# Newton's Laws of Motion

## 1 Inertia

An object stays at **rest** or in **motion** unless a force acts on it

You lurch forward when the bus stops.

## 2 F = ma

Force equals **mass** times **acceleration**

It takes more force to push a full cart.

## 3 Action & Reaction

Every action has an **equal and opposite** reaction

A rocket pushes gas down and goes up.