

# CAN YOU MAKE A SELF PROPELLED CAR?



## THE CHALLENGE

People are always looking for new ways to power things.  
Can you create a moving vehicle of your own from items around your house?

### THINGS YOU MAY NEED

- Elastic bands, fan, balloon (propulsion)
- Cotton reels, bottle lids, or CDs (wheels)
- Pencils, sticks, or straws (axles)
- Straws or tubes (axle holders)
- Lids, tubs, boxes, lolly sticks, plastic drinks bottles (vehicle body)
- Other items: plasticine, matchsticks, paperclips, cardboard, glue or selotape, scissors



## INVESTIGATE

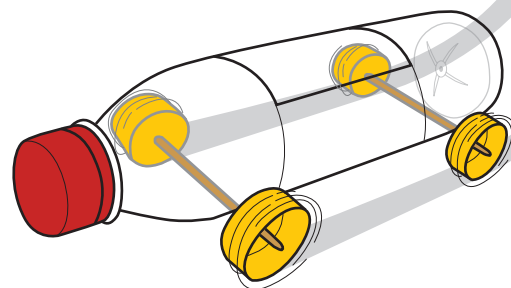
- Decide which one you think you can make together with items you have at home
- Search on the internet for inspiration of designs other people have created for self-propelled cars

## DESIGN & BUILD

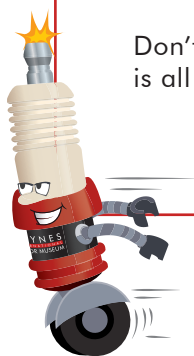
- Design and build your self propelled vehicle. For building from scratch, you will need:
- Wheels
- Axles - anything thin should work
- Axle holders - axles need a tube-like structure to hold them in place while allowing them to move freely. Make sure the car can roll along happily before adding any propulsion
- Vehicle body - the vehicle needs a sturdy frame or solid structure to attach the axle holders and engine to
- Now for the fun bit, propulsion - elastic bands, fans or balloons are all tried and testes methods of propelling
- Test your vehicle on a smooth surface

## PUT YOUR CAR TO THE TEST

1. DID IT WORK AS YOU EXPECTED?
2. HOW CAN IT BE MADE BETTER?
3. WHAT WOULD YOU DO DIFFERENTLY?
4. IF IT TRAVELS, HOW FAR CAN IT GO?



Don't worry if it doesnt work as expected. Designing and engineering is all about testing, you can always keep trying until you've got it right.



HOW DID YOU GET ON? Let us see your creations!

#HaynesAtHome #MuseumFromHome

