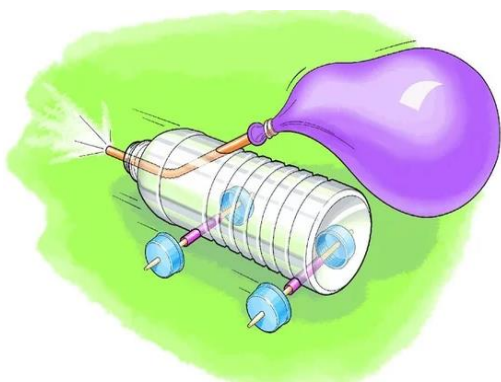


# Scarborough Science and Engineering Week 2018 INVITES YOU TO TAKE PART IN

A FREE and exciting STEM Challenge:

## Balloon car race!



Students and families are invited to take part in the Scarborough Science and Engineering Week 2018 Challenge – ‘Balloon car race’ developed as part of Successful STEM Futures, funded by Sirius Minerals.

The challenge is designed to be completed either in school or at home with the finale taking place during Scarborough Engineering Week taking place 9th – 11th October 2018 at the Scarborough Spa.

For Families, the finale of this challenge will take place on 9th October 2018, 4.30 – 6.30pm at the families evening session. For Schools attending the event, prototypes should be brought to their preregistered session.

### What is Balloon car racing?

Students/families will work in small teams to engineer, design and construct a balloon car, using any of the resources listed below.

### What materials can I use?

- A balloon (latex free)
- A paper cup
- Two plastic straws
- Four round objects to make wheels such as cotton reels, drinking lids or card circles
- Four small rubber bands
- Scissors
- A pencil

### The method

1. Using scissors, carefully cut the cup in half lengthways, to create the car body.
2. Using a pencil, poke two sets of holes through the length of the cup. One set near the top of the cup, and one set near the bottom. Poke another hole in the bottom of the cup.
3. Insert a straw through each set of holes. Then, slide the cotton reels (round objects) on to each end of the straws.

4. Wrap a rubber band around the end of each straw ; these will keep the wheels from sliding off.
5. Push the neck of the balloon through the hole in the bottom of the cup. The balloon should be lying in the cup. Make sure the hole is big enough to let the air out.
6. Blow up the balloon, place on a board surface and release.



**Prizes will be awarded for the following:**

- **The longest distance travelled**
- **The most creative and unique design**
- **The team who can tell us the most science behind it all!**

**How to enter:** To register for the challenge please email [events@nybep.org.uk](mailto:events@nybep.org.uk)

**For schools** entering the challenge, please let us know how many students are taking part.

**For families** wishing to take part, please let us know how many young people and we will register you to attend the finale at the evening session on the 9<sup>th</sup> October 2018

**Important information:** All small children taking part **must be supervised** by an adult.

If you require any further information on the challenge please do not hesitate to contact the Scarborough Science and Engineering Week team [events@nybep.org.uk](mailto:events@nybep.org.uk)