

Gravity

The force that pulls things to the ground on Earth (and other planets) is called gravity.

Gravity also holds Earth and the other planets in their orbits around the Sun.

Gravity is a very useful force – it holds everything together. It keeps us on the Earth, and keeps the Earth and the other planets revolving around the Sun. Without it everything would float around. That is why it has been described as ‘The Universal Glue’.

The force of gravity also exists on the Moon but it is not as strong as it is on Earth. This is because the Moon is much smaller than our planet. Because the Moon is much smaller than the Earth – it is about the same width as Australia - it is not nearly as heavy as the Earth, and so gravity is much weaker there. In fact, it is only about one sixth of gravity on Earth.

While you may not notice it, every object in the world has this pulling force of gravity – the bigger the object the greater the force. Earth is so big and heavy that its force of gravity is very great. The nearer things are to each other the greater the force of gravity between them.

Until Galileo’s time (around 1600 A.D.) people thought that heavier things fell faster than light things. Galileo was an Italian scientist who experimented (up to then they mainly just thought!) and found that things with different weight fell at approximately the same speed.

