Edexcel International GCSE Physics 4PH1 Learning Plan

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| **Unit: 6 Magnetism and Electromagnetism** | | **Chapter: 20. Magnetism and Electromagnetism** | | **Hours: 4** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| Section 6: Magnetism and Electromagnetism  a) Units  b) Magnetism  c) Electromagnetism | 6.1 use the following units: ampere (A), volt (V) and watt (W)  6.2 know that magnets repel and attract other magnets and attract magnetic substances  6.3 describe the properties of magnetically hard and soft materials  6.4 understand the term magnetic field line  6.5 know that magnetism is induced in some materials when they are placed in a magnetic field  6.6 *practical: investigate the magnetic field pattern for a permanent bar magnet and between two bar magnets*  6.7 describe how to use two permanent magnets to produce a uniform magnetic field pattern  6.8 know that an electric current in a conductor produces a magnetic field around it  **6.9P describe the construction of electromagnets**  **6.10P draw magnetic field patterns for a straight wire, a flat circular coil and a solenoid when each is carrying a current** | Video and Powerpoint:  5.1 Simple phenomena of magnetism  Textbook pages:  Page 197 – Magnetism and magnetic materials  Page 198 – Magnets  Page 199 – **Practical** – *Investigate the magnetic field patterns of bar magnets*  Page 200 – Overlapping magnetic fields  Page 200 – Creating a uniform magnetic field  Page 201 – Induced magnetism  Page 201 – Electromagnetism | Pages 204 – 205  Questions (1) to (6)  Chapter 20 Textbook Answers (PDF)  Chapter 20 - exam question - pdf  Chapter 20 - exam question mark scheme – pdf  Chapter 20 - 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))