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	
Explain how loudspeakers and headphones work – <u>Triple Physics only</u>	
Explain the generator effect and how it is used to create ac and dc	
Draw and interpret graphs of potential difference of ac and dc	
Explain how moving coil microphones work	
Describe the basic structure of transformers	
Apply the equation relating number of turns and pd in the coil to the currents and power transfer	