CiE iGCSE Physics 0625 Learning Plan

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| **Section 26: Electrical quantities 1** | | |
| Specification | Resources | Assessment |
| **Core**  •State that there are positive and negative charges  • State that unlike charges attract and that like charges repel  • Describe simple experiments to show the production and detection of electrostatic charges  • State that charging a body involves the addition or removal of electrons   * Distinguish between electrical conductors and insulators and give typical examples   State that current is related to the flow of charge  • Use and describe the use of an ammeter, both analogue and digital  • State that current in metals is due to a flow of electrons  **Supplement**  State that charge is measured in coulombs  • State that the direction of an electric field at a point is the direction of the force on a positive charge at that point  • Describe an electric field as a region in which an electric charge experiences a force  • Describe simple field patterns, including the field around a point charge, the field around a charged conducting sphere and the field between two parallel plates (not including end effects)  • Give an account of charging  • Recall and use a simple electron model to distinguish between conductors and insulators  Show understanding that a current is a rate of flow of charge and recall and use the equation I = Q / t  • Distinguish between the direction of flow of electrons and conventional current | Video: Section 5 – Lesson 2 – Electrical quantities (Part 1)  Powerpoint: Physics 26 – Electrical quantities 1.  Textbook  Pages 170 – 171; Electric charge (1)  Pages 172-173; Electric charge (2)  Pages 174-175; Electric fields  Pages 176-177; Current in a simple circuit.  Section 26 checklist.doc | Textbook  Page 171; Questions (1) to (6)  Page 173; Questions (1) to (3)  Page 175; Question (1)  Page 177; Questions (1) to (4)  Textbook answers: Page 330  Talking Paper video – Section 26 – Electrical quantities 1  Section 26 Exam Question - pdf  Section 26 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.