

## 3: Air and water – Topic questions

## Paper 6

The questions in this document have been compiled from a number of past papers, as indicated in the table below.

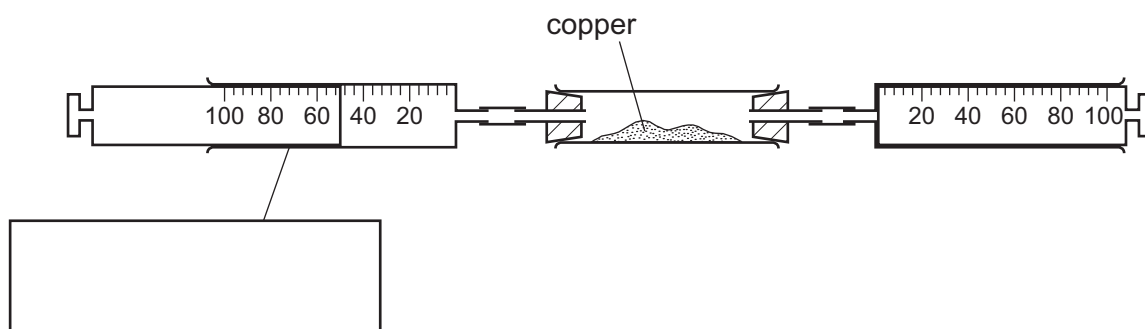
Use these questions to formatively assess your learners' understanding of this topic.

Question	Year	Series	Paper number
1	2016	June	63

The mark scheme for each question is provided at the end of the document.

You can find the complete question papers and the complete mark schemes (with additional notes where available) on the School Support Hub at [www.cambridgeinternational.org/support](http://www.cambridgeinternational.org/support)

- 1 Air is a mixture of gases. The diagram shows the apparatus used to find the percentage of oxygen in air.  
50 cm<sup>3</sup> of air were passed backwards and forwards over excess heated copper until there was no further change. The apparatus was left to cool and the volume of gas remaining was 40 cm<sup>3</sup>.



- (a) Complete the box to name the apparatus. [1]
- (b) Use an arrow to indicate where heat is applied. [1]
- (c) The colour of the copper changed from ..... to ..... [2]
- (d) From the results, work out the percentage of oxygen in the air.

..... % [2]

[Total: 6]

Question	Answer	Mark
1 (a)	(gas) syringe	1
1 (b)	arrow under copper	1
1 (c)	orange/red/brown/pink to black	1 1
1 (d)	volume of oxygen = $10 \text{ cm}^3$ % of oxygen = $10/50 \times 100 = 20\%$	1 1
		Total: 6