

Primary Science Newsletter

Summer Term 2015



Useful websites & resources

Theme for this edition:
Space

European Space Education
Resources Office:

www.esero.org.uk

Useful resources and support
materials:

www.nationalstemcentre.org

Borrow the Moon:

www.stfc.ac.uk/1360.aspx

The Wellcome Trust has
published a useful new booklet
for to assist science subject
leaders in primary schools:

[http://comms.wellcome.ac.uk/c/
16HKaTQrERnWmmuiHqrdby1](http://comms.wellcome.ac.uk/c/16HKaTQrERnWmmuiHqrdby1)



Updated Science Scheme for Key Stage 2

Welcome to GwE's first primary science newsletter. Over time we hope to be able to be able to support the provision and teaching of primary science through information and resources shared and discussed here. This first newsletter will focus on the launch of the updated scheme of work for key stage 2.

Since 2012, many schools have based their provision for key stage 2 science on an exemplar scheme produced by the Curriculum Support Service that previously served Flintshire, Conwy and Denbighshire. This scheme proved to be very effective in supporting the teaching and learning of primary science.

The scheme of work has now been updated to take account of the requirements of the LNF and the range of online science resources available on Hwb. For more information on this scheme, continue overleaf...

For more information and advice about any aspect of primary science contact:

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The 34 Main Clauses

| Unit | Topic | Year 3/4 | Year 5/6 |
|---------|-------------------------|---------------------------------------|---------------------------------------|
| Unit 1 | Introduction to Science | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 2 | States of Matter | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 3 | Light | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 4 | Sound | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 5 | Electricity | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 6 | Forces | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 7 | Energy | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 8 | Space | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 9 | Earth and Atmosphere | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 10 | Plants and Animals | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 11 | Human Body | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 12 | Health and Safety | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 13 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 14 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 15 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 16 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 17 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 18 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 19 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 20 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 21 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 22 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 23 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 24 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 25 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 26 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 27 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 28 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 29 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 30 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 31 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 32 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 33 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| Unit 34 | Science in Society | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |



KS2 Science Scheme
Distribution of principal writing opportunities across the 24 science units

Numbers refer to science units

| Range of writing Accounts | Year 3/4 | Year 5/6 |
|---------------------------|-----------------|-----------------------|
| Captions | 4, 5, 11 | 4, 6, 7, 8, 9, 10, 12 |
| Comprehensions | 8, 9 | 3, 4 |
| Descriptions | 5, 6, 9, 10, 11 | 4, 8, 8, 12 |
| Diagrams | 1, 2, 5, 8, 10 | 2, 5, 9, 11 |
| Imaginative accounts | 5, 11 | 7 |
| Instructions | 7 | 10 |
| Invitations | 11 | 2, 3 |
| Journals | | 10 |

Exemplar Science Scheme for Key Stage 2

Key features:

- 24 half termly units
- Contextualised questions to foster engagement and relevance
- Level-linked tasks
- LNf opportunities built in
- Hyperlinks to Hwb resources
- Guidance booklet and long term plan
- Available in English and Welsh

The scheme has been upgraded to take account of the requirements of the Literacy and Numeracy Framework. Science has clearly always been an excellent subject within which to

develop pupils' numeracy and literacy skills. This scheme now offers additional opportunities for teachers to teach and/or apply these core skills during pupils' science enquiry work. The elements and aspects of the LNf skills have been mapped onto the cover sheet of each unit, and key opportunities to practise text types are marked alongside tasks. Although many of the opportunities for applying writing skills in science are obvious, e.g. science reports and non-chronological reports, some additional text types have been added, e.g. questionnaires,

biographies and letters. All the tasks contained within each unit have hyperlinks to the best quality interactive resources in the relevant science section of the Hwb website. This should allow teachers to use effective models, simulations, and diagnostic activities to elucidate pupils' ideas and improve the quality of science pedagogy. All the updated Year 5-6 units are now available. The updated Year 3-4 units will be available by the start of the autumn term 2015. (The 2012 version of the Year 3-4 scheme is still available.)

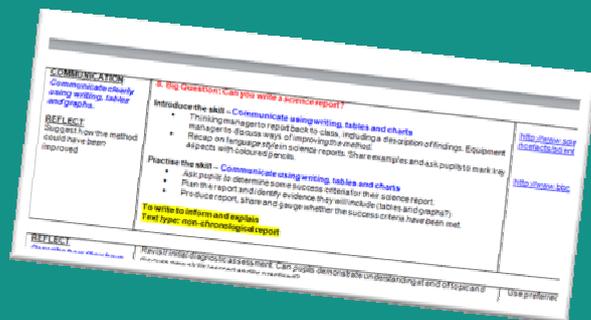
All the updated science units are available from:

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In the next newsletter:

- Foundation Phase plans for science
- Guidance on assessment and moderation in science in key stage 2.



Thanks to the following schools who assisted with the review of the exemplar science scheme and cross-referencing against the LNf: Ysgol Betws Gwerfil Goch, Ysgol Pen Barras, Ysgol Dewi Sant, Ysgol Tremeirchion, Ysgol Bro Cinmeirch, Ysgol Twm o'r Nant, Ysgol Craig y Don and Ysgol Maelgwn.