

## Eduqas Physics - Component 1

## Module 2: Kinematics

This topic covers rectilinear and projectile motion. Learners study accelerated motion in a straight line; the motion of bodies falling in a gravitational field; the independence of vertical and horizontal motion of a body moving freely under gravity.

You should be able to demonstrate and show your understanding of:	Progress and understanding:			
	1	2	3	4
What is meant by displacement, mean and instantaneous values of speed, velocity and acceleration				
The representation of displacement, speed, velocity and acceleration by graphical methods				
The properties of displacement-time graphs, velocity-time graphs, and interpret speed and displacement-time graphs for non-uniform acceleration				
How to derive and use equations which represent uniformly accelerated motion in a straight line				
How to describe the motion of bodies falling in a gravitational field with and without air resistance - terminal velocity				
The independence of vertical and horizontal motion of a body moving freely under gravity				
The explanation of the motion due to a uniform velocity in one direction and uniform acceleration in a perpendicular direction, and perform simple calculations				
SPECIFIED PRACTICAL WORK	1	I	1	1
Measurement of $g$ by freefall				



