

# Hands-on Minds-on Science

## Science Week

# national science week 2014

National Science Week was held during 18-22 August. At Coolbinia PS this involved three engaging components:

- Students built a large ice house as a school wide activity.
- Individual students created small ice houses and tested the insulation qualities of the materials used.
- Guest speakers conducted incursions: Scientists – Chemist, Engineer and more...

## Winter Wonders: Investigating ice houses

### School Wide Ice House:

Students created fabulous ice bricks of different colours and design. For example, some bricks had flowers, leaves and fruit embedded in the ice. Year 5 Waterwise students built the ice house, with over 350 ice bricks brought by students from K-Year 7.



Through participating in this activity students engaged with:

- **Physical Chemistry:** Investigating the physical behaviour of water in the presence of salt i.e. how dissolved salts change the freezing point of water.
- **Sustainability:** Waterwise behaviours related to recycling and valuing precious water resources.
- **General Capabilities:** Developing personal and social capability, such as cooperative team skills.

### **Individual Student Ice House:**

At home, students designed an ice house that will hold and keep one ice cube from melting for a long time. They then tested these houses to see how well insulated they were at school.

Through participating in this activity students engaged with:

- **Physical Science:** Learning about the insulation properties of different materials.
- **Science Inquiry:** Applying investigation skills.
- **General Capabilities:** Developing critical and creative thinking skills.

### **Guest Speakers:**

Tim Jarvis:

Students participated in an online event hosted by the Schools of Isolated and Distance Education and Scitech. Tim is an environmental scientist, author, adventurer and public speaker. Tim has undertaken expeditions to some of the world's most remote regions, including the South and North Poles, across Australia's largest desert, the Great Victoria Desert, and has retraced the polar journey of Sir Douglas Mawson. Our students had the opportunity to hear from this passionate and engaging man, and asked him questions.



Dilusha Silva:

Dilusha, an engineer, conducted science demonstrations in the Year 2 class. Students were enthralled and continued working after Dilusha had finished his presentation. Dilusha also provided advice and support for the building of the large ice house. Sincere thanks Dilusha.

Doctor Dave:

Dave is a chemist who has worked in many different areas of science, such as forensics and HAZMAT response. He visited the school with a friend, Tyrone, who is an expert in water testing and quality.

Dave demonstrated some cool experiments (using chemicals not usually available in a primary school) and talked about his career (Science as a Human Endeavour). Dave demonstrated a wealth of fascinating chemical knowledge and inspired the students about Science!



The students were very excited by the explosions!

Overall, a very successful and inspiring National Science Week at Coolbinia Primary!



### Term 3 Science at Coolbinia PS

Biological science is the focus this term. Students are engaging in an exciting range of biological investigations ...

**Mildew Mania** - Curtin University citizen science project investigating mildew on barley. Classes in Years 4/5 and 6 are engaging with the Mildew Mania program. Students are very excited to see mildew growing on their barley. Our new digital microscopes are a boon for this investigation!

**Greenhouse Effect, Compost Biology and the Carbon Cycle** – Last month incursions were conducted across the school with *Carbon Kids* coordinator, Belinda Bloxsome, from Scitech. Students made newspaper pots and planted bean seeds for investigations on plant growth. Seedlings are now 10 cm tall.

### Teacher Development School (TDS): Term 3 Activities

Professional learning sessions conducted to date:

- 21 July Elaine Lewis presented a session at our school on using our new solar cooker, relevant to the Earth and Space Sciences curriculum and science investigation skills.

- 1 August Elaine presented a session summarising 'TDS at Coolbinia: Hands on minds on' at a TDS conference in Perth.
- 15 August a teacher from Boddington High School work shadowed Elaine Lewis all day, to provide first-hand experience on how science is embedded into the cross curriculum priorities.
- 27 August Elaine presented a session at ECU, Mt Lawley campus on our 100 Tonne Plan, illustrating how the cross curriculum priorities are embedded into science.

Professional learning sessions scheduled for the rest of the term:

- 3 September Elaine will present a session at our school on science resources and their management.
- 4 September Elaine will present a session at the One World Centre on our 100 Tonne Plan focussing on its global links.
- 24 September Debra Holland and Elaine will present a session at the school on Assessment in Science.

### Science focus for River Rangers

#### Chemistry Labs

On Tuesday 2<sup>nd</sup> September the River Rangers visited Curtin University science labs to conduct a range of chemistry experiments. Photos and news from this excursion will be available in our next newsletter.

#### Clean Drains

In August the River Rangers attended a series of workshops at Murdoch University. One of these sessions related to water quality of the Swan River. A follow-up action related to this workshop involved students stencilling school drains with the message - Clean Drains River Gains.





Elaine Lewis  
Teacher Development School: Science Co-ordinator  
River Rangers Coordinator  
(Part time role; located in the Kwobadarn on Fridays)  
2 September 2014