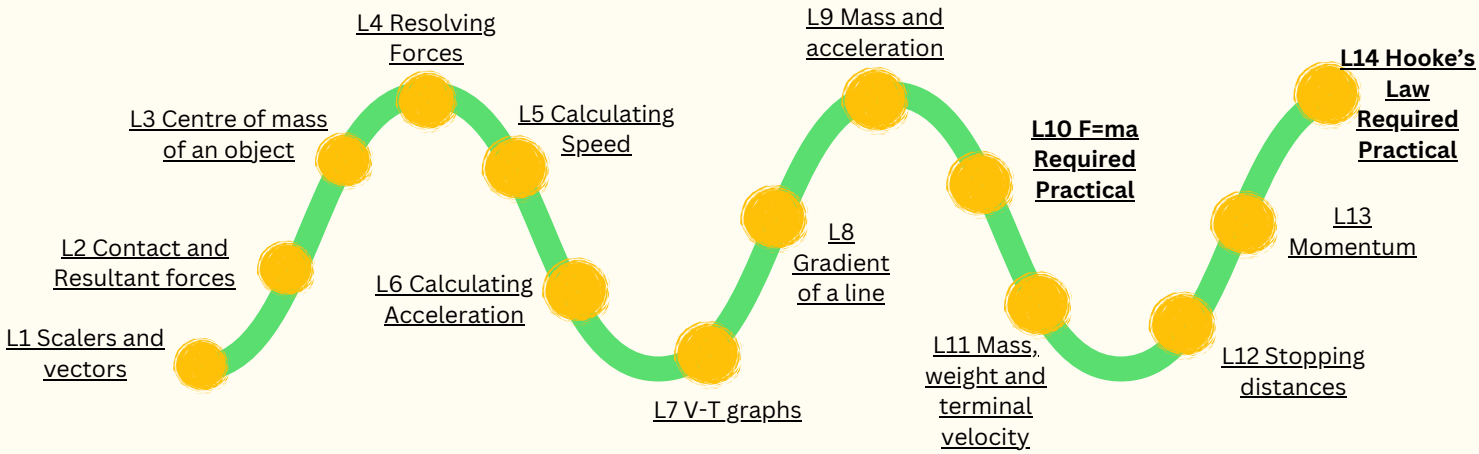
P5 Forces COMBINED

Physics Paper 2

In the Forces unit, you will learn how forces affect the motion of objects and how to represent them using vector diagrams and free-body diagrams. You will explore key concepts such as weight and mass, gravitational field strength, acceleration, and Newton's three laws of motion. As you progress, you will study the effects of forces in more detail, including friction, terminal velocity, stopping distances, Hooke's law for springs, and calculating moments and pressure in different contexts.



Key words

- displacement
- driving force
- effort
- force multiplier
- forces
- free-body diagram
- friction]load
- magnitude
- moment
- Newtons' first Law
- Newton's second Law
- Parallelogram of forces
- scalar
- resultant force
- vector
- acceleration
- deceleration
- displacement
- gradient
- tangent
- velocity
- braking distance
- conservation of momentum
- directly proportional
- elastic
- extension
- gravitational field strength
- inertia
- limit of proportionality
- mass
- momentum
- stopping distance
- terminal velocity
- thinking distance
- weight

Revision Resources

Sample exam style questions

Cognito Topic 5 Forces

BBC Forces

Free Science Lessons

Seneca Learning

F=ma Required Practical

Hooke's Law Required Practical