Edexcel International GCSE Physics 4PH1 Learning Plan

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| **Unit: 1 Forces and Motion** | | **Chapter: 1. Movement and Position** | | **Hours: 4** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| **Section 1: Forces and motion**  **a)** Units  **b)** Movement and position | **1.3** plot and interpret distance–time graphs  **1.4** knowand use the relationship between average speed, distance moved and time:  average speed = distance moved/time taken  **1.5** *embedded practical: investigate the motion of everyday objects such as toy cars or tennis balls.*  **1.6** know and use the relationship between acceleration, velocity and time:  acceleration = change in velocity/time taken  *a* = (*v* – *u*)/*t*  **1.7** plot andinterpret velocity–time graphs    **1.8** determine acceleration from the gradient of a velocity–time graph  **1.9** determine the distance travelled from the area between a velocity–time graph and the time axis.  **1.10** use the relationship between final speed, initial speed, acceleration and distance moved:  (final speed)2 = (initial speed)2 + (2 x acceleration x distance moved) | Video and Powerpoint:  1.2 Speed, velocity and acceleration.  Textbook pages:  Page 4 – Average Speed  Page 5 – Distance / Time graphs  Page 6 – The difference between speed and velocity  Page 7 – *Practical – Investigate the motion of everyday objects such as toy cars or tennis balls*  Page 9 – Acceleration  Page 11 – Velocity / time graphs | Page 15 – 17  Questions (1) to (17)  Chapter 1 Textbook Answers (PDF)  Chapter 1 - exam question - pdf  Chapter 1 - exam question mark scheme – pdf  Chapter 1 - Talking paper video | |

Videos – [www.igcsesciencecourses.com](http://www.igcsesciencecourses.com)

Textbook Ref: Edexcel International GCSE (9-1) Physics Student Book - Pearson (Arnold, Johnson, Woolley))