphere.

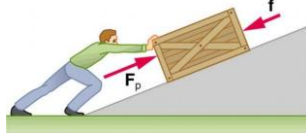


Gravity



Gravity is a force that pulls objects together. Gravity keeps all the planets in orbit around the sun. It also keeps the moon in orbit around

Forces



Forces are pushes or pulls. Forces are measured using a force meter also called a newton meter.

Surface

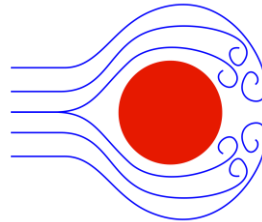


A surface is a physical object or space.

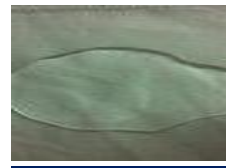
Forces

Air resistance

Bikes, cars and other moving objects experience air resistance as they move. Air resistance is caused by the friction when objects move through air.



Water resistance



Water resistance is caused by the friction when objects move through water. If you go swimming there is friction between you and the water particles.

Mechanisms

A system of parts working together e.g. in a machine.



Lever

A lever is a bar used to pry or move something.



Pulley



A pulley is a wheel over which a belt, rope or chain is used to lift or lower heavy objects.

Gears



Gears are mechanical parts with teeth designed to fit with teeth on another part to transmit or receive force and motion.

Parachute

When a parachute opens it increases the air resistance and will slow down the object.



Friction

Whenever an object moves against another object, it creates frictional forces. These forces act in the opposite direction to the movement.

