

Separation

- 6 Which one of the following mixtures could **not** be separated using the technique given?

	<i>mixture</i>	<i>separating technique</i>
A	calcium carbonate and water	evaporation
B	pentane and octane	fractional distillation
C	silicon dioxide and water	filtration
D	sodium chloride and water	distillation
E	ethanol and water	separating funnel

2016

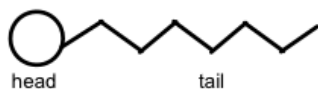
- 2 The following chemicals are mixed together. In which of the mixtures will a displacement reaction occur?

- $\text{Pb}(\text{NO}_3)_2(\text{aq}) + \text{Al}(\text{s})$
- $2\text{KCl}(\text{aq}) + 2\text{F}^-(\text{aq})$
- $\text{Al}_2(\text{SO}_4)_3(\text{aq}) + 3\text{Fe}(\text{s})$
- $\text{CuSO}_4(\text{aq}) + \text{Zn}(\text{s})$

- A** 1 only
B 2 and 3 only
C 3 and 4 only
D 1 and 4 only
E 1, 2 and 4 only
F 2, 3 and 4 only

2013

- 6 The diagram represents the molecule lecithin, a chemical that is added to chocolate drinks to prevent the oils separating out from water.



Which row of the table below correctly identifies the characteristics of the molecule?

	Head	Tail
A	hydrophobic	hydrophobic
B	hydrophobic	hydrophilic
C	hydrophilic	hydrophobic
D	hydrophilic	hydrophilic
E	neither hydrophobic nor hydrophilic	hydrophilic
F	hydrophilic	neither hydrophobic nor hydrophilic

2012