ELECTRICITY & MAGNETISM

SCIENCE

WHERE HAVE YOU BEEN?

At KS2 you learnt the basics about magnets, exploring how the poles of magnets attract or repel, and how many materials don't respond to magnetism. You also learnt how to build circuits and how you can affect the brightness of bulbs in different circuits, leading on to how electricity can make magnetism

MAGNETS

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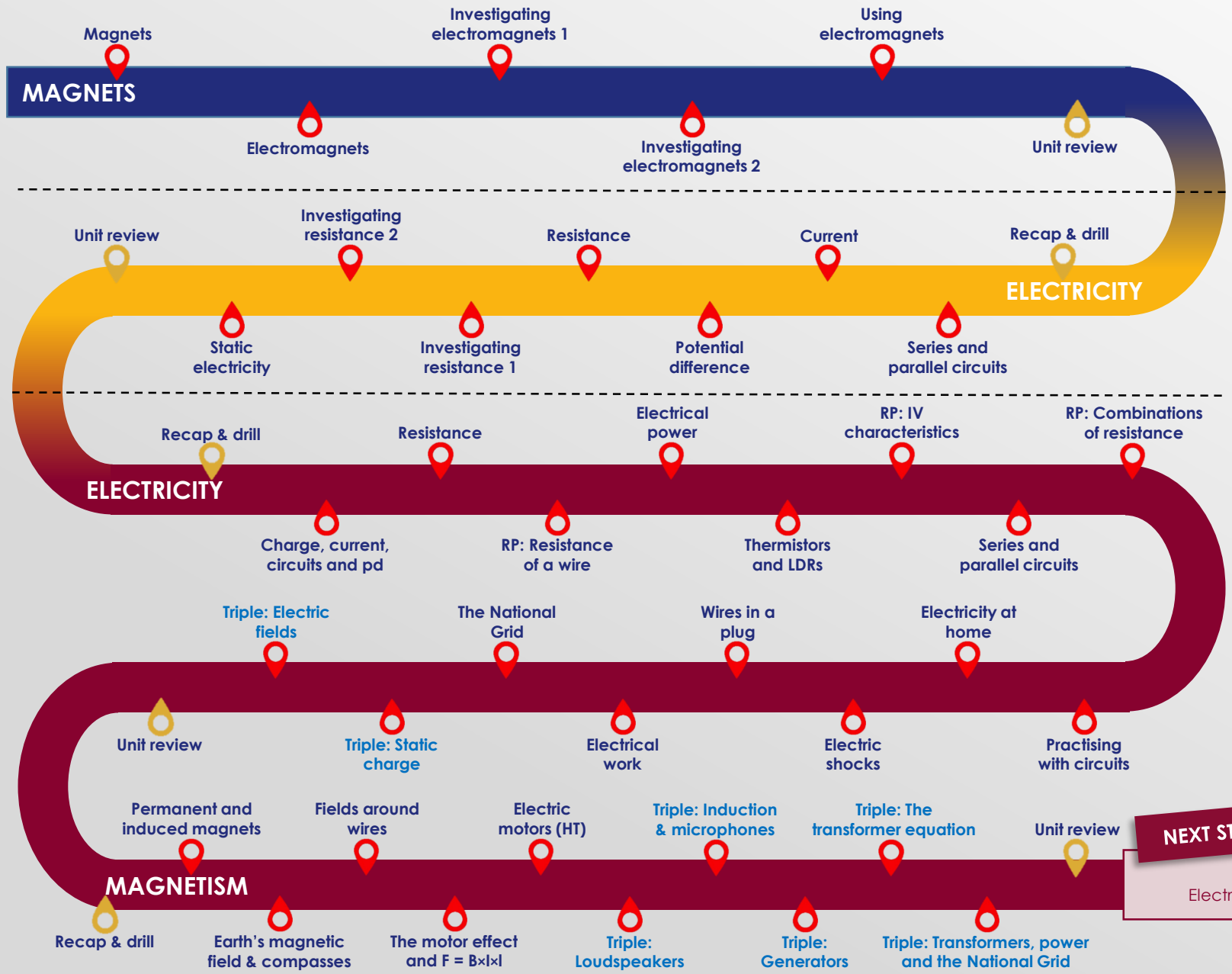
Why are we learning this?
Humans have been writing about magnetism since the 4th century BC – by observing the world around us we have began to understand more about the force of magnetism. There is an important relationship between electricity and magnetism that is key to us understanding how magnets are useful in our everyday lives. There are many applications such as motors, loudspeakers, earphones, MRIs and even children's toys.



ELECTRICITY

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Why are we learning this?
Electricity is all around us--powering technology like our mobile phones, computers and lights. Even when you try to escape electricity, it's still at work throughout nature, from the lightning in a thunderstorm to the synapses inside our body. But what exactly is electricity?

ELECTRICITY

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Why are we learning this?
Electric charge is a fundamental property of matter everywhere. Electrical power fills the modern world with artificial light and sound, information and entertainment, remote sensing and control. If we all continue to demand more electricity this means building new power stations in every generation – but what mix of power stations can promise a sustainable future?

MAGNETISM

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Why are we learning this?
Electromagnetic effects are used in a wide variety of devices. Nearly all the electricity you use has been generated using these effects, and any electrical device with moving parts will use them to produce movement. Even systems that involve control or communications can take full advantage of this.

NEXT STOP!

KS5 PHYSICS:
Electricity & Magnetic fields in KS5 Physics