

The Drox racing team

Year 5 STEM club 2024



What is The Drox?

- An Electric car designed and supplied by www.greenpower.co.uk
- The car is driven in competitions by children in Year 5
- Aim is to educate young people in sustainable engineering and technology as well as having fun and use the 'Skills for Learning'.
- Standard car design
 - No mechanical or electrical modifications allowed
 - Bodywork **CAN** be changed and awards can be won for the best!
- The tasks and requirements for the project team include:
 - Organise parents and children for out of school practise sessions and events
 - Maintain and repair the car and get the children engaged in working on it
 - Organise the team on race days
 - Arrange transport for the Drox car to and from the events
 - Arrange somewhere to practice
 - Run practice sessions
 - Optional – design and make new bodywork
 - Raise money for the project (mostly for new parts)
 - Work with the children to develop a portfolio for each event





Getting used to the Drox



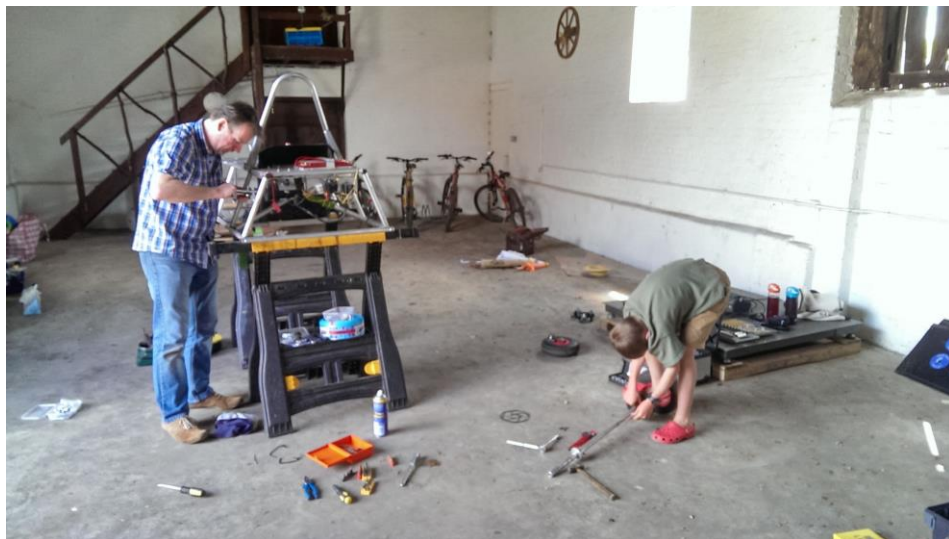
Bodywork







Nuts and Bolts







Sponsorship





The Events

- School enters 2 events
 - South downs College 23rd March 2024
 - Goodwood – Sunday 30th June 2024
- School will register and will receive details which will be forwarded to your team
- 3 types of race: 6x Drag, 6x Slalom and 1x Sprint or Relay. Final race for the top cars in the sprint.
- In 2017 this gave 13 drivers the opportunity to drive at each event.
- At Goodwood they also held a pit stop challenge and lap of champions
- If there are more than 13 then some will only drive at one event or you could raise money to buy and build a second car 😊
- Before each car is allowed to take part the car is scrutinised to ensure it is safe to race. The team will need to make sure the car is prepared to pass this check!
- Race control require all children to wear long trousers, long sleeves, helmet and gloves. You may want to make up team outfits and design logos.



South Downs College TBC



23rd March 2024
South Downs College



Goodwood





Sunday 30th June 2024
‘Gathering of the Goblins’ - Goodwood



The events



Drag
Slalom
Sprint
Lap of Champions
Pit stop challenge







STEM Club on tour!



Pre-visit to Goodwood Racetrack





July 2023







The Awards

- Its not all about the racing.....
- The children can learn a great deal from being involved in the whole project. The more they put in the more they get out.
- The intention is to promote engineering and working as a team.
- Your result can be improved by winning further prizes:
 - Best presented team
 - Spirit of Greenpower
 - Best bodywork design
 - Greenest bodywork – Google “Greenpower goblins” for ideas
 - Portfolio (take a look at the 2015 or 2016 one for ideas – 2017 is on our website)







To get you going.....

- We are sure you will have a great time working on this project and if everyone pulls together as a team and shares out the tasks it can be both rewarding and its not too much of a burden on your time.
- To get you going we have put together a few pages of handover with everything you need to get started and a few lessons we learnt along the way
- We would strongly suggest getting together as soon as possible to assign roles and tasks to make sure everything is in place for the first race in March. It comes around very quickly
- And last of all - Have fun!

Handover from the 2016 Drox Goblin Team



The Drox project is a fantastic opportunity for children to work in a team with their parents to maintain, develop and race an electric car.

We found that starting the project from scratch was a bit daunting and being aware of what has gone on in previous years can be a great help. So to help the next team, we've put together a few notes to get you off to a flying start!

Have fun.

Greenpower Formula Goblin

The Drox is one of many Goblin cars that have been built and raced by school children (aged 9 – 11) across the country. All of the cars are very similar and are based on the kits supplied by The Greenpower Education Trust who run and administer the races. The Trust's objective is to advance education in the subjects of sustainable engineering and technology to young people.

Their website (www.greenpower.co.uk) explains more about the technical details of the cars and the races that they organise

