

# What is a Force?

A force is a push or a pull on an object. When the direction of the force is towards the object applying the force, it is a pull force. When the direction of force is away from the object applying the force, it is a push force.

Forces occur when two objects interact. For example, when you fly a kite, the wind and the kite interact. The wind pushes the kite. When the wind stops blowing, gravity pulls the kite down towards the ground. Gravity is a result of the Earth interacting with the kite.

There are two types of forces: contact forces and non-contact forces. A contact force is a force that occurs when the interacting objects touch one another. For example, kicking a football. We make the football move by striking it with our foot. If our foot doesn't touch the ball, we don't move the ball.

A non-contact force is a force that occurs when there is no contact between the interacting objects. An example of a non-contact force is gravity. In the earlier example, gravity pulled the kite to the ground without touching it. Magnetism is another non-contact force. A magnet can attract magnetic objects within its magnetic field without touching them.

Forces can make an object begin to move, change an object's movement, or change an object's shape.



contact	non-contact	pull	push
interact	magnetism	gravity	force

**Show an example of a contact force and a non-contact force. Use arrows to represent the forces.**

Contact

Non-Contact