



Issue 4 - 28th^t May 2004

URGENT NOTICE - Permission Letters

We **NEED** your letters **URGENTLY**, we only have 3 weeks to go until the celebration day, and we are still missing a few.

We suggest the following paragraph for your letter "On behalf of the Governors of [school name] I confirm that it is agreed that any videos or photographs taken in regard to the project in school and on 22nd June at Enginuity, may be used to disseminate the Crossover project in publications and or websites."

We aim to arrange for a Live Web Broadcast of the Celebration day, back to schools and Education Specialists; for Regional News Programmes and newspapers to cover the day and to create a secure project public website on the WMnet portal, where we will post resources and questions / answers and photos, videos from the project for others who might want to replicate the activity in other schools. *The Webcast will be through a secure network, to authorised personnel only.* Without your permission letters we will be unable to do this.

Disabled Expert - One of our students here has told us how her disabled father has just visited Ironbridge. He would be willing to answer any questions about how he found his visit, and any difficulties he had. To ask a question please email becckiepal@yahoo.co.uk and copy josephine.jones@uce.ac.uk

START DATES

Keep us informed of your start dates, we know emailing has started for many of you, but don't officially know you have started.

Have you contacted your Local Newspaper to cover the Project?

If you need to know details of your local paper and who to contact, please email. josephine.jones@uce.ac.cuk

Quiz

Where was Thomas Telford born?

Crossover Group Email. Please use this email sparingly to save inbox space. It should be used for items you want to send to ALL schools. When contacting your partner school use direct email addresses and copy Chris.Howles@emu.org.uk and Josephine.jones@uce.ac.uk in the message so we get a picture of what is going.

Celebration Day 22nd June 2004

Amended Programme

- 10.31 Arrive at Enginuity
- 12.0 Introduction to the Day
- 11.16 Judging Commences, (individual timetables)
- Best Buggy / Bridge Builder co-operation (electronic)
- Best designed Buggy / Bridge combination
- Best designed Buggy
- Best designed Bridge
- Best example of Team co-operation Bridge / Buggy
- 2.45 Bridge and Buggy Strength test
- 3.15 Prize Giving
- 3.45 Depart for Schools

Team Names

1	Ridpool - Tibberton
2	Grange Farm- St John the Baptist
3	Manor Way - Mordiford
4	Five Ways - Perryfields
5	Haslucks Green - Blue Coat
6	<i>Up and Over the Brook</i>
7	Comberton Middle - Sutherland Primary

Don't forget to email Josephine with your Team Name.



Design

I.D.E.A.S.

- What restrictions does the Ironbridge Gorge give your bridge?
- What are the needs of a person with walking difficulties, how can you meet them?
- How wide is their Bridge? How wide is their Buggy? Don't forget to ask!



Making

- Try different strengths of card, see how tightly you can roll them to improve their strength.
- What material makes the best wheels?



ICT

- Have you thought about how you are going to do your presentation yet?
- If using Power Point, do you know how to include digital photos or movie clips?
- Send photos to your partner school.

Ask the Expert

Please encourage the children to email their questions to Ask the Expert.

Buggy Question

Question why worm gears would be useful if you build a model buggy?

Answer The main advantage of a worm and wheel gear combination is that a high reduction ration can be achieved by only 2 gears. This means that the speed of the motor shaft, (the input shaft that goes to the worm gear), can be reduced significantly on the output shaft. This can be calculated by seeing that 1 revolution of the worm gear equals 1 tooth movement on the wheel gear. So by selecting the number of teeth on the wheel gear you select the reduction; that is for a 20 tooth wheel gear to make 1 complete revolution the worm gear has to make 20 revolutions, a reduction of 20 to 1 or shown as engineers write it 20:1.

Bridge Question

Question I am m trying to find out if there are any restrictions on the thickness of card for making the bridge. On the specification it only states card and there is a lot of difference between the strengths of different weights of card. Any advice?

Answer
We think that thicker card should be allowed, particularly as it was not specified in the first place. Obviously, the thicker and bigger the card, the easier to construct the road way - thick card won't roll easily and so will be no good as tubes. However, please note that the judges will be looking primarily at the structure of the bridge and the innovative way materials have been shaped and joined together, which is why we have limited the allowable materials to paper and card, not wood

The Answers were quite long so check out the website for the full Answers

If you have a question, simply email crossoverexpert@wmnet.org.uk and your query will directed to an expert who will email back with advice. This question and answer will then appear on the website www.wmnet.org.uk/mycommunities/. We welcome questions from both Teachers and Children.

PACKAGES AND SOFTWARE AND WEBSITES

<http://www.dtonline.org/apps/menu/app?1&0> gives lots of ideas for bridge structures as well information for all buggy designs.

www.sln.org.uk Staffordshire Learning Net (an LEA site - lots of useful info)

Google searches can prove very useful, for example famous bridge builders.

The inclusion of products here does include an endorsement but should be viewed as a recommendation only.

CROSSOVER COMMUNITY WEBSITE

There is a project community where people can find resources and [join in](#) discussions, and check out all the questions that have been asked so far, you may find just the information you have been searching for.

www.wmnet.org.uk/mycommunities (when choosing your nick name for the site, please try and relate this to your school name as it helps who is joining in the discussions.)

We would love to have some input from the schools, progress photos (but don't give away too much), email any suggestions to josephine.jones@uce.ac.uk, and don't forget to keep checking your emails and the website www.wmnet.org.uk/mycommunities/