

Families competed to design and build a wind turbine

Visitors to the science centre in Coronation Square took part in an engineering competition on Saturday 17th June.

Competitors were allowed to use a variety of recycled materials to build a wind turbine that was capable of lifting a load of 60 grams from the floor to the table. Each team spent time testing and improving their model before the turbine was officially timed. Common problems included the string getting caught up with the blades or the wind being too strong and pushing the blades over. Each team solved these issues in different creative ways. However, the modification that separated the two fastest wind turbines from the rest, was the size of the bobbin. Whereas, most of the models wound the string about a thin piece of dowel, these two used a bobbin with a wider diameter so that the load was lifted after fewer complete revolutions.

The winning turbine, built by Rachel (12) and her dad (Steve), lifted the load in 1.87 seconds. In second place, with 2.22 seconds, were Jorja (9) and her mum (Alison). The next fastest took over six and a half seconds. The prizes (including a set of magnets, a pocket volcano, glow-in-the-dark planets and a slime making kit) that were donated by Waterstones Gloucester will be shared between these two teams.

Dave Watson, director of Cheltenham Science Group, says, "We have opened the science centre because we know how influential our families are when we choose our careers. There is a national shortage of STEM workers and we need to show our children that we value STEM skills like team work and problem solving. It was fantastic to see families working together on the challenge, especially over the Father's Day weekend."



Left The winning team Rachel (12) and Steve.

Right Second place Jorja (9) and Alison Bridgman

-ENDS-

Contact information

www.cheltenhamsciencegroup.co.uk

<https://www.facebook.com/Cheltenhamsciencegroup/>

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or contact Kirsty or Dave Watson 01684 298 525 (mobile) 07725 003 443

Visitor Information

Address: 68 Edinburgh Place, Cheltenham, GL51 7SE

Opening times:

school holidays: Tuesday - Saturday 10-4

term time: Saturday 10-4, Tuesday & Friday 2-5

Admission:

FREE for children aged 0-4

£2 per person over 4

£7.50 for a family (up to 5 people)

£20 annual family pass