

Your name:

The UK Linguistics Olympiad 2016



Problem 3. Watsonium (10 marks)

Or: *Eilimintach mo Watson daor* (Elementary my dear Watson)

Irish (or “Gaeilge”) is a language spoken by roughly 1.3 million people in Ireland. The earliest examples of written Irish date from the fourth century, but this problem is about modern Irish, which includes foreign loan words based on Latin, Greek or English. The Irish spelling of a loan word follows the pronunciation rather than the spelling of the original.

The table below shows the Irish names for some of the chemical elements, together with the English names for the same elements. In spite of the different spellings, the Irish words have similar pronunciations to the corresponding English words. The acute accent on a vowel (e.g. *é*) shows that it is long. Just in case you’re not familiar with the English names and their pronunciation, where ‘e’, ‘o’ and ‘u’ are underlined they have a pronunciation like the ‘ee’ in *feet*, the ‘o’ in *rope* and *snore* and the ‘u’ in *rule*. The ending *ium* on English words is always pronounced as in *medium*.

English	Irish	English	Irish
Beryllium	Beiriliam	Magn <u>e</u> sium	Maignéisiam
Carbon	Carbón	Pol <u>o</u> nium	Polóiniam
Chl <u>o</u> rine	Clóirín	Prom <u>e</u> thium	Próiméitiam
C <u>o</u> balt	Cóbalt	Th <u>u</u> lium	Túiliam
H <u>e</u> lium	Héiliam		

Question 3.1. What would you expect the Irish names for the following elements to be?

Americium		Rh <u>e</u> nium	
B <u>o</u> ron		R <u>u</u> th <u>e</u> nium	
Br <u>o</u> mine		S <u>o</u> dium	
Osmium		Ytterbium (‘itter...’)	
Potassium			

Question 3.2. What do you think the English names for the following elements are? (Don’t worry if you don’t know many chemical elements – just guess! The Irish words don’t all follow the rules you’ve just discovered.)

	Ocsaigin		Mearcair
	Fosfar		Cailciam
	Iarann		Luaidhe

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C <u>o</u> balt	Cóbalt	Th <u>u</u> lium	Túiliam
H <u>e</u> lium	Héiliam		

Question 3.1. What would you expect the Irish names for the following elements to be?

Americium	Aimeiriciam	Rh <u>e</u> nium	Réiniam
B <u>o</u> ron	Bórón	Ru <u>th</u> enium	Ruitéiniam
Br <u>o</u> mine	Bróimín	S <u>o</u> dium	Sóidiam
Osmium	Oismiam	Ytterbium (‘itter...’)	Itéirbiam
Potassium	Potaisiam		

Question 3.2. What do you think the English names for the following elements are? (Don’t worry if you don’t know many chemical elements – just guess! The Irish words don’t all follow the rules you’ve just discovered.)

oxygen	Ocsaigin	mercury	Mearcair
phosphorus	Fosfar	calcium	Cailciam
iron	Iarann	lead	Luaidhe

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Scoring: one point for each correct answer. (Max 14)

- No half marks – correct is 100% correct.
- Ignore capital letters
- Accept Irish vowels with or without the accent.
- Accept English misspellings or incorrect words if they're plausible (e.g. *phosphor* or *fosfor* for *phosphorus*), but not if they're simply copies of the Irish (e.g. *fosfar*).

Comment

The aim of this problem is to focus on regularities in the way in which Irish spelling treats words borrowed from English. The examples included do in fact follow regular rules, though other examples that could have been included break these rules.

The Irish spellings are clearly very different from the English spellings, so they must be based on the English word's pronunciation, regardless of how this is shown in English spelling. What, then, are the rules relating Irish spellings to English spellings?

- consonants stay the same, except that:
 - English double consonants => Irish single consonant (e.g. <ll> => <l> - i.e. English <ll> changes to Irish <l>)
 - English <x> => Irish <cs>
 - <th> => <t>
- vowels stay the same, except that:
 - <u> => <a> in *-ium*
 - <y> => <i>
 - <e/u/a/o> => < e/u/a/o + i> before <i/y> in the next syllable.

The last rule is at the heart of the problem. It is an example of a 'vowel-harmony' rule in which a vowel 'harmonises with' the vowel in the next syllable by becoming more similar to it. In this case, the change contrasts the vowel pronounced /i/ and spelt either <i> or <y> with all the others; so /i/ in one syllable, even if it's combined with another vowel, triggers an extra /i/ in the preceding syllable unless this already contains /i/.