

GCSE Physics P10 Force and Motion

What are we learning?	What knowledge, understanding and skills will we gain?	What does excellence look like?	What additional resources are available?
<p>How force can alter motion of an object.</p>	<p>Knowledge</p> <ul style="list-style-type: none"> • Identify forces acting on an object • Know SI units for measuring these values • Define terminal velocity • List factors that affect braking distances <p>Understanding</p> <ul style="list-style-type: none"> • Link acceleration, mass and force in a mathematical equation and explain the relationship • Explain the conditions in which an object changes velocity or remains stationary or in constant motion. • Explain how terminal velocity is reached in a variety of situations • Calculate braking distances and explain the factors that interact to alter the distance • Explain the concept of conservation of momentum within closed systems <p>Skills</p> <ul style="list-style-type: none"> • Use scientific understanding as a foundation for predictions • Write a detailed method that includes an appropriate table for results • Apply principles of repeatability and reproducibility • Apply mathematical principles of significant figures to reporting of scientific data • Use data to develop conclusions 	<p>Confident construction and manipulation of scientific equations that demonstrates an understanding of the interaction of factors involved.</p> <p>Application of two or more scientific equations in order to find a missing value</p> <p>Analyse complex graphs which provide more than one piece of data on the braking distances of vehicles.</p> <p>Apply conservation of momentum to a wide range of situations to explain the motion of objects within them.</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>

