Momentum:

→ Indicates how hard it might be to stop a moving object

→ Indicates how much force something can generate in a collision

→ momentum is: mass × velocity

$p = m \cdot v$ (kg) (m/s)

$\left(\frac{kg \cdot m}{s}\right)$

Momentum has direction!

Conservation of momentum:

- Momentum doesn't just appear or disappear - but it does get transferred from object to object.
- If you add up the total amount of momentum of a group of objects, it will always be the same (even if they're banking into each other)

Two types of collision:

→ elastic collision (objects don't stick together)

→ inelastic collison (objects do stick together)

$$p = m \cdot v$$

- Objects with larger masses have larger momentums
- Objects with higher velocities have larger momentums