Starters for Science: Y3 Forces and magnets

Starters for Science are 4 activities that parents can use at home to help children develop their science alongside the key learning and vocabulary children are using at school. The activities are easy to resource and provide children with the stimulus to learn and talk about their science topic. Encourage children to use the correct vocabulary as they talk about what they are doing and finding out. Don't forget to share your work on social media

#ScienceFromHome

Key Learning:

Forces are a series of pushes and pulls. Forces can move, slow and stop objects or change an object's shape.

There are contact forces where contact must be made and non-contact forces when the force acts at a distance.

Magnetic forces can act at a distance without direct contact.

Magnets can attract (pull) and repel (push) each other through their north and south poles. Opposite poles attract and matching poles repel.

Magnets can attract certain materials. These materials are magnetic materials. Not all metals are magnetic. Iron, nickel and cobalt are magnetic.

There are different types of magnets. Some examples are bar, ring, horseshoe and button magnets.

Things move differently on different surfaces. Bumpy, rough surfaces have more resistance than smooth surfaces making smooth surfaces much slippier than bumpy, rough ones.

Vocabulary:

move
movement
surfaces
forces
push
pull
contact
Non-contact
distance
magnet
bar magnet
ring magnet
horseshoe magnet
attract
repel
poles (of magnets)
magnetic materials

Force of attraction

Use a magnet in your house to investigate what materials are magnetic and which aren't. Make sure you try some different types of metal.

Were there some materials which surprised you?

Making things move

Take a toy car, or any toy with wheels and give it a push on 4 different surfaces in your house or outside space. Which surface do you think the car will go furthest on? Try it out a few times to find out. Can you find any other ways to make your toy car move?

Forces at home

Take a walk around your house. Can you see any forces in action? Are they pushes or pulls?

Forces can make things move and can make things change shape. Can you find evidence of any of these in your home?

Magnet games

Have you got some fridge magnets and some paper clips? Why not design a game with them? It could be a fishing game or maybe a maze on a paper plate. There are lots of possibilities when you use your imagination.