

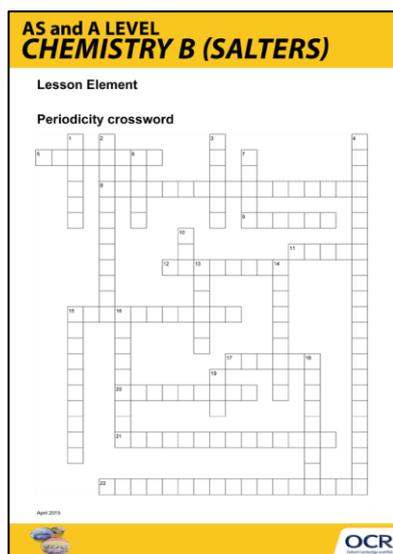
# AS LEVEL CHEMISTRY B (SALTERS)

## 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:**

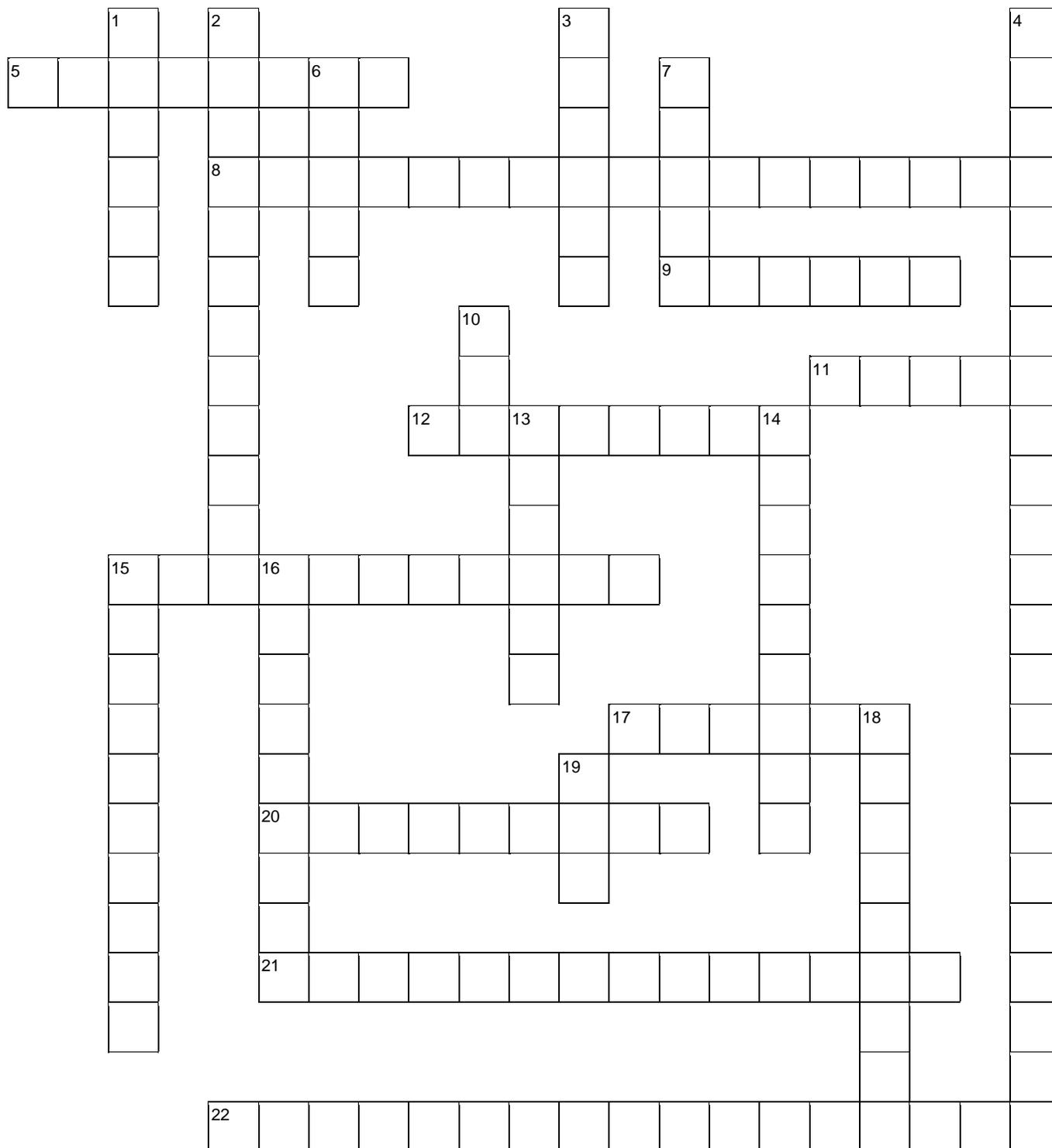
'Periodicity crossword' Lesson Element learner activity sheet.

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



We'd like to know your view on the resources we produce. By clicking on the 'Like' or 'Dislike' button you can help us to ensure that our resources work for you. When the email template pops up please add additional comments if you wish and then just click 'Send'. Thank you.

#### OCR Resources: *the small print*

OCR's resources are provided to support the teaching of OCR specifications, but in no way constitute an endorsed teaching method that is required by the Board, and the decision to use them lies with the individual teacher. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources. We update our resources on a regular basis, so please check the OCR website to ensure you have the most up to date version.

© OCR 2015 - This resource may be freely copied and distributed, as long as the OCR logo and this message remain intact and OCR is acknowledged as the originator of this work.

OCR acknowledges the use of the following content: Maths and English icons: Air0ne/Shutterstock.com

April 2015

