



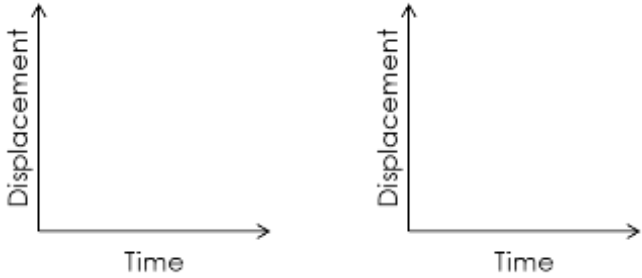
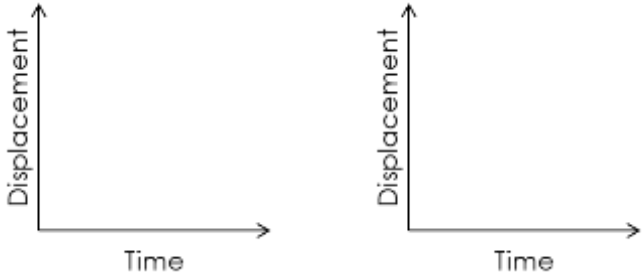
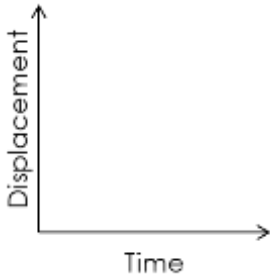
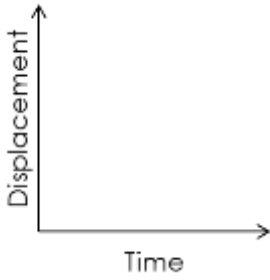
PHYSICS - Prior Knowledge Re-Cap From GCSE



Motion

Motion graphs: Displacement-time graphs

Sketch the correct shape graph that shows the different states of motion


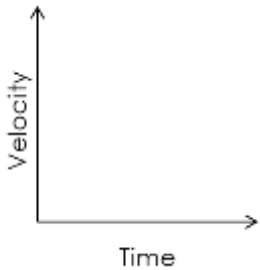
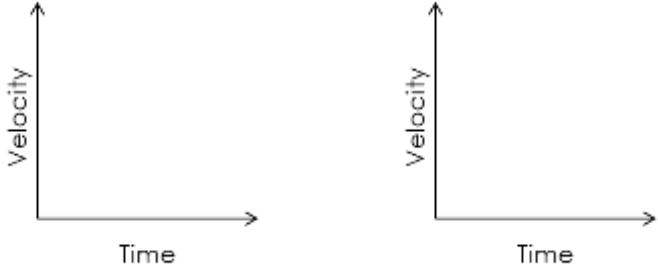
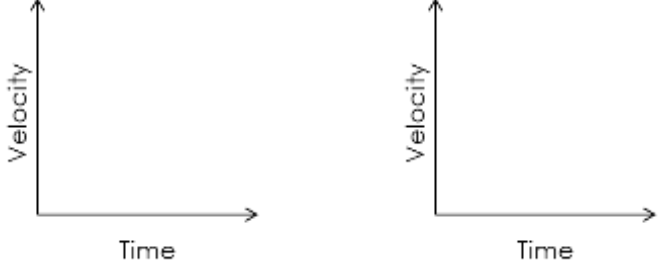
Stationary <i>Two possibilities</i>	
Constant velocity <i>Positive and negative</i>	
Acceleration	
Deceleration	

What does the gradient of a displacement-time graph tell you about the object?

How would you find the instantaneous velocity from a curved graph?

Motion graphs: Velocity-time graphs

Sketch the correct shape graph that shows the different states of motion

Stationary	 <p>A velocity-time graph with 'Velocity' on the vertical axis and 'Time' on the horizontal axis. The axes are represented by arrows pointing upwards and to the right.</p>
Constant velocity	 <p>A velocity-time graph with 'Velocity' on the vertical axis and 'Time' on the horizontal axis. The axes are represented by arrows pointing upwards and to the right.</p>
Constant acceleration and constant deceleration	 <p>Two velocity-time graphs side-by-side. Each has 'Velocity' on the vertical axis and 'Time' on the horizontal axis, with axes represented by arrows pointing upwards and to the right.</p>
Non-constant acceleration and deceleration	 <p>Two velocity-time graphs side-by-side. Each has 'Velocity' on the vertical axis and 'Time' on the horizontal axis, with axes represented by arrows pointing upwards and to the right.</p>

What does the gradient of a velocity-time graph tell you about the object?

What does the area under a velocity-time graph tell you about the object?

Stopping Distance

What is thinking distance?

How do you calculate thinking distance?

What is the relationship between thinking distance and initial speed?

What factors affect thinking distance?

What is braking distance?

How do you calculate braking distance?

What is the relationship between braking distance and initial speed?

What factors affect braking distance?

Explain what this graph shows you and what information you can determine from it

