Edexcel iGCSE Physics 4PH0 Learning Plan

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| **Section D17: Work and Power** | | |
| Specification | Resources | Assessment |
| 4.9 know and use the relationship between work, force and distance moved in the direction of the force:  work done = force × distance moved W = F × d  4.10 understand that work done is equal to energy transferred  4.11 know and use the relationship:  gravitational potential energy = mass × g × height GPE = m × g × h  4.12 know and use the relationship:  kinetic energy = ½ × mass × speed2  KE = ½ × m × v2  4.13 understand how conservation of energy produces a link between gravitational potential energy, kinetic energy and work  4.14 describe power as the rate of transfer of energy or the rate of doing work  4.15 use the relationship between power, work done (energy transferred) and time taken: power = work done / time taken  P = W / t | Video: Section 1 – General Physics – Lesson 8 – Energy; Lesson 10 – Work and Power  Powerpoint: Physics 10 – Work and Power; Physics 8 - Energy  Textbook: Ch.17 – Work and Power  Page 142 – Energy and Work  Page 144 – Gravitational potential energy (GPE)  Page 145 – Meteorites and kinetic energy  Page 146 – Calculations using work, GPE and KE  Page 147 – Power  Page 149 – End of Chapter Checklist  Edexcel iGCSE Physics Student Checklist Section D17.doc  DVD Revision check list | Textbook  Page 149 – Questions 1 to 9  Textbook Answers (PDF)  DVD Multiple choice test  Talking paper – Edexcel Physics Section D17 – Work and Power  Section D17 Exam Question –. (pdf)  Section D17 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.