

## The Cams Hill Science Consortium



The Cams Hill Science Consortium continues to actively involve over 30 teachers from different schools across three counties.

Generous sponsorship from

both the AstraZeneca STT and Gatsby TEP has enabled us to fund and co-ordinate a programme of classroom based research projects targeted towards improving teaching and learning in Science across all age groups from Key Stage 1 through to Key Stage 5.

We regularly run teacher training at the Science Learning Centre at Southampton University.



**Science**  
LEARNING CENTRES

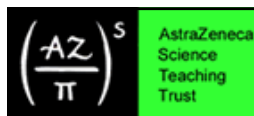
These are based upon cascading and sharing our highly successful "Levels Mountain" and "Thinking Frames" approaches. We have been approached by the Science Learning Centres in Bristol, London and York and hope to be able to offer these courses there in the near future.

The findings from some of our projects within the Consortium have enabled us to contribute three chapters towards a new

academic book on teaching Gifted and Talented Science students being compiled by Dr Keith Taber from the University of Cambridge.



Working in partnership with the AstraZeneca Science Teaching Trust, the Consortium has just embarked upon a new project to create a new online teacher training resource to support teachers improving Science lessons KS2 into KS3.



## Developing and sharing new Resources



Currently, the teachers within the Science Consortium are trialling and evaluating a new teaching and learning tool. This has been developed with the aim to improve pupil understanding and progression in Science from KS1 through to KS3.

These "Topic Placemats" and

"Organic Displays" map the curriculum and serve to assist teachers' planning and help children acquire and apply scientific vocabulary and ideas.

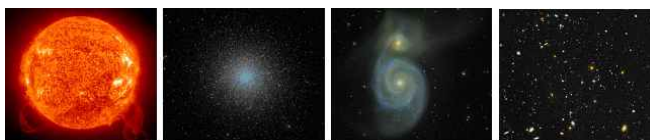
In addition we have just started a new blog website which links the Science clubs at several schools across the county and is showing great potential.

See [www.thinkingframe.com](http://www.thinkingframe.com)

Further details will follow in our next Update leaflet

## Public Understanding of Science

Last year, we worked in partnership with INTECH (the hands-on Science and Technology Centre in Winchester) and Prof Bob Nichol (from the Institute of Cosmology and Gravitation at the University of Portsmouth) to help design and create a new interactive space wall exhibit.



Opening late last year, this exhibit is a huge 10m long wall with images of stars, galaxies and deep space taken by the Hubble telescope. At each picture the visiting member of the public can pick up a torch and shine it a different area of the large pictures. As they highlight a sensitive area of the image, an audio commentary explains what they are looking at. There are different torches which can be used to give different levels of explanation from ages 4 through to adult.

The Science Consortium not only helped choose suitable images, but we were able to use our knowledge of the Science curriculum to write and record the audio explanations for the different ages groups. Pupils and staff from Consortium schools, including Uplands Primary, Court Moor School and Cams Hill School were used to record the commentaries. The exhibit is now one of the most popular exhibits at the centre and we have plans to collaborate upon a similar project with INTECH in the near future.

For further details or to visit INTECH, please see their website [www.intech-uk.com](http://www.intech-uk.com)

## Contact Details

Should you wish to contact us for further details of our work or specific details of any of our projects, we would be delighted to hear from you.

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## Cams Hill School

### Specialist School Update No.3

March 2007



The Lawn Tennis Association



At Cams Hill School we value all children as individuals with unique talents, skills and abilities. We are committed to supporting all children to do their best through academic, artistic and sporting achievements.

Over the next four years, our Specialist Status will enable us to develop facilities and resources to enhance teaching and learning across our whole curriculum and that of our partner schools. We are working towards becoming a centre of excellence in Science and Mathematics education and to be able to disseminate best practice at a regional and national level.



## Yr 8 Science Challenge Network

A new group of pupils has been invited to join the Science Challenge Network. This is an after school club which began by researching the Science and ethics behind the new medicine of face transplantation. This task has challenged the pupils' written and verbal presentation skills, their ability to research effectively and to evaluate the work of others in a specific, yet supportive manner.



### Stem Cells



What are they?  
Where do they come from?  
What can they do for us?  
Where might all this be going?

Prof. Tom Fleming  
University of Southampton

In January, eight members of the group represented the school in the Yr 8 Science Challenge Day at INTECH. This Challenge, organised and ran by The Cams Hill Science Consortium, gave the pupils the opportunity to meet and work

with scientists from Southampton University and teams of other highly able Yr 8 pupils from five other Science Specialist schools across Hampshire. The challenge focused upon researching and debating the fascinating Science and ethics behind the potential offered by advances in stem cell technology.

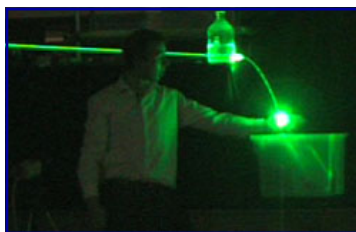
## Primary Partnerships

Following discussions with the Science co-ordinators from our four partner primary schools, we are delighted to have been able to use our Science Specialist funding to begin to purchase and provide resources to contribute to enriching learning Science at their schools. Data loggers and digital balances have also been purchased for use as a shared resource.



## Laser Light Show

We were very pleased to host a laser light show presented by Light Express – a team of academics from the School of Physics and Astronomy at Southampton University. Over 160 people attended the show and the evening began with a 10 minute laser light demonstration, then went on to explain and demonstrate the Science behind lasers and how they are used to transport vast amounts of information across the globe via the internet.



The evening finished with another laser light show to music. The powerful lasers gave a fascinating display and addressed topics in Key Stage 3 and 4 Science.

*'It's great that we have opportunities to have Science shows and share in the fun of Science.'* – Rachel Hicks, Cams Hill Staff & Parents' Association.

*'If he had been my Physics teacher I may have passed my 'O' – level. Very entertaining and explained in simple, understandable terms'* – Sally Rumble, Parent

## Interactive Whiteboards

Over the past year, we have invested specialist funding to equip several labs with a new projector and interactive whiteboard. These have provided access to a whole new level of resources via CD, the internet and our new interactive e-Science animations to enhance GCSE lessons.

"People want to write on the interactive whiteboard, so they answer more questions." Lindsey Wilkinson Yr 9

"You can get more information from the internet and it is fun" Charlie Cripps Yr 9



## Yr 10 Science Ambassadors

A fantastic time was had by all in December when the Year 10 Ambassadors took their first themed idea to the after school Science club at Harrison Primary School, to "bring Science alive for primary pupils". Pauline Patterson, Hampshire's Deputy County Inspector/Advisor for Science, was really enthused by their work. *"The Science Ambassadors were stars!! It was absolutely brilliant to watch the young people from Cams Hill interacting with the Yr 6 pupils from Harrison Primary, sharing Science experiences together. It was an inspiring evening, a real 'wow' session."*



Our new digital microscope was used to share interesting finds with the whole group on the interactive whiteboard. *"It's very interesting because we get to see all the detail. They help you make it better and more fun."* Yr 6 Pupil Harrison Primary School

A big thank you to the Ambassadors and to Harrison for letting us visit and share our work.

## Mathematics for the whole Family



The Mathematics Department recently held an open evening for parents of Yr 7 pupils. There were Workshops that informed parents about the Yr 7 Mathematics curriculum and gave them ideas for some activities they could use to support their child's learning at home. The most popular

Workshop was definitely the Useful Websites session. In fact, some parents got so involved in playing maths "Deal or No Deal" that they didn't want to leave at the end of the evening!

The feedback from the evening was very positive and we hope all the parents who attended found it useful and have been busy playing maths games at home!