KS3 Electricity and Magnetism Progress Sheet

To show how confident you are with each statement, either colour the square red, amber or green or add a tick in the correct box.

I can	Red	Amber	Green
Draw the circuit symbols for an ammeter, batter, bulb, cell, closed switch, open switch and voltmeter.			
Define electric current.			
Define potential difference (p.d.).			
Define resistance.			
Recall the units for current, potential difference and resistance.			
Compare battery and bulb ratings.			
Recognise series and parallel circuits.			
Draw a simple series circuit.			
Draw a simple parallel circuit.			
Describe how to connect an ammeter to measure the current in a series and parallel circuit.			
Describe how to connect a voltmeter to measure the potential difference in a series and parallel circuit.			
Compare current in series and parallel circuits.			
Compare potential difference in series and parallel circuits.			
Recall the equation that links current, potential difference and resistance.			
Use the equation to calculate resistance.			
Rearrange the equation to calculate potential difference or current.			
Compare the resistance of conducting and insulating components.			
Describe batteries as a store of potential energy.			
Describe the relationship between the length of a wire and its resistance.			
Name three magnetic materials.			
Describe magnetism as a non-contact force.			

Describe attraction and repulsion.		
Label the magnetic poles on a diagram of a bar magnet.		
Use plotting compasses to plot the magnetic field lines around a bar magnet.		
Describe the magnetic field around the Earth.		
Describe the effect of an electric current flowing in a wire.		
Describe how the strength of an electromagnet can be increased.		
Describe an experiment to investigate the strength of an electromagnet.		
Describe how a D.C. motor works.		
Describe electrostatic force as a non-contact force.		
Describe how an object can become positively charged.		
Describe how an object can become negatively charged.		
Describe the effect of two objects with the same charge being brought close together.		
Describe the effect of two objects with opposite charges being brought close together.		
Recall two dangers of static electricity.		

Revision Methods

Just reading through your book or a knowledge organiser is not an effective way to revise. Instead, you should do something with the information. Choose one of the revision methods below or see if you can come up with your own way to use the content from this topic.

Make some flash cards.	Write down key words, questions or equations on one side of a card. On the other side, write the definition or answer. Use them to test yourself or ask a friend or family member to test you.
Make a poster.Image: Animal CellImage: Animal Cell	Turn your notes into posters with lots of colour and illustrations. Summarising the key information in a different way is an effective way of learning information and your brain will remember the colours and pictures more easily. Handy hint: Add your title after you have written all the information so you don't waste too much time trying to make it look nice!
Draw spider diagrams or mind maps.	Write the topic or a key word in the centre of your page. Add everything you know about the topic in subtopics around the centre. Colour and pictures will help to make the information more memorable.
Write a song or rap.	Are there any songs that you have stuck in your head? Change the lyrics to the information you need to learn. You could even record your song and listen back. Singing the facts along to music can make the information more memorable.

Plan a lesson.	You could plan a lesson to teach to a primary school class or a friend or family member. Not only will you be reinforcing the information for yourself, but you'll be helping someone else to revise too.
Write a story or comic strip.	Take the key words or facts that you need to learn and turn them into a story or a cartoon. The more imaginative or silly your story, the more likely you are to remember the ideas. This is a great method if you have to learn a sequence of events in a process.
Write a quiz. Questions $1 \cdot (\widehat{A} - B - C - D)$ $2 - A - B - C \cdot (\widehat{D})$ $3 - A \cdot (\widehat{B}) - C - D$ $4 - A \cdot (\widehat{B}) - C - D$	Write a quiz to test yourself or a friend on the key facts from the topic. You could even ask a friend or family member to test you using the questions. If you want to be really creative, you could turn it into a gameshow with a group of friends!