CiE iGCSE Physics 0625 Learning Plan

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| **Section 14: Thermal properties and temperature 1** | | |
| Specification | Resources | Assessment |
| **Core**  • Describe qualitatively the thermal expansion of solids, liquids, and gases at constant pressure  • Identify and explain some of the everyday applications and consequences of thermal expansion  • Appreciate how a physical property that varies with temperature may be used for the measurement of temperature, and state examples of such properties  • Recognise the need for and identify fixed points  • Describe and explain the structure and action of liquid-in-glass thermometers  **Supplement**  • Explain, in terms of the motion and arrangement of molecules, the relative order of the magnitude of the expansion of solids, liquids and gases  • Demonstrate understanding of sensitivity, range and linearity  • Describe the structure of a thermocouple and show understanding of its use as a thermometer for measuring high temperatures and those that vary rapidly  • Describe and explain how the structure of a liquid-in-glass thermometer relates to its sensitivity, range and linearity | Video: Physics Section 2 – Lesson 3 – Thermal properties and temperature (Part 1)  Powerpoint: Thermal properties and temperature - 1  Textbook  Page 100 to 101 – Temperature (1)  Page 102 to 103 – Temperature (2)  Page 104 to 105 – Expanding solids and liquids  Page 106 to 107 – Heating gases  Section 14 Checklist.doc | Textbook  Page 101 – Questions 1 to 3  Page 103 – Questions 1 and 2  Page 105 – Questions 1 and 2  Page 107 – Questions 1 to 4  Answers – Page 328  Talking paper – CiE Physics Section 14 – Thermal properties and temperature 1  Section 14 Exam Question –. (pdf)  Section 14 Exam Question – Mark Scheme. (pdf) |

Videos – www.igcsesciencecourses.com

Textbook Ref: Complete Physics for Cambridge iGCSE (Stephen Pople) - OUP

DVD Assessments – see resource DVD in textbook.