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)$$v^{2}=u^{2}+(2×a×s)$$ | Video and Powerpoint: 1.2 Speed, velocity and acceleration.Textbook pages:Page 4 – Average SpeedPage 5 – Distance / Time graphsPage 6 – The difference between speed and velocityPage 7 – *Practical – Investigate the motion of everyday objects such as toy cars or tennis balls*Page 9 – AccelerationPage 11 – Velocity / time graphs | Page 15 – 17Questions (1) to (17)Chapter 1 Textbook Answers (PDF)Chapter 1 - exam question - pdfChapter 1 - exam question mark scheme – pdfChapter 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))