

Student book questions

3.5 Metal cations and non-metal anions combine to form ionic compounds

Pages 78-79

Check your learning 3.5

Remember and understand

- 1 Carefully examine the periodic table in Figure 3.9 (page 71).
 - a Which elements are likely to form positively charged ions?
 - b Which elements are likely to form negatively charged ions?
 - c What does this tell you about which elements will combine to form ionic compounds?
- 2 What kinds of particles are present in ionic compounds?

Apply and analyse

3 How does the group in which an element is found in the periodic table quickly identify one or more of its properties?



4 What is the maximum number of electrons that can be gained or lost by an atom? Why?

5 Use your knowledge of atomic structure and valence electrons to explain why many ionic compounds are made up of a metal and a non-metal.