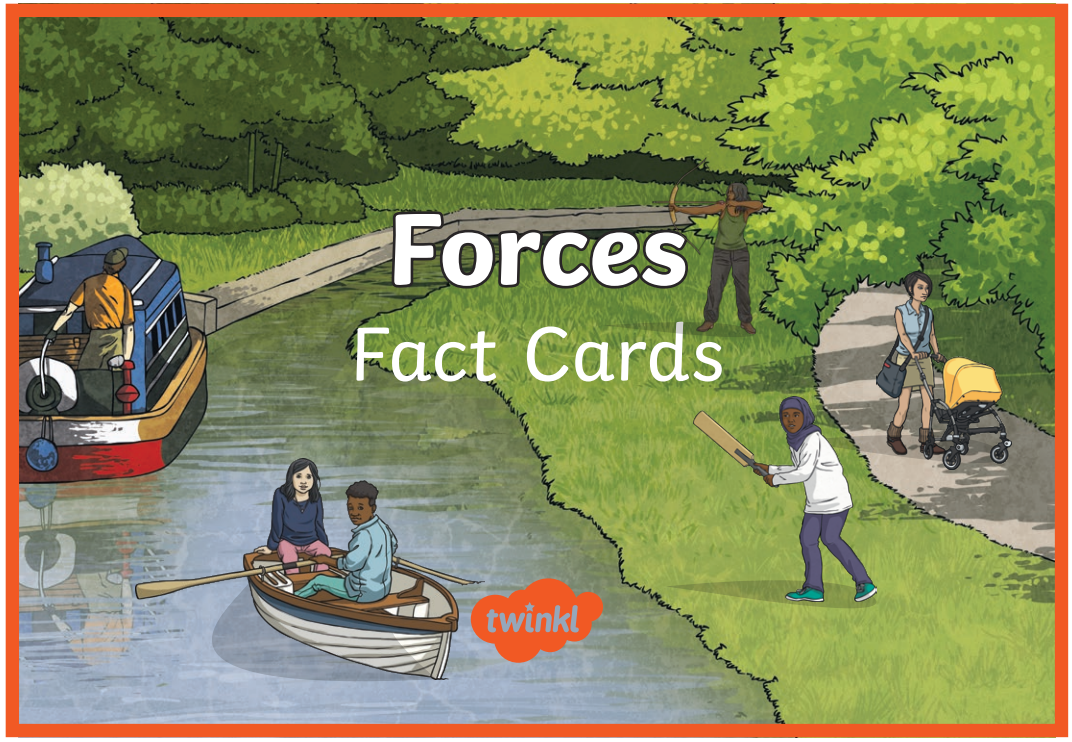
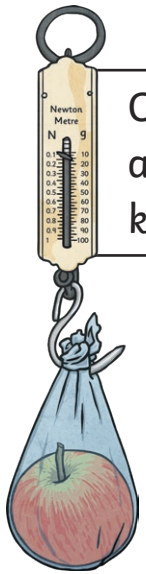
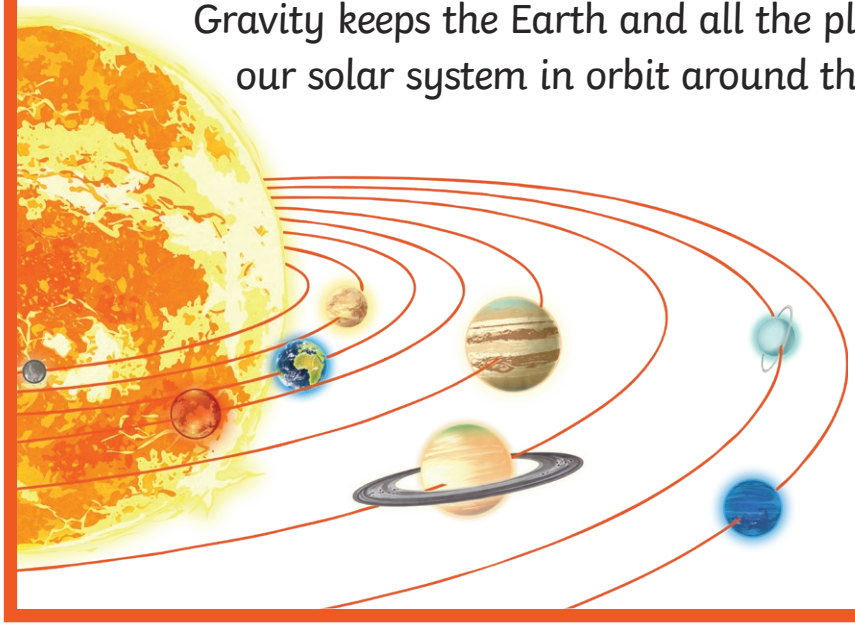




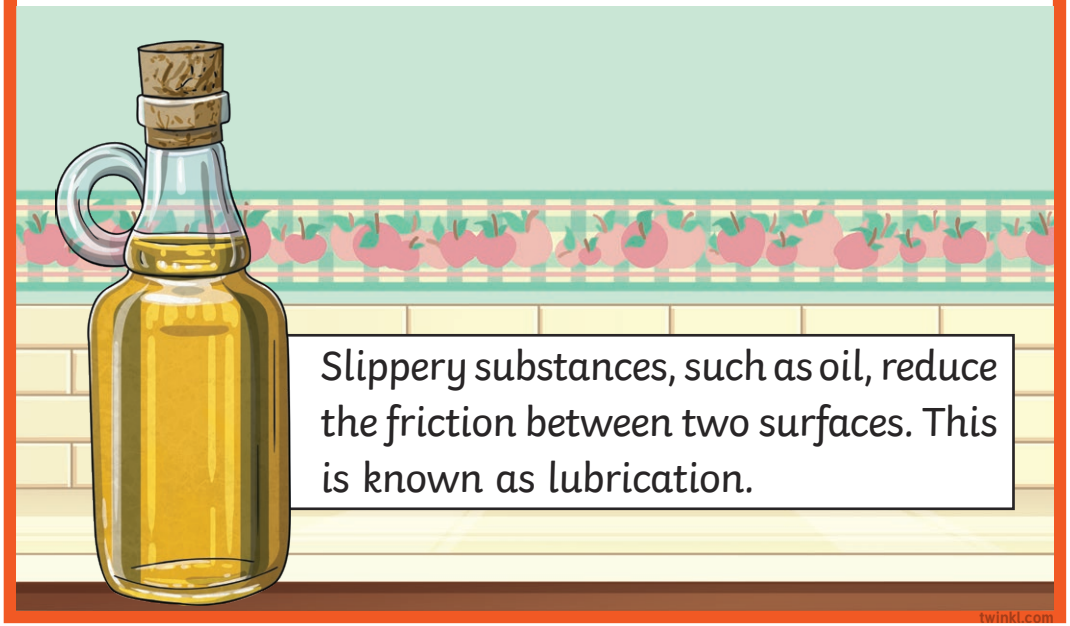
On Earth, the force of gravity is about 10 newtons for every 1 kilogram of mass.

Friction between two surfaces can generate static electricity.

Gravity keeps the Earth and all the planets in our solar system in orbit around the Sun.



Forces Fact Cards



Slippery substances, such as oil, reduce the friction between two surfaces. This is known as lubrication.

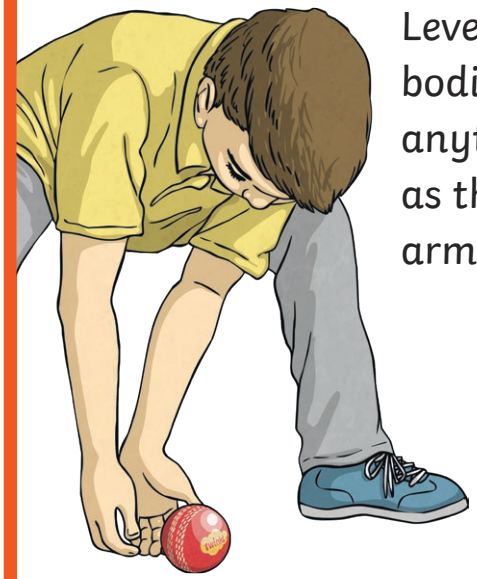
twinkl.com

Forces Fact Cards

When travelling at 50 miles per hour, a car uses around half its fuel just to overcome the effects of air resistance.

twinkl.com

Forces Fact Cards

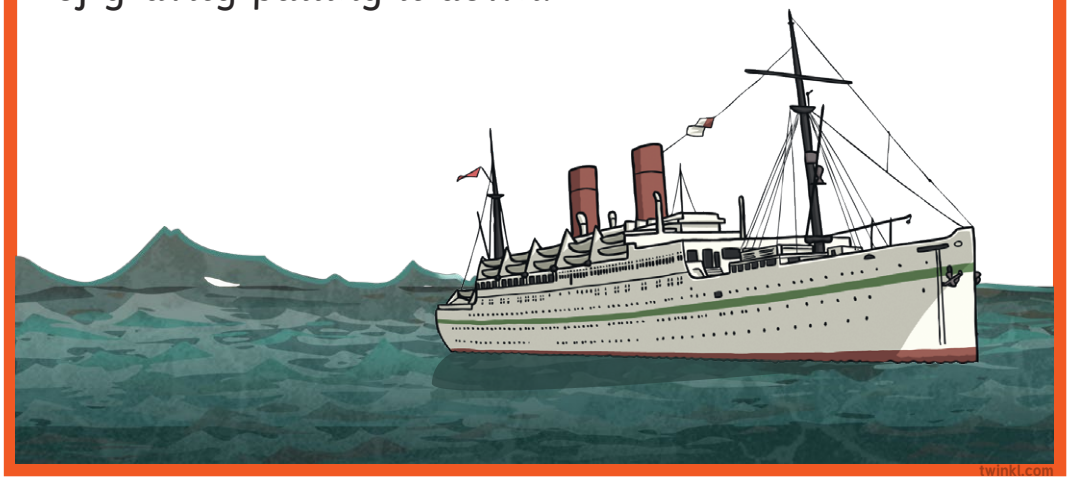


Levers occur naturally inside our bodies! Whenever you pick up anything heavy your elbow acts as the pivot of the lever and your arm bone acts as the lever itself.

twinkl.com

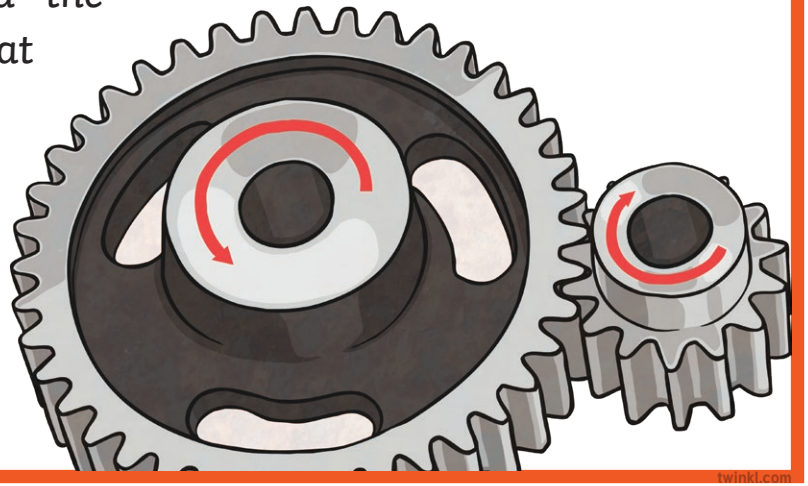
Forces Fact Cards

A ship floats in water because the force from the water pushing it up (buoyancy) is equal to the force of gravity pulling it down.



twinkl.com

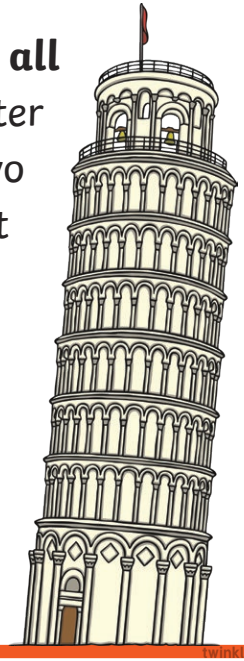
When two or more gears are connected, this is called a 'gear train.' The gear that you turn is called the 'driver' and the last gear that you are trying to move is called the 'driven' gear.



twinkl.com

In 1590, **Galileo Galilei proved that all objects fall at the same rate**, no matter what their mass is. He dropped two balls of a similar shape and size, but with different masses, from the top of the Leaning Tower of Pisa.

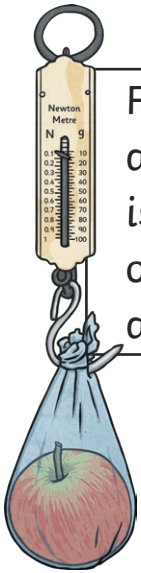
They landed at the same time.



twinkl.com

When a hammer and a feather were dropped on the moon, they both landed at the same time because there is no air resistance on the moon to slow the feather down.

twinkl.com

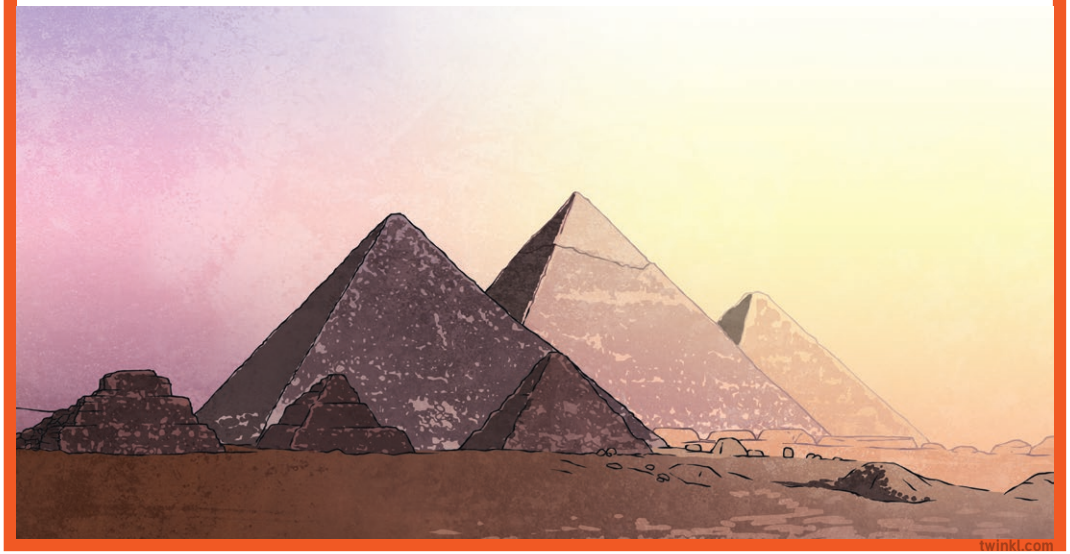


Forces are measured in newtons (N) using a newton meter. This unit of measurement is named after Sir Isaac Newton because of his important discoveries about gravity and forces.

twinkl.com

Forces Fact Cards

Levers were used to construct pyramids in ancient Egypt.



twinkl.com