**P6**

**Electricity for Gadgets**

Add notes and diagrams to make it useful

What 3 factors affect electrical resistance?

What is the law for resistors in series?

What might an LDR be used for?

What is the relationship between temp and resistance for a thermistor?

Draw symbols for:

Variable resistor

LDR

Thermistor

Transistor

Draw voltage current graphs for a resistor, bulb and diode.

What is the law for resistors in parallel?

Draw a truth table for an AND gate:

Draw a truth table for an OR gate:

Draw a truth table for a NOT gate:

What does the right hand grip rule show?

What is another name for a long coil of wire?

Describe how a relay works.

Give five household items that have a motor in them…

What 3 things will increase the speed of a motor?

What do the parts of Flemings left hand rule show?

Thumb

1st Finger

2nd Finger

Top speed of a maglev train?

Explain how a commutator is helpful

Transformer Eq:

UK household voltage:

Draw a step down transformers coils

What does rectification mean?

Draw a step up transformers coils

What is the job of a transformer?

Draw a rectifier circuit:

Why is it safe for a bird to sit on a power line?

Define a capacitor:

Why does a power station produce an Alternating Current?

Explain how a semi-conductor diode works, using electrons and holes.

Who is the father of electricity?

What word means “making” current?

Draw the symbols for:

AND gate

OR gate

NOT gate

How does a Scalextric track use variable resistors/

Draw symbols for

Diode Capacitor

What is the base, collector and transmitter of a transistor?