

# Chapter 1: Periodic trends

## SHORT ANSWER

- 1 Are all electrically neutral atoms chemically stable (i.e. unreactive)?
- 2 What makes atoms chemically stable?
- 3 Which electrically neutral atoms are chemically stable?
- 4 How can other atoms become chemically stable?
- 5 What is a chemical element?
- 6 Do metal or non-metal atoms tends to take electrons off other atoms? Explain.
- 7 Do metal or non-metal atoms tends to lose electrons to other atoms? Explain.
- 8 How does ionic bonding result in a regular array (lattice) of atoms?

- 9** What is a compound?
  
- 10** What type of compound is held together by ionic bonds?
  
- 11** How do the atoms of a metal share electrons?
  
- 12** How does this result in metallic bonding?
  
- 13** What physical properties of metals result from this metallic bonding?
  
- 14** How do non-metal atoms share electrons?
  
- 15** What two types of compounds are held together by covalent bonding?