

2 Make a walking horse

Harness the force of gravity to go to the races.

What you need

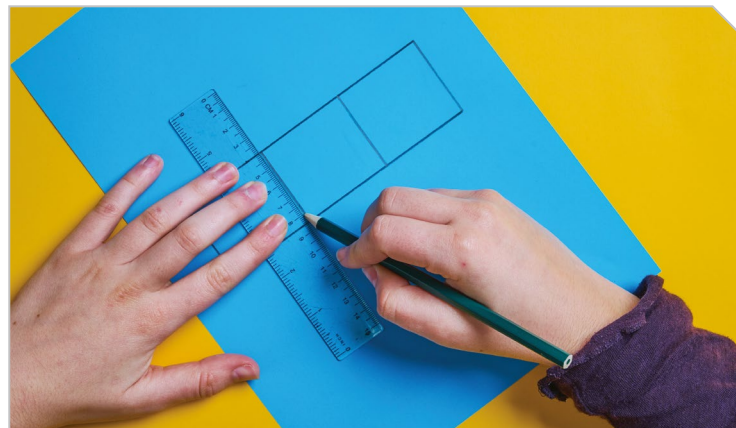
- A4 card
- Ruler
- Pencil
- Scissors
- Cardboard (for the ramp)

How does it work?

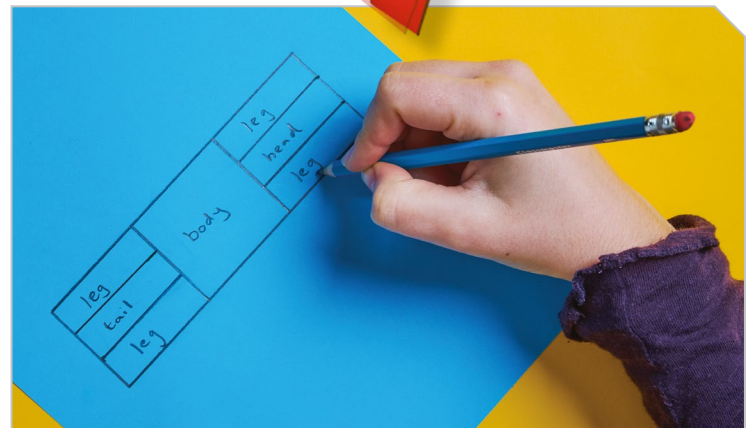
The force that pulls the horses down the ramp is gravity (the force that keeps your feet on the ground). Cutting the legs diagonally makes the model rock from side to side, helping it to “walk” down the slope. This experiment takes trial and error to get right. We altered the angle of the ramp until the horse began to walk down by itself. We also found that surfaces with more friction worked better than smooth surfaces.

WORLD'S FASTEST HORSE

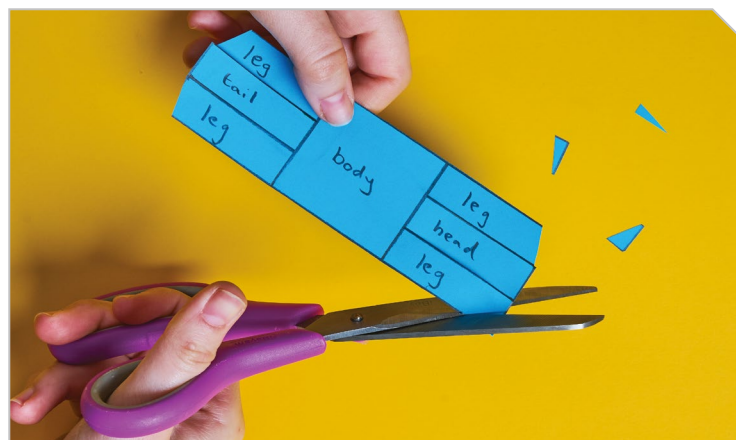
The swiftest horse ever recorded was called Winning Brew. She was clocked running at 44 miles per hour during a race.



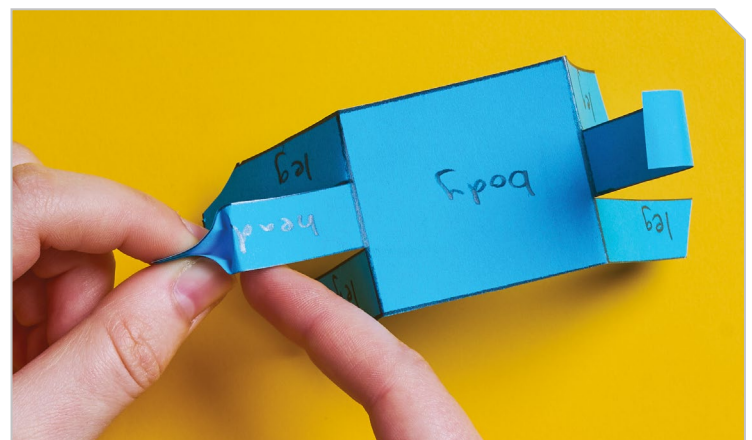
1 Draw a rectangle measuring 15 x 4.5cm onto a piece of card. Now divide up the rectangle along its length into three 5cm sections, as shown above.



2 Divide both end sections into three, by drawing horizontal lines 1.5cm apart. Now, label every section, as shown in the picture above.



3 Cut out your horse. Then, carefully cut along the lines between the legs and the head, and legs and the tail. Trim the legs diagonally.



4 Fold the legs down. Pinch the card together to make a head, and fold the head and tail up. Test your horse on a ramp and experiment until it works.