



5-7



Attractive rubbish

Learn about magnetism and how it can be used. Look also at the activity on sorting rubbish.

What you need

Various magnets, sticky tape, cardboard, scissors, two cardboard boxes, a selection of magnetic rubbish (e.g. tin lids, cutlery, staples, keys, empty food cans, watches) and a selection of non-magnetic rubbish (e.g. empty drinks cans, corks, paper, plastic bottles).



What to do

1. Cover any sharp edges on the cans with tape or cardboard.
2. Arrange your rubbish on a table with the magnets nearby.
3. Investigate which objects stick to the magnets and which do not – you can do this in groups or as a whole class
4. After practising, you can have a class quiz – get the teacher to hold up objects so you can guess whether, or not they are magnetic.

Discussion

1. What happens to some of the rubbish if you put a magnet near it?
2. Magnetism is used to pick out metal objects from other rubbish that has been collected for recycling. Metals such as steel and iron are magnetic and can be picked out of the rubbish on a conveyor belt by powerful magnets. The steel and iron objects are melted down and made into new objects. Up to 25% of all new steel contains recycled steel. Visit www.scrib.org.uk for more information on steel recycling.
3. Most drinks cans are made from aluminium. Aluminium is not a magnetic metal, so it won't be picked up by the magnets in this experiment. However, aluminium is still recycled into new drinks cans.
4. Explore the words repel, attract, poles and iron to find out their meaning.
5. How many uses for magnets can you think of?
What happens to magnets when they are heated? – Ask your teacher to explain.