Edexcel iGCSE Physics 4PH0 Learning Plan

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| **Section C13: Light Waves** | | |
| Specification | Resources | Assessment |
| •3.14 understand that light waves are transverse waves which can be reflected, refracted and diffracted  3.15 use the law of reflection (the angle of incidence equals the angle of reflection) 3.16 construct ray diagrams to illustrate the formation of a virtual image in a plane mirror  3.17 describe experiments to investigate the refraction of light, using rectangular blocks, semicircular blocks and triangular prisms  3.18 know and use the relationship between refractive index, angle of incidence and angle of refraction  3.19 describe an experiment to determine the refractive index of glass, using a glass block  3.20 describe the role of total internal reflection in transmitting information along optical fibres and in prisms  3.21 explain the meaning of critical angle c  3.22 know and use the relationship between critical angle and refractive index | Video: Physics Section 3 – Lesson 2 – Reflection and Refraction  Physics Section 3 – Lesson 3 – Total internal reflection and lenses – Beginning to 12:00  Powerpoint: Physics 18 – Reflection and Refraction Physics 19 – Total Internal Reflection and Lenses – Slides 1 to 39  Textbook: Page 107 Chapter 13: Light Waves  Page 107 – Seeing the light  Page 107 – Reflection  Page 109 – Refraction  Page 110 – Refractive index  Page 110 – Total internal reflection  Page 115 – Dispersion  Page 116 Ch.13 Checklist  Ch13 Student check list .doc  DVD Revision check list | Textbook  Pages 116 – 117. Questions 1 to 8.  Textbook Answers (PDF)  Talking paper – Edexcel Physics Section C13 Light Waves  DVD Multiple choice test  Section C13 Exam Question –. (pdf)  Section C13 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.