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| <p><u>Experiences and Outcomes</u></p> <p>I can use appropriate methods to measure, calculate and display graphically the speed of an object, and show how these methods can be used in a selected application.</p> <p style="text-align: right;">SCN 4-07a</p> <p>By making accurate measurements of speed and acceleration, I can relate the motion of an object to the forces acting on it and apply this knowledge to transport safety.</p> <p style="text-align: right;">SCN 4-07b</p> | <p><u>Resources needed</u></p> <p>Trundle wheels, timers, tape measure, chalk.</p> <p>Paper and pencils</p> <p>Calculators – iPads</p> |
| <p><u>Learning Outcomes</u></p> <p>Know that average speed is the total distance travelled in the total time.</p> <p>Know that acceleration is the change in speed over time.</p> <p>Measure distance and time and calculate speed in m/s</p> <p>Measure speed and time and calculate acceleration in m/s/s</p> <p>Plot a graph of distance against time.</p> | <p><u>Lesson Plan</u></p> <p>Collect equipment and go straight outside.</p> <p>How fast can you run? How can we measure this.</p> <p>Refer to mph distance/ time</p> <p>Science m/s</p> <p>How to measure distance – tape measure</p> <p>Time? – timers.</p> <p>Students mark off a distance and then time each other running/walking this distance. (If no timer just count). Calculate average speed in m/s</p> <p>Extension - calculate acceleration from 0m/s to end of run.</p> <p>Draw graphs of distance against time.</p> |