Edexcel iGCSE Physics 4PH0 Learning Plan

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| **Section C11: Properties of waves** | | |
| Specification | Resources | Assessment |
| 3.2 understand the difference between longitudinal and transverse waves and describe experiments to show longitudinal and transverse waves in, for example, ropes, springs and water  3.3 define amplitude, frequency, wavelength and period of a wave  3.4 understand that waves transfer energy and information without transferring matter  3.5 know and use the relationship between the speed, frequency and wavelength of a wave:  wave speed = frequency × wavelength  3.6 use the relationship between frequency and time period.  3.7 use the above relationships in different contexts including sound waves and electromagnetic waves  **3.8 understand that waves can be diffracted when they pass an edge**  **3.9 understand that waves can be diffracted through gaps, and that the extent of diffraction depends on the wavelength and the physical dimension of the gap.** | Video: Physics Section 3 – Lesson 1 – General Wave Properties.  Physics Section 3 – Lesson 2 – Reflection and Refraction  Powerpoint: Physics 17 – General Wave Properties  Physics 18 – Reflection and Refraction  Textbook: Ch.11 Properties of Waves  Page 91 – What are waves?  Page 92 – Describing waves  Page 93 – The wave Equation  Page 94 – The ripple tank  Page 94 – Wavelength and frequency  Page 95 – Reflection  Page 96 – Refraction  Page 96 – Diffraction  Page 98 – Chapter checklist  DVD Revision check list | Textbook  Page 98 – Questions (1) to (4)  Section C11 Textbook Answers (PDF)  DVD Multiple choice test  Talking paper – Edexcel Physics Section C11 Properties of waves (mp4 video)  Section C11 Exam Question – pdf  Section C11 Exam Question Mark Scheme - pdf |

Videos – www.igcsesciencecourses.com

Textbook Ref: Edexcel International GCSE Physics Student Book - Pearson

DVD Video Clips – see resource DVD in textbook.