

What are we learning about?

This topic is all about magnetism. You will learn about what magnets are, how they work and behave, as well as how to make certain types of magnet and their uses. We will also look at how magnets play a huge part in generating electricity and making things move.



Why are we learning about it?

You use magnets every day – fridge doors, handbags, wallets. But you also use a side-effect of magnetism even more often – electricity! Almost all mains electricity is made using electric generators, which use magnets to work!



What new **KNOWLEDGE** will I gain?

Magnetic field, poles and materials and how they are used, electromagnets and how to make them, test them and vary their strength, electric motors and electric generators.



Electromagnets: Learning Journey

How does this build on the **SKILLS** I already have?

As is often the case in physics, knowledge of how to use equations is vital, and builds on the work you have done on this before. Your safe practical skills will also come into play as we use electricity throughout this topic.



What new **SKILLS** will I develop?

Knowledge about how electricity is generated and how motors work is essential, but can only be done with a good grasp on writing and numbers! We will be doing some maths calculations using magnets, and writing about how to make them!



How does this build on the **KNOWLEDGE** I already have?

In Year 7 you learnt about electricity and power stations. One large part of this topic will discuss using electricity to make magnets, and you will also learn how power stations use magnets to assist in generating electricity.