How do transformers work?

Why do we need step up and step down transformers?

Make sure you can use the equation Primary voltage / secondary voltage = turns on primary / turns on secondary

How do you calculate power in a circuit?

How do generators produce electricity? How can the induced voltage be increased?

What does a battery do in a circuit?

Describe the relationship between current and voltage?

What causes static electricity? Use the terms electrons, attraction and repulsion

Describe what happens to potential difference and current in series and parallel circuits

**Higher – explain why**

How does resistance make

a) A light bulb glow?

b) an LDR change brightness?

c) a thermistor work?

Why are metals such good conductors of electricity and conductors aren’t? think about free electrons

P5 Electric Circuits

What sorts of devices are motors used in?

**Explain what a motor is and how it works. Use the terms turning force, coil, magnetic field, wire and current.**

What things in a circuit cause resistance? What happens to the current as the resistance increases?

What causes work to be done in a circuit?

Describe in words, or using a sketch graph, how the current through a component varies with voltage across it when the resistance stays constant.

**Why do resistors get hot?**

Draw the circuit symbols for a cell, power supply, filament lamp, switch, LDR, fi xed and variable resistor, thermistor, ammeter and voltmeter.

What is electric current and how do we measure it?

How do resistors behave in series and in parallel?

How do you calculate resistance