

What are forces?

A force is a push or pull that causes a change in speed, direction or shape.

Forces come in pairs according to Newton's 3rd Law:

Every action has an equal and opposite reaction.

So if you push on a wall, the wall pushes back on you.

Some forces occur when objects touch, i.e. pushing and pulling, however some occur without touching, action at a distance, such as gravity.

Some forces vary with speed. Air resistance, for example, increases with speed and acts against the direction of travel.

If you have a resultant force acting on you, it will cause you to move, if you are stationary all the forces acting on you must be balanced in every direction.