

GCSE Physics P9 Motion

What are we learning?	What knowledge, understanding and skills will we gain?	What does excellence look like?	What additional resources are available?
<p>The effect of forces on the motion of objects and how to represent this graphically.</p>	<p>Knowledge</p> <ul style="list-style-type: none"> • Know keywords that can be used to describe an objects motion. (Stationary, constant speed, terminal velocity, acceleration and deceleration) • Identify sections on distance-time and velocity-time graphs that show these different forms of motion • Know the standard units for measurements in this unit and their symbols <p>Understanding</p> <ul style="list-style-type: none"> • Identify from graphs when an object is accelerating and decelerating • Understand what the area underneath a graph is able to show you • Calculate gradients to compare motion on different graphs • Compare the similarities and differences between distance-time graph and velocity-time graphs. <p>Skills</p> <ul style="list-style-type: none"> • How to apply core mathematical principles to science focussing on averages, area and gradients. • Applying scientific calculations to determine a missing value (e.g acceleration, distance, time) • Drawing accurately and scientifically 	<p>Ability to create motion stories that accurately match a given velocity-time graph.</p> <p>Ability to construct a velocity-time graph with increasingly complex motion stories that accurately reflect the acceleration given / distance travelled etc using mathematical equations.</p> <p>Apply two or more scientific equations to find a missing value</p> <p>Evaluate the precision of data when measuring the different scalar and vectors studied and select the appropriate resolution for taking measurements in a variety of situations</p> <p>Understand when the use of a tangent is and isn't appropriate when calculating a gradient / rate and explain their decision to use it or not.</p> <p>Apply transformations of the equation $v^2 - u^2 = 2as$</p>	<p>BBC Bitesize</p> <p>Doodle – power points and quick quizzes</p> <p>You tube: 'Free science lessons'</p> <p>Seneca learning platform</p>

