CP10 Magnetism and the Motor Effect

CP10a Magnets and magnetic fields
Describe how magnets affect each other.
Explain the difference between permanent and induced magnets.
Describe the uses of permanent and temporary magnetic materials.
Describe the shapes of magnetic fields, including variations in strength.
Describe how the shape of magnetic fields can be shown using plotting compasses.
Explain how a magnetic compass can be used as evidence for the Earth's magnetic core.
CP10b Electromagnetism
Recall that a current can create a magnetic effect.
Relate the shape and direction of the magnetic field around a straight wire to the direction of the current.
Recall the factors that affect the strength of the magnetic field around a wire.
Describe the magnetic field inside and outside a coil of wire carrying a current.
Explain the shape and strength of the magnetic field around a solenoid.
CP10c Magnetic forces
H Recall that forces are produced when a current flows in a magnetic field.
H Explain what causes the forces produced when a current flows in a magnetic field.
H Recall Fleming's left-hand rule.
H Use Fleming's left-hand rule.
H Use the formula relating force, magnetic field strength, current and length.