Edexcel iGCSE Physics 4PH0 Learning Plan

|  |  |  |
| --- | --- | --- |
| **Section E20: Solids, Liquids and Gases** | | |
| Specification | Resources | Assessment |
| 5.7 understand the changes that occur when a solid melts to form a liquid, and when a liquid evaporates or boils to form a gas  5.8 describe the arrangement and motion of particles in solids, liquids and gases  5.9 understand the significance of Brownian motion, as supporting evidence for particle theory  5.10 understand that molecules in a gas have a random motion and that they exert a force and hence a pressure on the walls of the container  5.11 understand why there is an absolute zero of temperature which is –273oC  5.12 describe the Kelvin scale of temperature and be able to convert between the Kelvin and Celsius scales  5.13 understand that an increase in temperature results in an increase in the average speed of gas molecules  5.14 understand that the Kelvin temperature of the gas is proportional to the average kinetic energy of its molecules  5.15 describe the qualitative relationship between pressure and Kelvin temperature for a gas in a sealed container  5.16 use the relationship between the pressure and Kelvin temperature of a fixed mass of gas at constant volume:  P1/T1 = P2/T2  5.17 use the relationship between the pressure and volume of a fixed mass of gas at constant temperature:  p1V1 =p2V2 | Video: Physics Section 2 – Thermal Physics – Lesson 1 – Simple kinetic molecular model of matter (Part 1); Physics Section 2 - Thermal Physics – Lesson 2 – Simple kinetic molecular model of matter (Part 2).  Powerpoint: Physics 12 - Simple kinetic molecular model of matter 1. Physics 13 – Simple kinetic molecular model of matter 2.  Textbook: Ch.20 – Solids, Liquids and Gases  Page 169 – The states of matter.  Page 170 – properties of the different states of matter.  Page 171 – The gas laws  Page 173 – Absolute zero  Page 176 – End of Chapter Checklist  Edexcel iGCSE Physics Student Checklist Section E20.doc  DVD Revision check list | Textbook  Pages 176-177; Questions 1 to 7  Chapter E20 - Textbook Answers (PDF)  Page 178 – End of Section E Questions.  End of Section E Textbook answers – pdf  DVD Multiple choice test  Talking paper – Edexcel Physics Section E20 – Solids, liquids and gases  Chapter E20 Exam Question – pdf  Chapter E20 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.