Edexcel International GCSE Physics 4PH1 Learning Plan

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|  **Unit: 2 Electricity** | **Chapter: 9. Electric Charge** | **Hours: 4** |
| Content coverage | Learning outcomes | Resources | Assessment |
| **Section 2: Electricity****d)** Electric charge | **2.22P** **identify common materials which are electrical conductors or insulators, including metals and plastics****2.23P *practical:* investigate how insulating materials can be charged by friction****2.24P explain that positive and negative electrostatic charges are produced on materials by the loss and gain of electrons****2.25P know that there are forces of attraction between unlike charges and forces of repulsion between like charges****2.26P explain electrostatic phenomena in terms of the movement of electrons****2.27P explain the potential dangers of** **electrostatic charges, e.g. when fuelling aircraft and tankers****2.28P explain some uses of electrostatic charges, e.g. in photocopiers and inkjet printers.** | Video and Powerpoint:5.2 Electrical Quantities (1)5.3 Electrical Quantities (1) - supplement Textbook pages:Page 85 – Charges within an atomPage 85 – Charging materials by frictionPage 86 – Forces between chargesPage 86 – *Practical – investigate how insulators can become electrically charged by friction*Page 87 – Forces between charged and uncharged objectsPage 89 – Uses of static electricityPage 91 – Problems with static electricity | Page 92Questions (1) to (5)Unit QuestionsPage 93 to 95Questions (1) to (8)Chapter 9 Textbook Answers (PDF)End of Unit Answers to Questions (PDF)Chapter 9 - exam question - pdfChapter 9 - exam question mark scheme – pdfChapter 9 - Talking paper video  |

Videos – [www.igcsesciencecourses.com](http://www.igcsesciencecourses.com)

Textbook Ref: Edexcel International GCSE (9-1) Physics Student Book - Pearson (Arnold, Johnson, Woolley))