

Forces

Force: A push or a pull

SI unit of force: newton (N)

* 1 newton of force to lift a small lemon.

- The direction and strength of force can be represented by an arrow.

$$\underline{5N} \quad \underline{5N} = \underline{10N}$$

Net force: the combination of all forces acting on an object. This determines whether an object moves and in what direction it moves.

Friction: the force that two surfaces exert on each other when they move over another.

The strength of friction depends on how hard the surfaces push together and the types of surfaces involved.

* Newton's Laws of Motion:

1. An object continues in its state of rest or motion unless an external force is applied to it.

2. The greater the mass of an object, the greater the amount of force is needed to accelerate it.

3. For every action, there is an equal and opposite reaction.