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 appliances2.4 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 ElectricityPhysics 28 – Electrical Quantities 2 – slide 52 to endTextbook – Chapter 7 – Mains ElectricityPage 59 – using electricityPage 60 – using electricity safelyPage 61 – Safety devices – fusesPage 62 – Earth wires, double insulationPage 63 – The heating effect of a currentPage 63 – Electrical powerPage 64 – calculating the total energy converted by an applianceDVD Revision check list | TextbookQuestions on Page 65Chapter B7 -Textbook Answers (PDF)DVD Multiple choice testSection B7 – Exam question - pdfSection B7 – Question Mark Scheme – pdfTalking 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.