Solving words: developing a whole school approach to teaching spelling

July 2010
Christine Topfer
Teach students *how* to spell rather than just teaching words to memorise, that is *what* to spell.

Develop dispositions for thinking about word solving when writing, and learning new words.
• Explicitly teach a variety of **spelling strategies**
• Encourage **inquiry** and **pattern finding**
• Provide a **variety of resources** such as charts, dictionaries, and word walls
• Encourage learners to **take risks** and ‘have a go’, when constructing words
• **Writing** is integral to spelling success
• **Spelling analysis** of students’ writing is the most valid assessment
• Strategies are mental processes you use to achieve a positive outcome. The awareness of such strategies is known as metacognition.
Spelling Strategies

- **Sound** – focusing on sound
- **Visual** – focusing on the way words look
- **Meaning** – thinking about word meaning
- **Connecting** – making connections with other words
- **Checking** – using live, print or electronic resources

Sound strategy
thinking about the sounds you can hear in the word

Prompts

• Say the word slowly, listen carefully; write the sounds in order.

• Clap the syllables, listen and write the word syllable by syllable. Make sure you have represented each sound with a letter or letters.

• Say the word in parts, write down each part.
Visual strategy focusing on the look of words

Prompts

• Think about how the word looks; try several different patterns.
• What do you often see at the end of words?
• What other letters could you use to write that sound?
Meaning strategy
thinking about word structure and meaning

Prompts

• Think about the meaning. Does it give any clues to the spelling pattern?

• Begin with the base word.

• Think about adding endings to words.
Connecting strategy
thinking about what you know about one word to work out a new word

Prompts

- Does this word remind you of any other words you know? Why or How?
- Is there any other word that looks or sounds the same? Can you use this information to help you spell this word?
- Do you know a memory trick to help you with this word?
- Does this word have an oral or visual twin? (homophone, homograph)
## Connections

<table>
<thead>
<tr>
<th>Sounds like</th>
<th>Write your words</th>
<th>Looks like</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have some of the same sounds</td>
<td></td>
<td>Has some of the same letter patterns</td>
</tr>
<tr>
<td>peach</td>
<td>beach</td>
<td>beat</td>
</tr>
<tr>
<td>honey</td>
<td>funny</td>
<td>funnel</td>
</tr>
</tbody>
</table>

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Checking strategy
making use of other resources: live, print and electronic

Prompts

• Is there a chart or word wall that can help you with the spelling of the word?

• Is there someone in the room that can help you with that word?

• Try to locate the word in a dictionary.

• Type the word on the computer and select an option from the spell check suggestions.
Effective spellers

- Have a go at spelling words when writing.
- Use the word wall to help them to spell words.
- Say the word slowly and listen to the sounds.
- Think about other words that have similar letter patterns.
- Break words into parts (chunking).
- Reread their writing to check the spelling.

Talk about the strategies effective spellers use
What do effective spellers do when they don't know how to write a word?

Year 5 Lansdowne Crescent Primary

- Break words into syllables and listen for the sounds
- Look for small words in big words
- Try to remember spelling generalisations
- Check the word looks right and try different ways
- Check in spelling resource book or dictionary
- Use mnemonics
- Think about the base word and prefixes and suffixes
- Know how to say the word and say the sounds to help you eg, scissors
- Practise words
Finding out what children know

‘Teachers need to know what spelling strategies students are using and provide learning experiences to support productive spelling.’

Dahl et al. Vol 57 No4 Reading Teacher

Provide opportunities to practise
Assess use of strategies
Teach for strategy use
Pre-phonetic

- Forms random letters
- Scribble and letter-like symbols

Semi-phonetic

- Relies on sounds he or she can hear
- Represent most prominent sounds in words

Phonetic

- Represents most sounds
- Knows that one sound may need more than one letter
- Substitutes similar sounds

Transitional

- Words begin to ‘look right’
- Work with base words
- Internalises letter patterns

Conventional

- Sound strategies: chunking
- Uses visual strategies: letter patterns
- Uses meaning strategies: base words, origins

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Word Solving Interview

• What do you do when you want to write a word you don't know how to spell?

• What are some words that are tricky for you to spell?

• Why do you think they are tricky?

• What helps you to learn to spell new words?

• If you were teaching a child in Kindergarten how to write words what would you do?

• Would you do anything else?

• What could you do to get better at writing new words?

• Why do you think correct spelling is important?
Looking Closely At Student Writing

<table>
<thead>
<tr>
<th>Student spelling</th>
<th>Conventional spelling</th>
<th>Strategy used</th>
<th>What connections did they seem to be making?</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
Spelling Analysis

1. Monster test (Gentry)
2. Spelling analysis of writing
3. Looking closely at student writing
The day that the moon crossed the sun a boy wowed turn invisible the professor side and that day had come. Tom wook up not nowing that the professor had come true. It was a luvly day on the Great Astrlean but nothing simd to have hapend entil his mum came upstairs and code not see him. He soon relised that something strange had hapnd.
THE PROPHECY

The day that the moon crossed the sun, a boy would turn invisible the prophecy said and that day had come.

Tom woke up not knowing that the prophecy had come true. It was a lovely day on the Great Australian Bight. Nothing seemed to have happened until his mum came upstairs and couldn’t see him. He soon realised that something strange had happened.
Thinking about spelling strategies

How often do you use these strategies when you are writing words that are tricky for you to spell?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listen to the sounds in words</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Say words in chunks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Think about how the word looks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build the word from the base word</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Think about how the word is similar to other words</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Find the word on a chart or wall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use a dictionary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ask a friend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name something else you might do to spell a tricky word</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Developing a scope and sequence

P10-13 Guiding Thinking for Effective Spelling
Grade One - What do we expect?

Sound
- Develops phonemic awareness (hears sounds in words)
- Represents many sounds in words
- Recognises and uses consonant digraphs *sh, ch, th, wh*
- Represents initial consonant blends
- Increasingly aware that a letter may be pronounced in different ways

Visual
- Writes an increasing number of high frequency words
- Begins to identify misspelt words

Meaning
- Begins to use suffixes *ed, ing, s*

Connecting
- Uses knowledge of onset and rime to spell new words (eg *m-ake*)

Checking
- Uses word walls and charts to check some words
Grade One - How do we achieve this?

- Use onset and rime word wall activities
- Use and teach onsets and rimes to build new words
- Chart findings from word searches based on common rimes
- Talk about strategies good spellers use
- Create a word wall for high frequency words
- Provide ‘Doing the word wall’ games
- Introduce word study journals
- Teach a variety of ways to learn new words
- Focus on initial and final blends
- Build word families such as play, plays, playing, played
- Share big books that contain repetition and rhyme, or focus on visual and sound patterns
Grade Three - What do we expect?

Sound
• Uses consonant digraphs (eg ph, gh, wh)
• Uses two and three letter blends (eg br, str)
• Represents all vowel and consonant sounds in a word, placing vowels in every syllable
• Develops knowledge of silent ‘e’ and how it influences the sound of vowels
• Continues to develop knowledge of vowel digraphs

Visual
• Spells commonly used high frequency words correctly
• Developing awareness of the use of visual letter patterns (eg ite, ight), silent letters and double letters

Meaning
• Continues to develop knowledge of the use of prefixes and suffixes with base words (eg re, un, dis, ed, ing, ly)
• Begins to use the generalisation for adding suffixes to single syllable words
• Knows about compound words and contractions
• Writes some homophones correctly
• Developing knowledge of plurals

Connecting
• Uses knowledge of onset and rime to spell new words (eg str-ain, m-ain)

Checking
• Proofreads own writing and attempts to correct mis-spelt words using classroom resources
Grade Three - How do we achieve this?

• Use material read by children to conduct word searches for letter patterns. Sort words according to sound and visual patterns, make charts to display findings and label as sound or visual strategies
• Talk about how good spellers spell: list these strategies
• Build word families including prefixes and suffixes
• Use word study journals: identify tricky parts or key features of words to be learnt
• Develop a variety of ways for learning words
• Use word wall to extend and consolidate high frequency words and to record or explore examples of letter patterns
• Explore meaning relationships, homophones, compound words, contractions and plurals and record findings on charts
• Refer to the whole school editor's code
Developing consistent teaching practices

Consistent teaching practices
Which practices would help us achieve a consistent approach?
What practices should be consistent?

- Daily writing
- Explicitly teaching spelling strategies: sound, visual, meaning, connecting and checking
- Creating word walls
- Word sorting - teaching students to look closely “inside and outside” words
- Generating anchor charts of words with common features using problem-solving approaches
- Using a school-wide editor’s code
- Using letter sound or word study journals
Whole School approach to spelling

Words Study
Word Journal
Proofreading

Independent Writing and Reading
Modelled Writing
Shared Writing
Interactive Writing
Guided Writing

Meaning relationships
Sounds/letters
Sensitivity to sounds

Visual patterns
High frequency words
Onset and rime
Sensitivity to Sound

This involves the development of:

• an awareness of sounds that make up spoken words including rhyme, alliteration, syllabification

• the ability to segment a word into distinctive sounds
Manipulating sounds

I hear with my little ear,
Something that rhymes with long,
And starts with s.
Hey there - you’re a real cool cat
You’ve got a lot of this
And you’ve got a lot of that
So come on in
And get on down
You go up -------
You go down -------
You go left -------
You go right -----
Yeah!!
Relationships between letters and sounds

Purpose:

• To become familiar with letter names
• Assist children in investigating the alphabetic principle – that letters stand for sounds in words we say
• Learn that most letters represent more than one sound and the sound is influenced by the surrounding letters and the letter positions in words.
Name - word sorts

Which name has the most letters?
How many more letters does it have?
Do the names have any letters that are the same?
Which names start the same, end the same?

Claudia
Catherine
Otto
Emma
Finn
River
Simon
Samia
Sarah
<table>
<thead>
<tr>
<th>Aa</th>
<th>Ambulance</th>
<th>Nn</th>
<th>Newsagency No Smoking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bb</td>
<td>Bananas in Pyjamas</td>
<td>Oo</td>
<td>Opossum Bay Store OPEN</td>
</tr>
<tr>
<td></td>
<td>Bus stop</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bakers Delight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cc</td>
<td>Coles CLOSED</td>
<td>Pp</td>
<td>POST Police</td>
</tr>
<tr>
<td>Dd</td>
<td>Dorothy the dinosaur</td>
<td>Qq</td>
<td>Qantas</td>
</tr>
<tr>
<td></td>
<td>DANGER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ee</td>
<td>egg carton</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EXIT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ff</td>
<td>For Sale</td>
<td>Ss</td>
<td>School STOP sign</td>
</tr>
<tr>
<td></td>
<td>Fire Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gg</td>
<td>Give Way sign</td>
<td>Tt</td>
<td>Target Toilet</td>
</tr>
<tr>
<td>Hh</td>
<td>Hi 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Happy meal</td>
<td>Uu</td>
<td>Unleaded petrol</td>
</tr>
<tr>
<td></td>
<td>Harry Potter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ii</td>
<td>ice cream</td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>iPod</td>
<td>Vv</td>
<td>vegemite</td>
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<td></td>
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<td></td>
<td>Value Plus supermarket</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Virgin Blue</td>
</tr>
<tr>
<td>Jj</td>
<td>James</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Just Right</td>
<td>Ww</td>
<td>Warwick Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Big W</td>
</tr>
<tr>
<td>Kk</td>
<td>Kmart</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinder Surprise</td>
<td>Xx</td>
<td>X-MEN</td>
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<td></td>
<td>KFC</td>
<td></td>
<td></td>
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<tr>
<td>Ll</td>
<td>Lego</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lansdowne Crescent</td>
<td>Yy</td>
<td>Yu-Gi-Oh cards</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yowie</td>
</tr>
<tr>
<td>Mm</td>
<td>McDonald’s</td>
<td></td>
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<tr>
<td></td>
<td>Metro Milk</td>
<td>Zz</td>
<td>zoo</td>
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</tbody>
</table>
**/f/ Sound Chart**

<table>
<thead>
<tr>
<th></th>
<th>f</th>
<th>ff</th>
<th>gh</th>
<th>ph</th>
</tr>
</thead>
<tbody>
<tr>
<td>fun</td>
<td>friend</td>
<td>free</td>
<td>for</td>
<td>elephant</td>
</tr>
<tr>
<td>stuff</td>
<td>coffee</td>
<td>enough</td>
<td>tough</td>
<td></td>
</tr>
<tr>
<td>laugh</td>
<td></td>
<td></td>
<td>photograph</td>
<td>alphabet</td>
</tr>
</tbody>
</table>

**What we have learned about the /f/ sound**
- When /f/ sound is at the end of a word it is never just one letter `f`
- When the letters `gh` are used to represent the /f/ sound it is at the end of the word.
- The sound `/f/` can be written in four different ways
- One letter `f` is used to represent the /f/ sound at the beginning of words
- The letters `ph` can be used to represent the sound `/f/` at the beginning, middle and end of words
- ee
  - knee
  - tree
  - feet
  - teepee
  - three
  - see
  - bee
  - cheap
  - seen
  - been
  - keep
  - meet

- ea
  - sea
  - bean
  - heat
  - meat
  - eat
  - cheap
  - tea
  - teach(ing)
  - bear
  - flea
  - team
  - clean
  - beat
  - beach
  - seat
  - treat
  - Easter

- e
  - me
  - he
  - metre
  - she
  - be
  - ey
  - key
  - Riley

- ie
  - Evie
  - Lucie
  - Jordie
  - Billie

- y
  - Tully
  - baby
  - wonky
  - Ricky

- wii
  - Wii
Onset and Rime

- **Onsets** are the consonants that come before a vowel in a syllable:
  - $w$ - onset in *wall*
  - $sm$ - onset in *smile*

- **Rimes** are the vowel and any consonant after the vowel:
  - *wall* - rime is *all*
  - *smile* - rime is *ile*

- Some words do not have onset:
  - *I, are*
Onset and Rime

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<tr>
<th>ack</th>
<th>ail</th>
<th>ain</th>
<th>ake</th>
<th>ale</th>
<th>ame</th>
<th>an</th>
<th>ank</th>
<th>ap</th>
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<th>at</th>
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</thead>
<tbody>
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<td>ate</td>
<td>aw</td>
<td>ay</td>
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<td>ill</td>
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<td>ine</td>
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<td>ink</td>
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<td>ump</td>
<td>unk</td>
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</table>

After short vowels have been introduced through rimes, move on to long vowels, -vCe words eg. -ate, -oke. Then move to other long vowel rimes such as -ain, -ight.
Prompts to encourage reflective thinking

• What were you thinking when you chose that letter to come and stand next to you?
• What were you saying in your head as you thought about possible words?
High frequency words

Purpose

• To assist children in recognising and spelling the words which make up approximately 50% of the written language

• To build a bank of words that children can automatically spell
Word Walls

A technique that connects with brain research because good word wall work is multimodal, involving multiple assemblages of visual, auditory, kinaesthetic and tactile brain circuitry working together along with lots of repetition, to get words into an automatic processor.
Guess my word

1. It's one of the words on the wall
2. It has four letters
3. It starts with a \( b \)
4. It has the same letter pattern as \textit{look}
5. It finishes the sentence \textit{I put my\underline{____} on the shelf.}'

Reflective questions
Which clues helped the most and why?
What do you need to know about words so the clues make sense?
E.g. The sounds letters make or Patterns that groups of letters make.
Visual Patterns

Purpose

- Effective word study draws students’ attention to the order of letters in words, forcing them to recognise common patterns in English.

- Spelling is a chunking skill. The reader/writer/speller must learn to chunk strings of letters into discernable patterns.

- Spelling knowledge in English includes patterns that must be detected by the brain for reading. (Gentry)
Visual Patterns - word sorting

Word sorting capitalizes on the brain’s search for patterns and its propensity to respond to repetition.
Meaning Relationships

• In the English language, most words that have the same meaning-base have a similar spelling pattern within the word.

  eg  electric and electrician
    sign and signature
Analyzing prefixes

- Students record words that start with the letter pattern *re* on a class chart.
- As words are collected, record the words as prefix plus base word and the meaning of the word.

<table>
<thead>
<tr>
<th>Word</th>
<th>Prefix + base word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>replace</td>
<td>re + place</td>
<td>place it again</td>
</tr>
<tr>
<td>review</td>
<td>re + view</td>
<td>view it again</td>
</tr>
<tr>
<td>recycle</td>
<td>re + cycle</td>
<td>cycle it again</td>
</tr>
<tr>
<td>reuse</td>
<td>re + use</td>
<td>use it again</td>
</tr>
<tr>
<td>rethink</td>
<td>re + think</td>
<td>think it again</td>
</tr>
<tr>
<td>remove</td>
<td>re + move</td>
<td>move it again</td>
</tr>
</tbody>
</table>

Visual pattern
- rely, really, reason, remember

We think you add ‘re’ to base words and the base word stays the same.

This is a meaning strategy.
## Meaning Relationships

<table>
<thead>
<tr>
<th>Add s</th>
<th>Add es</th>
<th>Change y to i and add ies</th>
<th>Change f to v and add ies</th>
</tr>
</thead>
<tbody>
<tr>
<td>days</td>
<td>churches</td>
<td>ladies</td>
<td>calves</td>
</tr>
<tr>
<td>tables</td>
<td>splashes</td>
<td>puppies</td>
<td>halves</td>
</tr>
<tr>
<td>goats</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Reflective prompts

How will knowing about suffixes/prefixes help with your reading and writing? Think about the connecting strategy – how will knowing how to spell one word help you know how to spell other words?
Developed through meaning relationships

e.g. Word web

- autograph = a signature
- graph = written
- telegraph = a system for transmitting a message along an electrical wire making and breaking an electrical current
- photograph = writing with light
Maths connections

**hex / a / gon**

(greek)

**hex**
meaning six

**hexagram**

**hexahedron**

**hexameter**

**hexadecimal**

**gon**
meaning angle

**octagon**

**diagonal**

**polygon**

**trigonometry**
<table>
<thead>
<tr>
<th>What can I do to help me spell words?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sound strategies</strong></td>
</tr>
<tr>
<td>I can clap out the syllables and make sure that I have represented each sound with a letter or letters.</td>
</tr>
<tr>
<td>I can think about other words that sound almost the same.</td>
</tr>
<tr>
<td>I can check I have written a vowel in every syllable.</td>
</tr>
<tr>
<td><strong>Visual strategies</strong></td>
</tr>
<tr>
<td>I can think about the letter pattern. Do I know another word that looks like this?</td>
</tr>
<tr>
<td>I can think about how the word looks and try different letter patterns.</td>
</tr>
<tr>
<td>I can think about what other letters could be used to write a particular sound.</td>
</tr>
<tr>
<td><strong>Meaning strategies</strong></td>
</tr>
<tr>
<td>I can think about the meaning. Does it give me clues to the spelling pattern?</td>
</tr>
<tr>
<td>I can begin with the base word.</td>
</tr>
<tr>
<td>I can think about the ending of the word.</td>
</tr>
</tbody>
</table>
Proofreading

Proofreading includes two components:

• *Examination* - identification of misspelled words in a written text

• *Production* - using a range of strategies to correct the misspelled words
Try - It - Another Way: Which strategy helped me?

<table>
<thead>
<tr>
<th>Try it</th>
<th>Another try</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep what you are sure is right</td>
<td>What else is possible?</td>
</tr>
</tbody>
</table>

How I worked out which letters to choose:
• Task board for spelling focus time and Word Study journals
Reflective prompts

• How will this activity assist you to remember words?
• How has this game helped you with your spelling thinking?
• How could you use this new information in the future?
What can I do to help me spell words?

<table>
<thead>
<tr>
<th>Sound strategies</th>
<th>Visual strategies</th>
<th>Meaning strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can clap out the syllables and make sure that I have represented each sound with a letter or letters.</td>
<td>I can think about the letter pattern. Do I know another word that looks like this?</td>
<td>I can begin with the base word.</td>
</tr>
<tr>
<td>I can think about other words that sound almost the same.</td>
<td>I can think about how the word looks and try different letter patterns.</td>
<td>I can think about the ending of the word.</td>
</tr>
<tr>
<td>I can check I have written a vowel in every syllable.</td>
<td>I can think about what other letters could be used to write a particular sound.</td>
<td></td>
</tr>
</tbody>
</table>
Websites

• http://www.copacabana-p.schools.nsw.edu.au/Get_Smart_Pages/Get_Smart_English2.htm

• http://www.woodlands-junior.kent.sch.uk/interactive/literacy.html#9