

## Exercise 2.34 – Electronic configuration

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**Q234-01** 2,8,8,2 is the ground state electronic configuration of which of the following elements:

- A. Ca
- B. Sc
- C. Zn
- D. V

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**Q234-02** 2,8,1 is the ground state electronic configuration of which of the following elements:

- A. Ca
- B. Na
- C. K
- D. F

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**Q234-03** Which atom has the correct ground state electron configuration?

- A. Cl: 2,8,6
- B. Ca: 2,8,2
- C. C: 2,8,4
- D. Ar: 2,8,8

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**Q234-04** To which group in the periodic table does the element with a configuration 2,8,2 belong?

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**Q234-05** What is the charge on the ion formed by magnesium (2,8,2)?

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**Q234-06** What is the electronic configuration of the ion formed by fluorine?

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**Q234-07** What is the electronic configuration of the aluminium ion?

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**Q234-08** In which period of the periodic table do you find the element with a configuration of 2,6?

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**Q234-09** How many electrons must the element sulphur gain or lose to achieve a full outer shell?

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**Q234-10** Which of the following represents the configuration of an element in an excited state?

- A. 2,7,6
  - B. 2,8,2
  - C. 2,8
  - D. 2,8,8,1
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