

Name _____

Date _____

End of Chapter 1 test

This test and its sample answers have been written by the authors. IB may award marks differently.

1 Which of the following are homogeneous mixtures?

- I sand and water
 - II ethanol and water
 - III steel
 - IV tea with milk
- A I only
B II only
C I and II only
D II and III only

For each of the following mixtures in questions 2-6, select which separation method you can use to carry out the separations:

2 To obtain chalk (mainly calcium carbonate) from a mixture of chalk and water

- A distillation
B solvation
C use a magnet
D filtration

3 To obtain water from a mixture of table sugar dissolved in water

- A distillation
B solvation
C use a magnet
D filtration

4 To obtain ethanol from a mixture of ethanol and water

- A distillation
B solvation
C use a magnet
D filtration

- 5 To obtain iron from a mixture of iron filings and table salt
- A distillation
 - B solvation
 - C use a magnet
 - D filtration
- 6 To obtain ethyl ethanoate (an ester that is insoluble in water) from a mixture of ethyl ethanoate and ethanoic acid (a carboxylic acid that is soluble in water)
- A distillation
 - B solvation
 - C use a magnet
 - D filtration
- 7 Mercury has a melting point of 234.1 K and a boiling point of 356.7 °C. Select the temperature at which mercury is a liquid.
- A -100 °C
 - B -40.0 °C
 - C 40.0 K
 - D 350 K
- 8 The change from $\text{NH}_3(\text{g}) \rightarrow \text{NH}_3(\text{l})$ is called
- A condensation
 - B sublimation
 - C diffusion
 - D boiling

END OF TEST