

Nova's Forces Flashcards

Learning objective: To identify and understand different types of forces, including friction, air resistance, and magnetism, as required by the Year 4 Science curriculum.

Use these flashcards to test your knowledge about forces. Read the question on the front, think of the answer, then flip to check if you are right!

What is a force?

A force is a push or a pull that can change the speed, direction, or shape of an object.

What is friction?

A force that acts between two surfaces that are sliding, or trying to slide, across each other. It slows things down.

Which force pulls objects towards the centre of the Earth?

Gravity.

What is air resistance?

A type of friction caused by air pushing against a moving object, which acts to slow it down.

True or False: Smooth surfaces create more friction than rough surfaces.

False. Rough surfaces usually create more friction than smooth surfaces.

What do we call a force that acts between objects that are touching?

A contact force.

What is magnetism?

A non-contact force that can attract or repel certain metals, like iron or steel.

If you push a toy car across a carpet, why does it eventually stop?

Friction between the wheels and the carpet slows the car down until it stops.

What can you use to measure the strength of a force?

A force meter (sometimes called a newton meter).

Is magnetism a contact or a non-contact force?

It is a non-contact force because it can act on an object without touching it.

What force helps a parachute slow down a skydiver?

Air resistance.

Give an example of a pulling force.

Opening a drawer, pulling a rope in tug-of-war, or gravity pulling an apple to the ground.