**Norfolk** County Council at your service

# TECHLINK

# a newsletter for science technicians

No: 60 December 2005

## NORFOLK TECHNICIAN WINS NATIONAL AWARD

The Salters National Awards for Science Technicians 2005 has been won by Linda Thorpe, science technician at Aylsham High School. I am really pleased for Linda and it is good for the school and Norfolk to get national recognition and some publicity. Hopefully, this will improve the confidence of other technicians in Norfolk and we can go on to win other events? From a total entry of sixty, Linda succeeded in reaching the last seven. The last seven then had school visits from three Salter judges who interviewed the Headteachers, Heads of Science and saw the technicians at work. From these seven Linda was successful and awarded the National award. She now has to receive her £250.00 cheque at an award ceremony at Salters House. Well done again – I knew we had some of the best technicians in the Country!!!

#### **Electronic communication or nothing!**

The post room at County decided to stop all future paper copies of the CLEAPSS Bulletin being delivered to schools in Norfolk. Being aware of the problems this



might cause I was concerned that vital health and safety information might not reach those at the chalk face. With support from the health and safety officers at County Hall and the science advisers, we argued our case with the Post Room and eventually it was decided to continue as before, but with a timed phaseout for paper copies. This is a wake-up call for all those departments with no internet access in the preparation room. With no direct access you will have to rely on others to download science information and pass it on to you. For those of you new to this I will try to explain what happens! On the Norfolk County Council Esinet site there is an icon called ecourier. Clicking on this brings up all the information provided to schools electronically. Select the ones relevant to you and read. You can then save what you need to your own storage medium or print it off. Don't forget to scroll down to find more information! Your schools make their own IT decisions so you will have to put your case to those concerned and use health and safety as a very relevant argument. If you have real difficulties with e-communications please let me know but please work with your head of department to plan your future strategy. The CLEAPSS CD-ROM is another very valuable asset, made much more so, when it has been networked and is available to all science teachers. Contacting anyone in Children's Services is also much easier electronically and probably gets a quicker response. The email format is the same for us all,

firstname.secondname@norfolk.gov.uk just make sure you spell the names correctly or it will 'whiz off' somewhere else! john.mallott@norfolk.gov.uk

### Imperial War Museum, Duxford

I am the Science and Technology Teacher at the Imperial War Museum, Duxford where we offer an extensive programme of activities that complement our internationally acclaimed collection of aircraft and other vehicles and machinery.

The activities cater for all key stages and cover aspects of the National Curriculum including, forces and motion, materials and their properties, mechanisms and structures. All of the activities include demonstration and hands-on elements and in most cases follow up materials are provided. The sessions take place in our dedicated Education Workshop using specially made exhibits and apparatus.

In addition to the main programme we provide tailor made activities, special one-offs and sessions aimed at gifted and talented students.

The activities coupled with the exhibitions and the site itself provide an experience not available in school and offer very good value as entry and the teaching sessions are free.

Further information can be found at http://duxford.iwm.org.uk/server/show/nav.00d00c Our Primary Science and Technology practical workshops offer a chance for primary school teachers to try out the range of Science and Design Technology activities currently offered at the Museum. For example, the day could include a choice of practical workshops for teaching KS1 or KS2 pupils related to structures, cont...



**'freebies'** If you want some 'freebies' and have time to enter a few competitions try the scienceonestop website.

http://www.scienceonestop.com/wrapper.asp?action=kitpot

materials, forces, mechanisms and flight, and an opportunity to trial materials for use on site by your pupils. (£20 per teacher or £15 per head if more than one from any one school).

If you have curriculum groups or similar I would be interested in coming to talk at one of their meetings. I would also be more than willing to discuss ways in which we can help with the specific requirements of staff in your county.

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Providing Science and Technology with WOW!

#### **MERCURY Scare**

I heard a horror story on Breakfast TV. A family bought a new clinical thermometer and dropped it on to the kitchen floor. The mercury spread all over the stone floor. They rang the fire brigade, who came with full chemical protection. The family were evacuated from their home while the environmental, cleanup company, dealt with the spillage and removed the contaminated, wooden furniture, carefully wrapped in polythene! The £2.00 thermometer cost the family £7000! Just as I was about to have a fit, and rush to work, to answer all the phone calls, the TV doctor came on and gave a very level headed and scientific response about the risks to health from mercury. In fact, he sounded very much like a representative from CLEAPSS and said things like 'rather over the top' and explained that although mercury is toxic, it is very difficult for mercury to cause harm to the body. Science scare stories can soon turn school science from an exciting and memorable experience, to boring theoretical lessons. This is a cautionary tale, for without CLEAPSS providing risk assessments and common sense approaches, many practical experiments and lively demonstrations would already be banned!

Below is a useful link to an ASE article about mercury: http://dwb.unl.edu/Teacher/NSF/C14/C14Links/www.a se.org.uk/therms.html

#### **Marshmallow Man**

This provides a variation for the vacuum in the bell jar experiment. I have not tried this, nor seen it, but it sounds fun! Try the Marshmallow Man in a vacuum. Make a frame from an old wire coat hanger, which stands up and fits inside the bell jar. It is shaped like a stick person so use 7 marshmallows; one for the head, 2 hands, 2 feet and 2 for the body. The pupils will think it's wonderful as it expands under a vacuum and when you let the air back in, it shrivels up.

#### Questionnaire Regarding Radioactive Materials in Schools

Hopefully, most schools will by now, have completed and returned this questionnaire. I am sorry to be so persistent but the new Radiological Protection Advisor requires this information. If you could check that your RPS has recently sent me a completed form listing your radioactive materials it would be a great help. If this all sounds a bit vague to him/her give me a ring, or email me, and I will fax you a copy. The new RPA is Monty Guest and he is based in Suffolk. We are lucky to have him, as he has been working closely with CLEAPSS, to produce their Guide L93. He is therefore very familiar with how schools operate. My title is now Radiological Protection Officer (RPO), I do the same job as before i.e. monitoring Norfolk schools but I also have to transfer this information to Monty. He has already picked up that a few of you transport radioactive materials between schools and that there are transport regulations to be followed. Although I believe those schools involved are behaving within the law, I have had to send out details of the labels and notices required during transportation. If you have any queries regarding the use of radioactive materials please ring me, preferably before contacting Monty, via CLEAPSS. If Monty has to visit your school there will be a considerable charge!

CLEAPSS - 'Radiological Protection Supervisors in Schools' All day course, Kings Lynn Teachers Centre. March 7th 2006 ... look out for the flyer.

#### Science Video Network website

The above site is compiled by a group of enthusiastic UK science teachers, who enjoy using digital video resources in their day to day teaching. The site can help you in two ways: firstly by helping you to obtain copies (in MPEGI) of broadcast programmes that you may have missed, and secondly, by giving you detailed advice and suggestions covering the editing and encoding of video clips. Whether you want to make time-lapse movies, create your own 3D simulations, enhance the quality of old recordings or improve the video resources of your department, you will find the answers here!

#### The ECLIPSE

It was very cloudy on the morning of the eclipse, so I missed it! If you want to see a very good animation of the moon and the sun in relation to the earth, visit the following websites.

http://www.shadowandsubstance.com/ or link from www.spaceweather.com

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