General:

Fair Test Posters (1-4) Flexicam + Microscope (1-5) Junior Microscopes (1-3)

Compound Microscopes (3&4) ESP (2-4)

Spectrophotometer (5)

Physical processes:

General Forces (1 & 2) Measuring Forces (1-4)

Friction (2 & 3)

Cars & Ramps (2 & 3) Solar System Model (2-4)

Telescopes (2-4) Sound (1-3)

Electricity (1 & 2)

Life processes

Skeleton (1-4) Torso (1-4) Model Eye (1-4) Heart (1-4)

Healthy Eating (1 & 2) Micro-organsims (1-4)

Smoking (1 & 2)

Environmental Science (1-3)

Seeds (1-4)

Plant Movement (2 & 3) Biotechnology (4 & 5)

Materials:

Materials (1-3) Rocks & Soils (1-3)

Full kit information available at www.tsn.org.uk under Kit Club, or contact tsn.kits@bbsrc.ac.uk or telephone Sheila McCarter on 01603 450619

Schools' Energy Club

The Club's programme gets pupils involved in activities such as monitoring energy use, checking for wastage and generally raising awareness of energy efficiency. The activities are also linked to curriculum areas so that the staff can use the school buildings as an educational resource to bring what can be a very abstract subject to life. The benefits of this are two fold. First, the classroom teaching is linked to real life examples making lessons practical and relevant. Second, there can be substantial savings made. Recently Bignold Middle School in Norwich managed to reduce its annual electricity consumption by over 30%.

The Club is rapidly expanding with a new Club Coordinator now in post at the Green Quay in King's Lynn and more clubs due to start in other parts of the country. The club provides a range of resources for use and all the materials are available on the internet at www.cred-uk.org/SchoolsEnergyClub free of charge for individual schools to participate.

ates for your diary

11th Oct - TSN Annual Meeting, JIC, 6pm k/o

21st Oct - Closing date for partnership grant applications (Royal Society 21st Oct - Closing date for NSW applications (RCUK)

Nov, tba - Master Class 12 - look out for flyers

Nov, tba - Repeat of Primary Science Workshop - look out for flyers

New Members - Welcome

Teachers

Mr. Mike Green, Langham Primary School Mrs. Joanna Flegg, Saxlingham Primary School Mrs. Louise Hinton, Hapton Primary School Mrs. Alison Foyster, Chapel Rd. Special School Mrs. Debbie Cooke, Angel Rd. Middle School Mr. Jamie Smith, Heartsease High School Mr. Tim Mullis, Notre Dame High School Mrs. Sally Bone, Gt. Dunham Primary School Mr. John McConnell, West Earlham Middle School Mr. Glenn Pardon, Costessey Junior School Mrs. Irene Hendon, Sacred Heart Convent School Miss Laura Eaves, Wroughton First School Mr. Samuel Agbalaka, Larkman Middle School Mrs. Alison Ledington, Magdalen Gates First

Scientists

Mr. Mark Smedley, John Innes Centre Mr. James Hadfield, John Innes Centre Dr. Gill Malin, ENV, UEA Dr. Laetitia Chartrain, BIO, UEA Miss Valerie Hawkes, BIO, UEA

Fond Farewells

One our most active and longterm partnerships - Wendy Harwood (IIC) and Charles Hill (Wymondham College) - is no longer, with Charles now plying his trade in the South-West. Charles & Wendy came together at the first TSN get-together and have sought additional funding from both BBSRC and SAPs to develop resources and activities to boost biotechnology opportunities for VIth formers. We wish Charles well and would like to take this opportunity to thank them both for their support.



Another departure, this time to join the teaching ranks, is Sarah Oyston from the Institute of Food Research. After a productive partnership with Hoveton Primary School, Sarah joins the dozen or more TSN scientists to have crossed-over to the 'other side.'

Teacher Scientist Network

Coordinator: Dr. Phil Smith Chairman: Prof. Keith Roberts John Innes Centre, Norwich Research Park, Colney, Norwich, NR4 7UH Telephone +44(0)1603 450304, Fax +44(0)1603 450015, Email ts.network@bbsrc.ac.uk,

www.tsn.org.uk

Newsletter of the Teacher Scientist Network

TSNews

TSN and the BA Festival, Norwich 2006

• Coordinating young people's programme, 8-13 yrs.

•Running a session exploring the future of partnerships

Barely 1 month into the 2005/06 academic year and we are talking about the next one! TSN is proud to announce that it has won the contract to coordinate the Young People's programme at the BA Festival. One of the largest science festivals in Europe, it will be held in Norwich between the 4th and the 8th September 2006 - the Young People's (YP) programme will run from Tuesday



No. 20 Autumn 2005

5th until the Friday. A programme of bookable workshops (for which there will be a charge) will be sent to schools throughout East Anglia around Easter 2006. Please give some thought to bringing your pupils to this exciting and prestigious event. The YP programme is split between two age-groups, 8-13 and 14-19, and TSN has responsibility for the younger programme. We will be working closely with SETPOINT to ensure that a wide variety of Science, Engineering and Technology activities are available

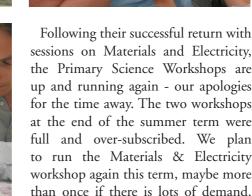
For details as they appear, and a flavour of previous festivals go to http://www.the-ba.net

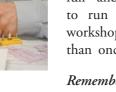
TSN pioneered the idea of science partnerships, but what is the future of scientists working with teachers? A session exploring this topic will be held during the festival - any teachers/scientists who wish to present small case studies should contact Phil asap.

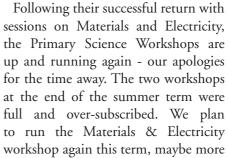
Primary Science Workshops, lift-off again!











Remember we always want to hear from you about topics for future workshops.



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National Science Week 2005 & 2006!

Just how big is the mouth of a basking shark, what are plankton, can you really cycle around the water cycle and why would you put a radio-receiver on the back of a turtle? - these were just some of the questions children were faced with at Water, water everywhere, our National Science Week extravaganza that was held at the John Innes Centre during March. Over 3200 children (yrs 4-8) from over 50 schools from across Norfolk and North Suffolk saw their breath frozen, watched boiling, evaporation and condensing, made waves in tanks and whirlpools in bottles at our fifth in the Secrets of Science and Survival series. Demand this year was greater than ever and our apologies if you missed out, you were not alone.

A selection of photos from the event are on the TSN website, www.tsn.org.uk under news, and look out for the gallery.



Should you wish to apply for funding for your own NSW event in 2006, the Research Councils UK (RCUK) are offering awards of up to £2000 for NSW awards. A number of partnerships, primary and secondary, have made successful applications in the past and Phil would be happy to help partners with their applications.

Application forms available at *www.bbsrc.ac.uk/funding/public* Closing date, 21st October 2005.

PLEASE SEND US STORIES OF YOUR PARTNERSHIP, PREFERABLY WITH PHOTOS!

Adventures in Great Dunham

Dr Chris Ridout (JIC) and Mrs Sally Bone (Gt. Dunham Primary)

I was involved with TSN several years ago, but lost touch with my partner after we both changed jobs and moved to different areas. I re-started a partnership with Sally Bone at Great Dunham Primary, jumping in at the deep end by investigating the sun, moon and planets. Fortunately, there is an excellent kit available for loan from TSN to help with this (photo). Getting out into the playing field made the science into an event, and I think a new face in the classroom stimulates the learning experience. At the end of the study, I was delighted by the quality of the 'scientific posters' that the children presented to me. Not only had they understood the science, they had presented it in a lively, informative and colourful way. This term its 'forces' and 'micro-organisms' - exploding mushrooms perhaps!



Spacemas!

Dr Amanda Francis (JIC) and Mrs Heather Drake-Brockman (Thompson Primary)

Seeking inspiration for Christmas .. read on! Here's the recipe ... the creative skills of staff and pupils at Thompson Primary mixed together ideas about the planets based on the characters developed by Gustav Holts, with the solar system model and supporting resources (provided by TSN scientist, Amanda Francis), add a nocturnal animal or two, a sprinkling of star constellations, oh and of course the Nativity tableau and "Spacemas" was born. Music and lyrics were produced by the talented 'supernova' Mrs Clark and included 'Away in a manger', 'the Sun and Moon we work together' and the festive 'Planet Wrap' all carefully baked by Janet Walmsley, the Master Chef.

Here's what Amanda had to say about the event "it was very pleasing to see a school taking such an innovative approach to learning. This type of activity should certainly help the children see science as exciting and accessible."







ANNUAL MEETING 2005

Tuesday 11th October, 6pm JOHN INNES CENTRE, NORWICH

WE LOOK FORWARD TO SEEING AS MANY OF YOU AS POSSIBLE AT OUR CELEBRATION OF EINSTEIN YEAR. THIS WILL INCLUDE A LOOK AT EINSTEIN'S INFLUENCE IN MODERN LIFE AND THE USE OF CONTEMPORARY DANCE TO ILLUSTRATE HIS 3 THEOREMS FROM 1905. AN ENTERTAINING EVENING GUARANTEED!

SCIENCE, DANCE,
REFRESHMENTS,
GIVEAWAYS & MUCH MORE!

National Kit Club coordinated by TSN, funded by DfES



A period of intense activity has followed our successful bid to develop the National Kit Club project. Science Learning Centres in Hertfordshire and the North-East are now in posssession of many kits and each has started working with their local schools. Both centres are running the schemes slightly differently and we wish them both success. Its great that our model of best-practice is spreading beyond Norfolk and from a storage point of view great that some of the kits are now in their new homes and not cluttering-up our TSN space!

Bayfordbury open for business!



Our friends and colleagues at the East of England Science Learning Centre in Bayfordbury, Herts held a most enjoyable Open Day back in June to celebrate the completion of their move into state-of-the-art labs and briefing rooms. Basking in sunshine all day, the centre looked at its best with hundreds of visitors listening to leading speakers, taking part in exciting workshops, or looking around the magificent grounds which offer tremendous potential for field studies. The highlight for many was probably hearing about the National Kit Club project, a session delivered by Phil and Sheila at which we met a Norfolk headteacher worried how he'd get the resources to and from Hertfordshire - we reassured him and look forward to welcoming him in Norwich soon!

If you can't get to Bayfordbury look out for an SLC course running at one of their more local out-stations here in Norfolk, at John Innes Centre, Costessey High School or Neatherd High School. The Autumn programme of courses is available at www. sciencelearningcentres.org.uk

STOP PRESS: 'Making Plants Exciting', 18th October 2005 at Costessey HS. Course runs across KS1-4 and has been developed with SAPS, Cambridge.



A warm welcome awaits everyone at the SLC in Bayfordbury, Hertfordshire