



| Section 1: Key Vocabulary | |
|---------------------------|---|
| Key Word | Definition |
| Conductor | Will allow electricity to pass through it |
| Insulator | Will not allow electricity to pass through it |
| Current | The flow of electrons around a circuit |
| Ammeter | Measures electric current in a circuit |
| Series Circuit | A closed circuit in which the current follows one route |
| Parallel Circuit | A closed circuit in which the current divides into two or more paths before recombining to complete the circuit |
| Magnetic Field | The area around a magnet in which there is magnetic force |
| Magnetic Pole | Area at each end of a magnet where the external magnetic field is strongest |
| Electromagnet | A magnet that turns on and off with electricity |
| Induced Magnetism | When a magnetic material is close to a magnet it becomes a magnet itself |
| Electron | A negatively charged particle |
| Component | A specific part of a circuit |

| Section 2: Quick Questions | |
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| What are circuit symbols? | Circuit symbols are used when drawing circuit diagrams to make them clearer and easier |
| What are examples of good conductors? | All metals, but especially copper. Graphite is the only non-metal conductor. |
| How does the current change in different circuits? | The current is the same in all parts of a series circuit whilst in a parallel circuit, the current is split between the branches. |
| How does the voltage change in different circuits? | In a series circuit, the voltage is shared across the components, whilst in parallel circuits, each branch has the same voltage. |
| Which direction do magnetic fields go? | Magnetic fields go from the north to south pole |
| What are the magnetic metals? | The magnetic metals are iron, cobalt, nickel and alloys containing them |
| Which poles attract and repel each other? | Like poles (north-north or south-south) repel whilst opposite (north-south) attract |
| How can we increase the strength of an electromagnet? | You can add more coils, increase the voltage or add an iron core |

Section 3: Helpful Diagrams

Switch Cell Battery
Lamp Voltmeter Ammeter

Current here = 5A Current here = 5A
Current here = 5A Current here = 5A

Current here = 9A Current here = 3A
Current splits in 3 ways Current here = 3A
Current splits in 3 ways Current here = 3A
Current splits in 3 ways Current here = 3A

Section 4: Video Links