

GCSE Chemistry A (Gateway Science)

J248/01 Chemistry A C1-C3 and C7 (Foundation Tier)

Question Set 16

- 1 A student is separating some mixtures. She wants to make pure water from a solution of salt water. She filters the mixture.

Her method does not work.

- (a) Explain why her method does not work and describe the method she should use.

[2]

- (b) The student wants to separate a mixture of two liquids.

The liquids are:

Liquid	Boiling point (°C)
Water	100
Ethanol	78

Which separation technique should she use?

Explain how the method works.

[2]

- (c) The student separates two solid substances **A** and **B**. She wants to check that they are **pure**.

- (i) What is meant by a **pure solid**?

[1]

- (ii) The student measures the melting points of four samples of solid **A**.

Look at her results.

Sample	Melting point (°C)
1	115
2	119
3	114–118
4	120–122

She knows that a pure sample of solid **A** has a melting point of 120°C.

She concludes that sample 4 is the purest sample of solid **A**.

Do the results support her conclusion?

Explain your answer using evidence from the table.

[3]

Total Marks for Question Set 16: 8



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