



Sponsored by **ALFED**
ALUMINIUM FEDERATION

BLOODHOUND ALUMINIUM DESERT WHEELS DESIGN & TECHNOLOGY CHALLENGE

Competition Overview

This engaging project is designed to give teachers a practical toolkit to support learning in the classroom. By linking to the BLOODHOUND Project, it gives young people an opportunity to take on the role of engineers by designing their own wheels using recycled aluminium, and solving the challenges involved in a running a World Land Speed Record car across the desert. This 5-hour project can be run as an activity day or several sessions in the classroom. The competition comes with a comprehensive teacher pack which gives all the information and advice you will need.

Get your whole class involved by registering them on our website. All schools, clubs and groups that register will receive a BLOODHOUND poster and a certificate, plus a team certificate template that they can use for each of their teams.

After running the project, submit the results to us for judging. Ten finalist teams will be invited to present their project in May. The winning team will be visited by the BLOODHOUND Education Team for a free Rocket Car workshop for up to 100 pupils at their school, club or group.

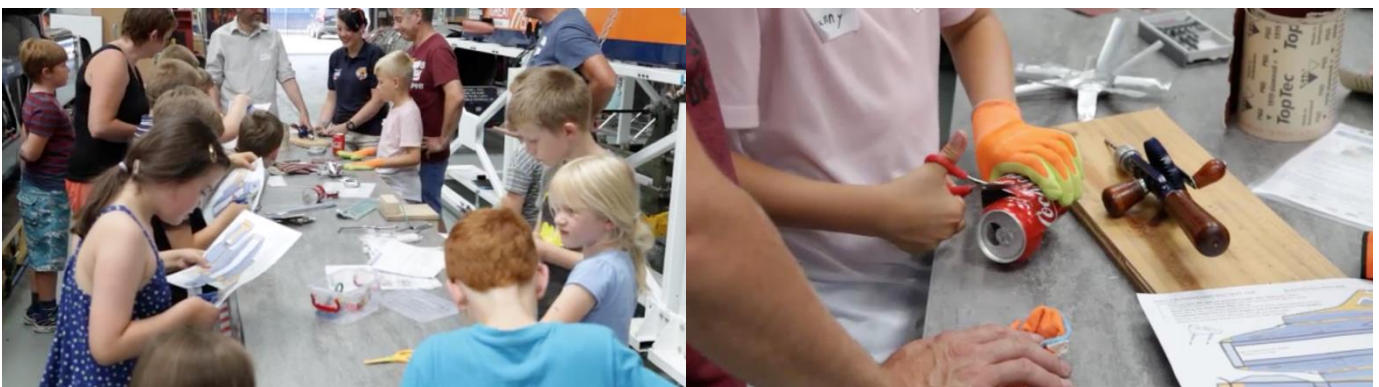
Can you design all-terrain wheels to help BLOODHOUND drive safely on a rough surface?

This challenge is for Years 3-6, working in teams of up to four. It covers a wide area of the D&T Curriculum, focussing on the iterative design process and the six key principles of design: User, Purpose, Functionality, Innovation, Design Decisions and Authenticity.

Teams can find out about the BLOODHOUND Project, and investigate the characteristics of our racetrack at Hakskeen Pan in South Africa.

They can then make their own aluminium wheels using simple tools, test their designs, then adapt and improve them. They can record their findings in a poster and 3-minute video diary.

The competition is free to enter.





What you need to get started

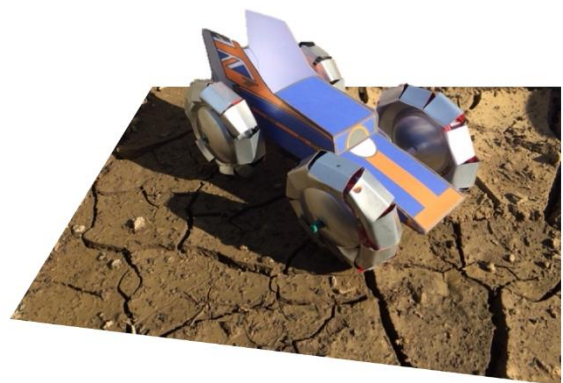
Download the pack from our website which has everything you need for teachers and students.

The pack includes:

- A flyer to help promote the competition.
- Introductory PowerPoint presentation, with videos describing the BLOODHOUND Project and explaining the competition.
- Hints and tips – A breakdown of the different activities within the challenge, the equipment required and suggestions of where to start.
- A guide to working with aluminium in the classroom.
- Risk assessment* – Which you can use as a guide to working safely and responsibly with aluminium in a classroom setting.
- A mark scheme – To help your teams keep on track when they are creating their poster and video diaries.
- A car template to print onto cardboard and allow for fair testing of wheels.
- Research guide, with links to interviews, and informative videos about BLOODHOUND's wheel designs, and the track at Hakskeen Pan.
- Full terms and conditions.

Register your school now on our website at www.bloodhoundeducation.com

Then submit the project of your best team by noon on 31st March 2019.



* We have included a 'generic' risk assessment relating to the activity for the competition. Due to the nature of the task and risk assessing, YOU MUST conduct a dynamic risk assessment with your children working in your environment, to ensure all relevant risks are considered. Each adult carrying out the task must read, understand and date/sign the risk assessment. This should be reviewed annually or sooner if the environment changes. BLOODHOUND SSC Education Ltd cannot accept any liability for any injuries incurred during the activity.