

Physics – Magnetism and Electromagnetism **Points in bold are HT only**

| Content | End |
|--|-----|
| Describe the force between two poles of a magnet | |
| Describe the difference between permanent and induced magnets | |
| describe how to plot the magnetic field pattern of a magnet using a compass | |
| draw the magnetic field pattern of a bar magnet showing how strength and direction change from one point to another | |
| explain how the behaviour of a magnetic compass is related to evidence that the core of the Earth must be magnetic. | |
| Explain how a current produces a magnetic field and how a solenoid can increase the strength | |
| Explain how the interaction of a magnetic field induce by a current and a magnetic field between a horseshoe magnet can produce movement of the wire | |
| Explain the motor effect and use Flemings left hand rule to predict direction of movement | |
| Describe factors that can affect the size of the force acting on a wire and use $F=BIl$ to calculate it | |
| Explain how an electric motor can produce a turning effect | |