

Inside this issue:

Flying Start Challenge 2

Primary Explorer Dome 2

Pet Club 3

Year 7 Cross Country Success 3

Dates for your Diary 4

Go4SET Competition 4

School Show Tickets Info 4

REMINDER

Final deadline for D&T GCSE Coursework (RM, Textiles, Electronics & Graphics) is FRIDAY 16 MARCH. There are 6 school weeks left!

Mangotsfield Newsletter



Issue 9

27 January 2012

Rolls-Royce engineers start competition Year 8 students to design and build fan-powered buggies

Rolls-Royce engineers visited a group of Year 8 students recently and introduced the FAN-tastic Challenge. Using only two batteries, an electric fan and some other bits and pieces, teams of Year 8 students will design, build and then race their electric buggies. The winner of the class will go on to compete against other schools and perhaps reach the national finals.

The engineers gave a presentation about Rolls-Royce and what the company does, explaining that they no longer make the



famous cars (although they receive quite a lot of money from BMW who now make the cars using the Rolls-Royce name). The company now concentrates on making engines. These engines are not only used in aeroplanes but in a wide range of applications such as pumping natural gas.

Design skills

The Year 8 students also tried their hands at some simple experiments to help them understand the different forces and design skills needed to improve the performance of their buggies.

To show the effectiveness of blown air as a means of propulsion, students blew up balloons and just let them go—the rapidly

deflating balloons travelled very quickly (if in a rather random direction!) across the room.



Air resistance

Another experiment showed the effects of drag on different shaped objects. Two pieces of paper of the same size and weight were dropped from the same height to the floor. One piece, however, was folded in half. The unfolded piece took quite a lot longer to get to the floor, showing that its air resistance was much greater.

The students will meet every Wednesday after school in Sc4. The engineers will be coming in next term to judge the first round.



Good luck to the students taking part and many thanks to the engineers from Rolls-Royce for coming to school.

Flying Start starts flying

This year's Flying Start Challenge is off the ground with the Year 9 students making great progress with their glider designs.



Some models are at the test-flight stage and the students will soon be racing them in the school hall and tweaking their designs to improve performance.

Technical advice

The MBDA engineers have been coming in every week to help the group with technical advice and guidance. The students will compete against other schools on 8 February for a chance to go to the Fleet Air Museum for the National Finals on 28 March.



Primary children explore space

The Explorer Dome science show landed in the school hall again this month. Five classes of Year 5 students from our local primary schools had a chance to crawl through the dark tunnel to find themselves inside the surprisingly spacious dome.

Science experts

Inflated with air, like a bouncy castle, the dome houses a projector, a super sound system and two science experts who never seem floored by the many questions they are asked. Barley Close Primary, Emersons Green Primary and The Tynings

Primary saw shows on space, the solar system and the stories behind the names of some of the stars and their constellations. Two classes from Mangotsfield Primary school were shown how sound is really just a series of vibrations.

Elephants

We found out how elephants can hear very low sounds (slow vibrations) and use their feet to hear; how, if you put your finger in your ear and tap your elbow you can hear it because the sound travels right through your bones and that dog whistles are very short because they



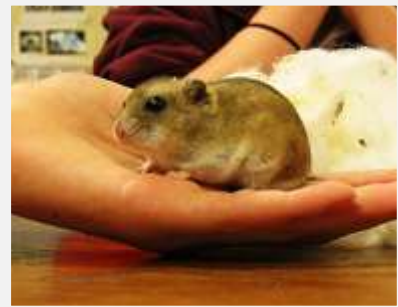
are designed so only dogs and not their owners can hear the high pitched sounds (fast vibrations).

Many thanks to the Explorer Dome the presenters and their great science shows.





Pet Club



FIND THE RIGHT JOB FOR YOU

APPRENTICES @ Bristol - 9 FEBRUARY 2012



European Union
European Social Fund
Investing in jobs and skills

Come and have a go...

This event will host all of the region's major Apprenticeship providers in one space. You will have the opportunity to try new skills, allowing you to get a very real understanding of the Apprenticeship route, and just what is on offer.

COME AND FIND OUT MORE

Where
@ Bristol
Anchor Road
Bristol BS1 5BD

When
9 February 2012
4pm-7pm

APPRENTICESHIPS JOBS INCLUDE:

- Accountancy
- Business Administration
- Care and Childcare
- Catering and Hospitality
- Construction
- Creative
- Customer Service
- Hair and Beauty
- Engineering
- Horticulture
- IT
- Motor Vehicle
- Retail
- Sport and Leisure
- Warehousing
- Youthwork
- Plus many more...



More Sports Success

Congratulations to Shelby Kendall (Year 7), who ran in the **Avon Schools' Cross Country Championships** on 14 January and came 10th in the county.

She will now go on to run in the national competition so we wish her good luck.





MANGOTSFIELD
SCHOOL
AN ENGINEERING AND
SCIENCE COLLEGE

Please give any feedback or
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www.mangotsfieldschool.org.uk

Can you or
someone you
know help to
supervise our
students at
lunchtime
from 1.00—
2.00 pm?

We would like
to hear from
you even if
you are
unable to work
every day.

Please
contact the
HR office on
01454-862740
for more
details.

Dates for your Diary

Wednesday 1 February	School Show—Storyville 7.30pm
Thursday 2 February	School Show—Storyville 7.30pm
Friday 3 February	School Show—SOLD OUT!
Tuesday 7 February	Celebration of Achievement Evening 7pm
Thursday 9 February	Yr 7 TAG Launch 6pm
Friday 10 February	Last Day of Term 3
Monday 20 February	INSET Day
Tuesday 21 February	Term 4 starts for students, Week A



Year 8 go for Go4SET science and engineering competition

The students taking part in the Go4SET project are all Year 8s in the Tag Team for Maths, Science and D&T.

Go4SET (Science and Engineering Trust) links teams of Year 8 and Year 9 students with companies and universities to give them a 10 week science, technology, engineering and mathematics experience.



Make a model

Many schools from the area compete in a design competition in which they both have to write a report, make a model and give a presentation. The presentation of their ideas is on Wednesday 1st February at the Frys Centre in Keynsham.

Each team has the help of an engineer from another company as their mentor during the project.

M20 and *The Green Mangos* are our two Mangotsfield teams. *The Green Mangos* have chosen The Eco Classroom project, where they must design and model an eco-classroom, reducing energy consumption.

Reduce tap water

The other group, *M20*, have chosen the project "Water and Your School", where they have to identify a suitable building or part of the school and look at ways to reduce how much tap water is used through reducing waste and/or by finding water from other sources.

The Green Mangos are: Mike Smith, Harry Dyte, Jacqui Dwyer, Ella Bailey, Georgia Tucker, Megan Harris and Emily Hanks.
M20 are: Tom Smith, Lucy King, Jack Milton, Dan Weakley, Emily Lockwood and Rachel Jakes.

The School Show this year is: "Storyville"

Performance Dates:

1st, and 2nd February 2012 (Fri 3rd SOLD OUT)
all performances start at 7.30pm

TICKETS ON SALE at the "student reception desk" break and lunchtime

Prices: £2.50 for children/students/OAPs, £5.00 for adults