Edexcel iGCSE Physics 4PH0 Learning Plan

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| **Section B10: Electrical resistance** | | |
| Specification | Resources | Assessment |
| 2.10 describe how current varies with voltage in wires, resistors, metal filament lamps and diodes, and how this can be investigated experimentally  2.11 describe the qualitative effect of changing resistance on the current in a circuit  2.12 describe the qualitative variation of resistance of LDRs with illumination and of thermistors with temperature  2.13 know that lamps and LEDs can be used to indicate the presence of a current in a circuit  2.14 know and use the relationship between voltage, current and resistance: voltage = current × resistance V = I × R | Video: Physics Section 5 – Lesson 4 – Electrical Quantities 2 – 06:34 to 20:34  Physics Section 5 – Lesson 5 – Electric Circuits – 09:05 to end.  Powerpoint: Physics 28 – Electrical Quantities 2 – Slides 16 to 51.  Physics 29 – Electric Circuits – Slides 34 to end.  Textbook: Chapter 10 – Electrical Resistance  Page 82 – Resistance  Page 83 – using resistance  Page 84 – Special resistors  Page 85 – Measuring resistance – Ohm’s Law  Page 88 – Chapter Checklist  DVD Revision check list  Practical resources: Section B10 - Measuring resistance with a voltmeter and an ammeter <https://sites.google.com/site/quantumboffin/physics-videos/internal-resistance-and-emf>   * Take readings and calculate the resistance! | Textbook – End of Chapter B10 Questions Page 88  Chapter B10 - Textbook Answers (PDF)  Textbook – End of section B Questions – pages 89 – 90  End of Section B – Answers – pdf  Section B10 Exam Question – pdf  Section B10 Question Mark Scheme - pdf  Talking Paper Video – Section B10 Electrical resistance  DVD Multiple choice test |

Videos – www.igcsesciencecourses.com

Textbook Ref: Edexcel International GCSE Physics Student Book - Pearson

DVD Video Clips – see resource DVD in textbook.