

AWARDS OF SCIENCE AND MATHS EXCELLENCE - How They work

>> NB YOU NEED TO APPLY FOR THE AWARD OF SCIENCE & MATHS EXCELLENCE BETWEEN JANUARY 6TH to 26th MARCH 2010.

This year in response to feedback from participating teachers some changes have been made to the structure of your application for the Award of Science Excellence. This is to allow you more flexibility in your application and to facilitate schools that have attained the Award in previous years to further their achievements and try something new. Maths has also been added into the mix to recognise the importance of integration of the two subjects and to provide opportunities for applying maths in real life situations. There are still four steps that applicants must undertake, but these have changed slightly as detailed below. If you have any queries please contact us at primaryscience@forfas.ie

>> TO APPLY FOR AN AWARD PLEASE LOG ONTO WWW.PRIMARYSCIENCE.IE FROM JANUARY 6TH TO MARCH 26TH 2010 OR CONTACT THE DPS TEAM ON 01 607 3184

>> YOUR LOG BOOK MUST BE SUBMITTED BY FRIDAY 23rd APRIL 2010.

Keep a Discovery Log

Your Discovery Log is a key aspect of your application for an Award and should provide all the evidence the judging panel needs to demonstrate that your school meets all of the criteria for an Award of Science & Maths Excellence.

NB: Discovery Logs must be received in full on the submission date – there will be no opportunity to re-submit or substantiate evidence once the application has been made. If evidence is not apparent, an Award cannot be achieved.



Break the log into the 4 steps required:

- **Step 1** – Prescribed activities – one activity relating to each of the four strand units in the Science curriculum (a total of 4). These can be DPS activities from the pack/website or your own ideas, or a mix of both (see below for examples).
- **Step 2** – Visit a DPS Discover Centre or invite a science speaker to your school
- **Step 3** – Attend or hold a science event (e.g. a science day or evening in your school, a group from the school attending a science week event or the BT Young Scientist and Technology exhibition).
- **Step 4** – Maths – Give three examples of how you integrated maths into your science work. This can include your own examples or the new maths extensions for DPS activities launched this year – (see www.primaryscience.ie for further information)
- Children's accounts of their own work are the basis of a good Discovery Log. Use lots of photos to record work in class, trips, events or visitors to the school, this way you can spend less time writing and more time doing hands-on science and maths.
- If children are keeping individual Discovery Logs, a small number of samples of each can be submitted along with the overall School Discovery Log that covers all the work required for the Award
- Don't be afraid to include things that didn't work in your log book as understanding what went wrong is a very important aspect of science!!

Step 1 - Prescribed activities

(From the Discover Primary Science Activity Pack or from other resources). Provide evidence that more than one class in the school have been involved in completing ONE activity from each strand unit:



Living things activities

(listed below some activities from the DPS support booklet, please feel free to use other resources for activities on living things)

- Can you balance?
- Myself – fingerprints, dominant eye, blind spot
- How much air can my lungs hold?
- Growing tomatoes
- Participate in Greenwave project (www.greenwave.ie)



Environmental Awareness & Care activities

(listed below some sample activities from the DPS support booklet, please feel free to use other resources for activities on environmental awareness and care)

- Green schools
- Gardening projects
- Appreciating how we use science and technology in everyday life
- Projects on environment (e.g. climate change, pollution, rainforests)
- Other e.g K'nex Xperience



Materials activities

(listed below some activities from the DPS support booklet, please feel free to use other resources for activities on materials)

- Creeping colours
- Dyeing with red cabbage, soap and vinegar
- Which paper absorbs best?
- Grow some crystals



Energy & Forces activities

(listed below some activities from the DPS support booklet, please feel free to use other resources for activities on energy and forces)

- Design a bridge
- Rainbow spinner
- Strange sounds
- Diving drops and sinking feelings
- Friction - slip or stick?
- Acrobatic clown
- Paper helicopters
- Make a lighthouse
- Dancing raisins
- Air pressure
- Surface tension and bubbles
- Design a boat

Other activities available on www.primaryscience.ie








Step 2 - Either A) visit a DPS Discover Centre or B) Invite a Science Speaker or Engineer to your school





Step 3 - Attend or hold a science event

A science day or evening in your school, a group from the school attending a science week event or the BT Young Scientist and Technology exhibition. If your event is planned for after the Awards deadline you can include a plan by students of what will happen or a booking form as evidence. For example you could include:

-  Evidence that your school ran or attended a Science Week event during November 2009. You must provide photographic evidence or children's written account of this.
-  Evidence that your school took part in the STEPS to engineering "Xperience Engineering" project.
-  A joint science event with another registered school where students display their work. You must provide photographic evidence or children's written account of joint science event.
-  Evidence that your school took part in "Engineered! – A Week of Wonder during 2010".
-  Evidence that students took part in or attended the Young Scientist and Technology Exhibition 2010.

Step 4 - Maths

Give three examples of how you integrated maths into your science work.

-  Describe three examples of integration of maths into science work, showing the link to any of the strands from the maths curriculum (Number, Algebra, Shape and space, Measures, Data)
-  Explain how pupils used maths skills (applying and problem solving, communicating and expressing, integrating and connecting, reasoning, implementing, understanding and recalling).

Remember, you must provide evidence for all four steps in your Discovery Log. You can submit your intention to apply for an award from January 6th to March 26th 2010. All Discovery logs must be in our office by close of business 23rd April 2010.

