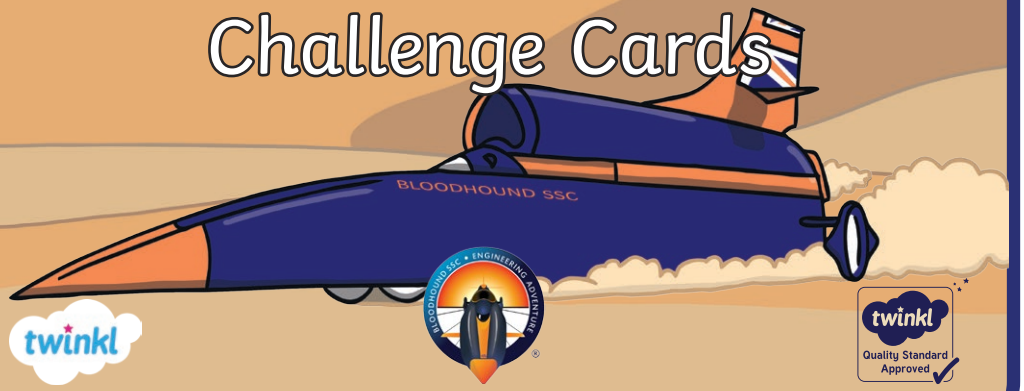
BLOODHOUND SSC STEM

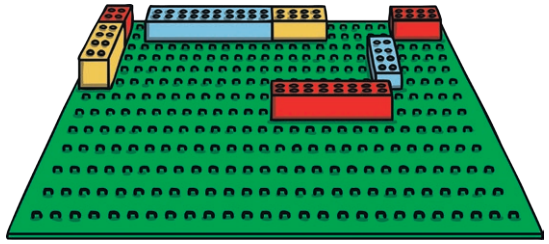
Challenge Cards



1

BLOODHOUND SSC will take just less than 4 seconds to travel a mile.

Using bricks and a board, can you make a track that a ping pong ball will travel down (from the top to the bottom) in exactly 4 seconds?



2

BLOODHOUND SSC has two parachutes that may be used to help it stop.

Make a parachute to slow down a toy car when it is dropped from a height.

What happens if you use different shaped parachutes?

What happens if you make your parachute bigger or smaller?

3

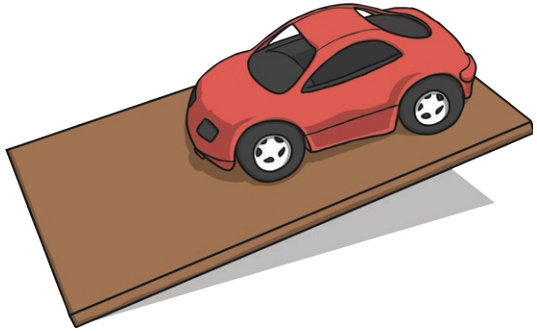
The BLOODHOUND Team have to run the car for 12 miles and then turn it around and run it back to the start again.

Can you program your Bee-Bot to travel 12 spaces forward, turn around and then travel back to the start line?

4

BLOODHOUND has been designed to travel on two very different surfaces – a runway and a desert.

Use different materials on a ramp and time how fast a toy car travels down the ramp.



Which material did the car travel fastest on?

Which material is most like the desert?

5

BLOODHOUND is made from lots of different materials. Some are heavy whereas others are light. Certain materials are waterproof. Some materials are magnetic.

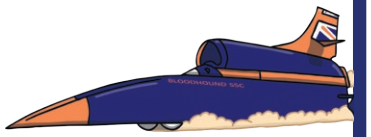
Sort the materials in front of you into two groups.

How did you sort them?

Why did you sort them that way?

Can you sort them a different way?

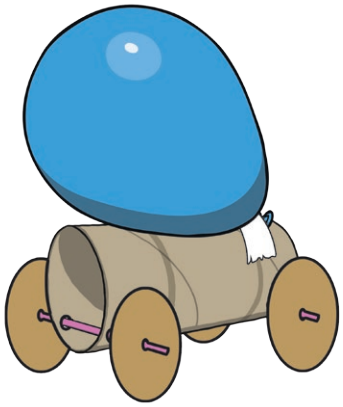
Which would be useful for building a car?



6

Can you make a balloon car using the equipment provided?

You will need: a balloon, straws, cardboard, cardboard tube, sticky tape and scissors.



How far will your car travel?

7

BLOODHOUND is not the only team trying to travel at more than 1000mph.

Design and make a trophy to award to the team which reaches 1000mph first.