Edexcel iGCSE Physics 4PH0 Learning Plan

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| **Section B7: Mains Electricity** | | |
| Specification | Resources | Assessment |
| 2.2 understand and identify the hazards of electricity including frayed cables, long cables, damaged plugs, water around sockets, and pushing metal objects into sockets  2.3 understand the uses of insulation, double insulation, earthing, fuses and circuit breakers in a range of domestic appliances  2.4 understand that a current in a resistor results in the electrical transfer of energy and an increase in temperature, and how this can be used in a variety of domestic contexts  2.5 know and use the relationship: power = current × voltage P = I × V and apply the relationship to the selection of appropriate fuses  2.6 use the relationship between energy transferred, current, voltage and time: energy transferred = current × voltage × time E = I × V × t | Video: Physics Section 5 – Lesson 7 – Dangers of Electricity.  Physics Section 5 – Lesson 2 – Electrical Quantities 2 – 20.33 to end  Powerpoint: Physics 31 – Dangers of Electricity  Physics 28 – Electrical Quantities 2 – slide 52 to end  Textbook – Chapter 7 – Mains Electricity  Page 59 – using electricity  Page 60 – using electricity safely  Page 61 – Safety devices – fuses  Page 62 – Earth wires, double insulation  Page 63 – The heating effect of a current  Page 63 – Electrical power  Page 64 – calculating the total energy converted by an appliance  DVD Revision check list | Textbook  Questions on Page 65  Chapter B7 -Textbook Answers (PDF)  DVD Multiple choice test  Section B7 – Exam question - pdf  Section B7 – Question Mark Scheme – pdf  Talking paper Section B7 video – Mains electricity |

Videos – www.igcsesciencecourses.com

Textbook Ref: Edexcel International GCSE Physics Student Book - Pearson

DVD Video Clips – see resource DVD in textbook.