







and win a trip to South Africa with the BBC Micro:bit Model Rocket Car Competition

Open to years 3-11 in England and Wales
Register your school for free Rocket Car Kits

**20th September 2016 – 20th March 2017** 

Final for 15 fastest primary teams & 15 fastest secondary teams – June 2017



## The BLOODHOUND Project

The BLOODHOUND Project is using a 1,000mph world land speed record attempt to inspire the next generation to enjoy, explore and get involved in science, technology, engineering and mathematics.

The project has teamed up with Microsoft to develop its model rocket car programme to integrate **the BBC** micro:bit, enabling it to run a schools model rocket car competition. Microsoft is part of the BBC **Micro:bit** partnership.

Sponsorship has been secured to fund 25,000 foam model rocket car kits in the UK. Extra kits are available to order through www.racefortheline.com.

Rocket car kits will be modified by school teams to run faster. This is a great opportunity to get students excited about **STEM**, work as a team and get hands on experience of programming and aerodynamics in one of the most fun ways possible.





All finalists get their school name printed on the tailfin of the BLOODHOUND car plus:

1st The winning team of students and one teacher from the winning School will win an all-inclusive trip to South Africa to spend a week with the BLOODHOUND Race team on the Hakskeen Pan and enjoy a week of activities in the area. In the event that the BLOODHOUND SSC undertakes a test run or record breaking run during that week the winners will be invited to watch as part of the BLOODHOUND team. 1st place cash prize of £1,000 (including VAT) awarded to the school.

## 2nd £500 for the school 3rd £250 for the school

The goal is simple – the 2 fastest primary and secondary teams to compete in the Model Rocket Car Competition Race HUB open days during Feb and March 2017 are invited to the Regional Finals in March 2017. The fastest primary and secondary team at each regional finals are invited to the national final in June 2017. The winner will be the fastest car on Finals day.

## Make use of the Micro:bit Model Rocket Car Race Hubs

The BLOODHOUND Rocketeer team have trained a network of regional Rocket Car Race Hubs. These Hubs consist of Colleges, Teaching Schools and University Technical Colleges, trained to support the Micro:bit Rocket Car Competition. These hubs will provide teacher CPD race briefings and open race days at no cost for the school. In many instances, Army 'Rocketeers' will support Rocket Car Race Hubs to run in school rocket car workshops and competition events. More details can be found on the website at: www.racefortheline.com

## Teacher materials to support classroom delivery In brief – how the competition works:

- Form as many school teams as you like (no more than 4 students in each team) and register them at
   www.racefortheline.com by clicking on the map, finding your local Race HUB, and joining the HUB community by the 31st
   October 2016. Schools registered by 31st October will be eligible for an allocation of free rocket car kits that has been made
   available by the British Army and other competition sponsors.
- 2. Create your school STEM community at www.racefortheline.com to receive entry codes. This will be linked to your regional HUB, and you can invite your teams to join this community it's a free STEM collaboration space!
- 3. Collect your free allocation of foam model rocket kits from your HUB at a briefing held in November and December 2016. Purchase extra kits from the shop in the HUB community.
- 4. You will need to use your own BBC Micro:bits allocated by the BBC to each secondary school during planning and design. Primary schools can purchase Micro:bits from the shop.
- 5. Program the BBC micro:bit, using the Micro:bit editor inside Dendrite, to measure and capture acceleration and G force.
- 6. Insert the programmed BBC micro:bit into the foam rocket car using the kit supplied by race HUBs.
- 7. Test fire the model rocket using an air pump and/or the supplied rocket motors (one time use).
- **8.** Race your cars on an approved race track set up at your Race HUB, gathering speed and Accelerometer data to load into the leader board in your school community on www.Dendrite.me.
- 9. Post a video for your fastest time into your school community on www.Dendrite.me and link to your time on the leader board.
- 10. The goal is simple The 2 fastest primary and secondary teams from each Race HUB open day, qualify for the regional finals in March 2017. The fastest primary and secondary team from the regional finals will qualify for the national finals in June 2017.
- 11. Full terms and conditions can be found at www.racefortheline.com

**Race for the Line** - The **Micro:bit** Model Rocket Car Competition is kindly supported by:







Full details and how to enter can be found at: www.racefortheline.com