



# A MAGNETIC RACE



## Equipment

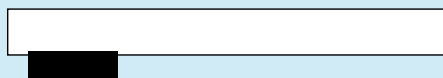
- Paper and scissors
- A large sheet of cardboard
- Crayons or markers
- 2 steel paper clips
- 2 pencils
- 2 small magnets / fridge magnets
- 4 thick books or 4 glasses
- A table

## Facts

Objects made from iron, steel, nickel or cobalt will stick or be attracted to magnets. These are called magnetic objects or magnetic materials. Magnets attract magnetic objects through other materials, for example cardboard, water, glass or plastic. Let's use these facts to make a fun magnetic game.

## How to make our game

1. Draw 2 small cars about 5cm long and 2cm wide.
2. Colour each car.
3. Tape the steel paperclip to the bottom of each car.
4. Draw two courses on the cardboard. Mark the start and finish on each course. Colour in. Place the cardboard on the glasses or books. This will allow you to put your magnet wand underneath the cardboard.
5. Tape the magnets to the end of each ruler. This is your magnetic wand (shown below).



6. Position the two magnetic wands underneath the cardboard, under the two cars, so that you can move the cars along the courses with the magnetic wands. Invite one of your family to race with you. Enjoy!

## What is happening?

The magnet attracts the steel clips through the cardboard, moving them along the race course.

## Challenge

Place a paper clip in a glass of water. Challenge somebody in your family to take the paper clip out, but without putting a hand in the water. Hint: Magnets attract magnetic objects through other materials.