



Spring 2	<p><b>2.4 Linear motion</b></p> <p>Knowledge and understanding of the factors associated with linear motion and the application of definitions, equations, calculations and units of measurement in a sporting context.</p> <p><b>2.5 Angular motion</b></p> <p>Knowledge and understanding of how angular motion is applied in a sporting context.</p> <p><b>2.6 Projectile motion</b></p> <p>Knowledge, understanding and application of projectile motion in refining technique in different sporting contexts.</p>	<ol style="list-style-type: none"> <li>1. What is the difference between a scalar and a vector?</li> <li>2. What is the difference between distance and displacement?</li> <li>3. What is the difference between speed and velocity?</li> <li>4. How do we calculate speed and velocity?</li> <li>5. How do we calculate acceleration?</li> <li>6. How do you plot and label a distance time graph?</li> <li>7. How do you calculate acceleration from a velocity-time graph?</li> <li>8. How do you calculate distance from a velocity-time graph?</li> </ol> <ol style="list-style-type: none"> <li>1. What is angular motion?</li> <li>2. What is moment of inertia (MI)?</li> <li>3. What is the relationship between (MI) and angular velocity?</li> <li>4. What is the conservation of angular momentum?</li> </ol> <ol style="list-style-type: none"> <li>1. What forces affect a projectile's flight?</li> <li>2. How do these factors affect sporting events?</li> <li>3. What 3 factors affect horizontal displacement?</li> <li>4. How can these factors be modified to improve performance?</li> </ol>		
Summer 1	<p><b>2.7 Fluid mechanics</b></p> <p>Knowledge, understanding and application of aerodynamics and hydrodynamics to appropriate sports contexts.</p>	<ol style="list-style-type: none"> <li>1. What factors affect air resistance and fluid friction?</li> <li>2. How can we adjust technique and equipment to reduce resistance?</li> <li>3. How can technology help make improvements to fluid mechanics?</li> <li>4. How does the angle of attack affect a projectile?</li> <li>5. How does the Bernoulli effect work?</li> <li>6. How does Magnus force affect the flight path of balls?</li> </ol>		

