

Newton's 3 Laws

KS4 Notes

1st Law

LAW OF INERTIA

An object at rest stays at rest,



An object in motion stays in motion,



Unless acted on by an

Unbalanced Force!



Objects resist changes in motion!

2nd Law

$$F = m \times a$$

Force = Mass x Acceleration

★ More Force → More Acceleration!



F =

a = acceleration

m = mass

F = Force



← Push Harder!

← Larger Mass

→ Harder to Move!

3rd Law

ACTION & REACTION

For every action,
there's an equal and opposite
reaction!

Action

Reaction



Thrust

Lift



Equal & Opposite Forces!