

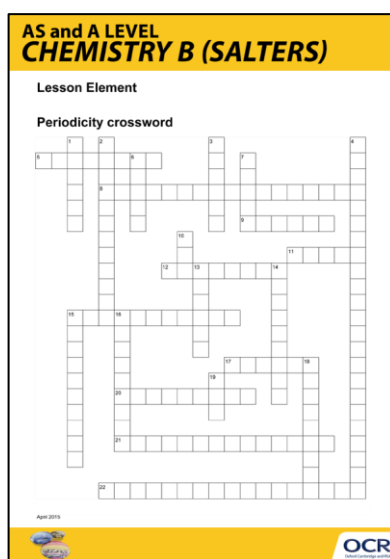
AS LEVEL CHEMISTRY B (SALTERS)

Lesson Element

Periodicity crossword

Instructions and answers for teachers

These instructions should accompany the OCR resource 'Periodicity crossword' activity which supports OCR AS Level Chemistry B.



Introduction

At the beginning of AS Level, many learners seriously underestimate the rate at which they need to assimilate new terminology into their scientific vocabulary. This crossword is designed to practice or revise some of the key terms related to periodicity, as well as some key ideas associated with this topic.

The Activity:

This crossword combines ideas from *Elements of life* and *The ozone story*. It could be used during teaching of *The ozone story* to recap ideas from earlier in the course. This resource can help learners to understand the periodic aspects of electronegativity, which can be missed during the focus on intermolecular bonding.

Once completed, learners could be asked to make their own glossary or flashcards, choosing ten of the most important words.

Learning outcomes

This resource relates to the following specification learning outcomes:

EL(j), EL(m), EL(n), EL(q), EL(r), O(a)

Associated materials:

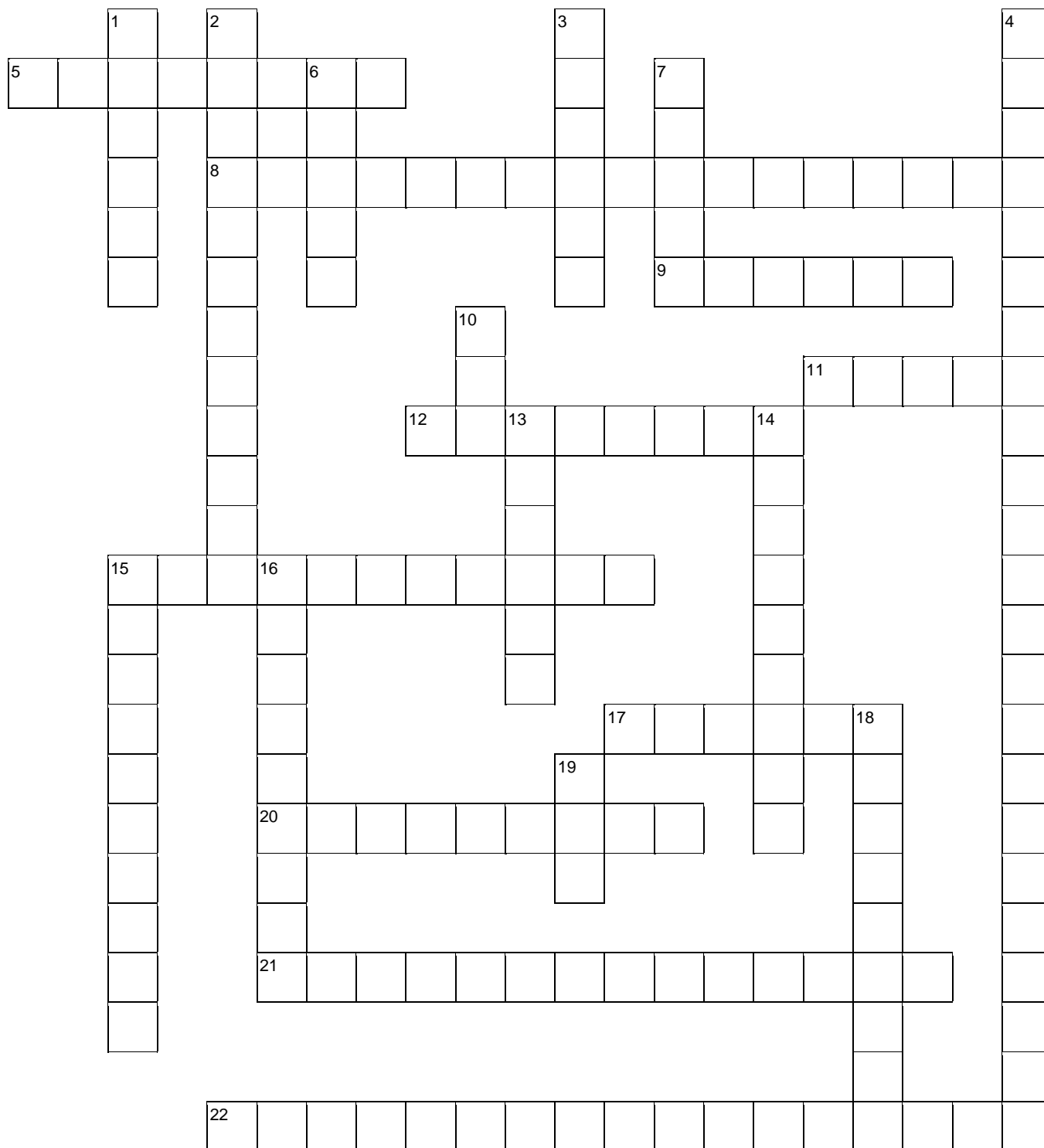
'Periodicity crossword' Lesson Element learner activity sheet.

April 2015



AS LEVEL CHEMISTRY B (SALTERS)

Periodicity crossword



AS LEVEL CHEMISTRY B (SALTERS)

Across

- From one element to the next in the periodic table there is one more _____ in the outer shell. (8)
- A trend in properties of elements moving from left to right across the periodic table. (6,2,3-6)
- The halogens are to be found in this part of the periodic table. (1-5)
- The element in period 3 with the lowest melting point. (5)
- Each period in the periodic table ends with one of these. (5,3)
- A word that refers to the trends that occur in physical and chemical properties as you move across the periods. (11)
- Which of these has the higher first ionisation enthalpy? Radium or barium? (6)
- Which of these has the higher boiling point? Magnesium or aluminium? (9)
- All the elements in the s-block are these. (8,6)
- This measures how strongly an atom attracts electrons in a chemical bond. (17)

Down

- A horizontal row in the periodic table. (6)
- The elements in the periodic table are arranged according to their what? (6,6)
- The transition elements are to be found in this part of the periodic table. (1-5)
- Energy needed to remove the first electron from an atom or molecule. It increases across a period. (5,10,8)
- All the elements within a group have the same number of electrons in their _____ shell. (5)
- A vertical column in the periodic table. (5)
- The number of electrons in the outer shell of a strontium atom. (3)
- Which has the greater atomic radius: radium or barium? (6)
- The effect of the electrons in the inner shells reducing the pull of the nucleus on the electrons in the outer shells. (9)
- Elements in the same group of the periodic table have similar _____. (10)
- Because argon will not conduct electricity it is said to be a good _____. (9)
- The man whose periodic table we use today. (9)
- The number of electrons in the outer shell of a selenium atom. (3)



AS LEVEL CHEMISTRY B (SALTERS)

Answers

Across

1. electron
8. metals to non-metals
9. p-block
11. argon
12. noble gas
15. periodicity
17. barium
20. aluminium
21. reactive metals
22. electronegativity

Down

1. period
2. atomic number
3. d-block
4. first ionisation enthalpy
6. outer
7. group
10. two
13. radium
14. shielding
15. properties
16. insulator
18. Mendeleev
19. six



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April 2015

