

Name Class Date

Lesson	Aiming for 4		Aiming for 6		Aiming for 8	
P13.1 Magnetic fields	I can state the names of the poles of a magnet.	<input type="checkbox"/>	I can sketch the shape of a magnetic field around a bar magnet.	<input type="checkbox"/>	I can describe the regions in a magnetic field where magnetic forces are greatest using the idea of field lines.	<input type="checkbox"/>
	I can describe the interaction of magnetic poles (attraction and repulsion).	<input type="checkbox"/>	I can describe how the shape of a magnetic field can be investigated.	<input type="checkbox"/>	I can explain in detail how a magnetism can be induced in some materials.	<input type="checkbox"/>
	I can list some magnetic and non-magnetic metals.	<input type="checkbox"/>	I can compare the Earth's magnetic field to that of a bar magnet.	<input type="checkbox"/>	I can plan in detail how the strength of a magnetic field can be investigated.	<input type="checkbox"/>
P13.2 Magnetic fields of electric current	I can state that the magnetic field produced by a current carrying wire is circular.	<input type="checkbox"/>	I can use the corkscrew rule to determine the direction of the field around a current carrying wire.	<input type="checkbox"/>	I can determine the polarity of the ends of a solenoid from the direction of the current.	<input type="checkbox"/>
	I can describe the effect of increasing the current on the magnetic field around a wire.	<input type="checkbox"/>	I can describe the shape of the field produced by a solenoid.	<input type="checkbox"/>	I can sketch the shape of the field surrounding a solenoid relating this to the direction of the current through the coil.	<input type="checkbox"/>
	I can describe the effect of reversing the direction of the current in the wire.	<input type="checkbox"/>			I can plan a detailed investigation into the factors that affect the strength of the magnetic field around a solenoid.	<input type="checkbox"/>
P13.3 The motor effect			I can describe the operation of a moving-coil loudspeaker.	<input type="checkbox"/>	I can describe and explain in detail the operation of a d.c. motor.	<input type="checkbox"/>
			I can apply Fleming's left-hand rule to determine the direction of the force acting on a conductor.	<input type="checkbox"/>	I can perform calculations involving rearrangements of the equation $F = BIl$.	<input type="checkbox"/>
			I can calculate the force acting on a conductor when it is placed in a magnetic field.	<input type="checkbox"/>	I can investigate the factors that affect the rotation of an electric motor.	<input type="checkbox"/>