

Year 3 Topic

Mighty Metals



Mighty metals are everywhere! From earrings to rockets, metals have shaped the world we live in today.

In this learning project, we're going to become fantastic physicists, exploring the world of forces, metals and materials. At a playground, we'll explore the forces that help us to slide and swing. Then, we'll bring toys from home to investigate how they work. We'll look closely at levers and explore how they help us to lift heavy objects. In maths, we'll have fun investigating where we need to sit to make a seesaw balance. To learn more about forces, we'll make spinners, play with parachutes and make magnetic games. We'll also investigate iron, think about why some metals rust and discover the properties of different metals. We will use our artistic skills to create embossed patterns and pictures and design and create jewellery!

Help your child prepare for their project

Metals and magnets are everywhere! Why not hunt around the house to see how metal is used? You could also make fridge magnets using a flat magnet, glue and modelling clay or recycled materials. Alternatively, you could build models using blocks or recycled materials and investigate the force needed to knock them over!

What will you choose to do?

- Go on a magnetic treasure hunt in your house. How many magnetic objects can you find? What materials are they made from?
- Research some of the tasks carried out by robots. What tasks do you think robots could do in the future? What jobs would you like a robot to do in your house? Ask your parents – they're sure to have some ideas!
- Investigate the best surfaces at home for toy cars to travel on: carpet or a tiled floor? Measure the distance travelled on each type of surface and rank each one in order of effectiveness. Make a table or bar chart to show your results. Which force is acting to slow down and stop the cars from moving?
- Use non-fiction books and the web to find out about a metal of your choice. Write down your findings as a list of facts.
- Read stories and poems about robots. Choose your favourite, then write or film a review for your classmates.
- Design your perfect playground. What (real or imaginary) equipment would you include?
- Search the web to find artwork made using metal and make a collage or scrapbook of downloaded images.
- Learn to spell the names of some common metals such as iron, gold, platinum, lead and aluminium. Create anagrams for your friends and family to solve.
- Choose and find out all you can about a musical instrument made from metal. It could be an orchestral instrument or something more unusual. Create a presentation with photos and sound clips of your chosen instrument.
- Design and make a fridge magnet, either as a gift for someone or to commemorate a special event.
- Imagine... you wake up, and all the metal in the world has vanished! Write a story about your day. How is everyday life different without metal?
- Find out about King Midas and his golden touch.

