

Atomic structure and the periodic table

Atoms, elements and compounds

① This question is about atoms, elements and compounds.

a Draw **one** line from each word to its correct description. (4 marks, ★★)

Atom	A substance that contains two or more elements chemically combined.
Element	A substance that contains two or more elements not chemically combined.
Compound	A substance made of only one type of atom.
Mixture	The smallest part of an element that can exist.

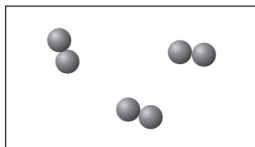
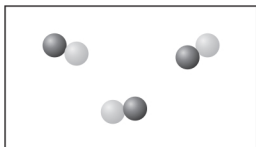
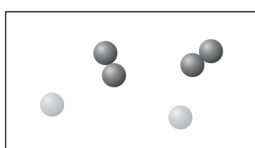
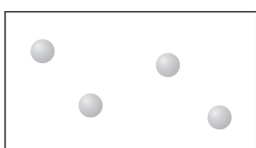
b Which of the following substances are elements? Tick **two** boxes. (2 marks, ★★)

Br_2	
Na_2CO_3	
Ar	
H_2O	

DO IT!

Look through your Revision Guide for different formulae, and then work out the numbers of each type of element present. This will also help to familiarise you with the different substances you need to know.

c Which of the following represents a compound? Tick **one** box. (1 mark, ★★)

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d How many atoms are there in a molecule of magnesium nitrate, $\text{Mg}(\text{NO}_3)_2$? (1 mark, ★★★)

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e How many different elements are there in a molecule of sulfuric acid, H_2SO_4 ?

(1 mark, ★★★)

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② Use your periodic table to help you to answer the following questions.

a Name **two** elements that are found in group 7. (2 marks, ★)

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b Give the symbols of **two** elements that are found in group 1. (2 marks, ★)