

30 Which flow chart describes the correct treatment sequence of the domestic water supply?

- A** filtration → chlorination → sedimentation
B sedimentation → chlorination → filtration
C chlorination → filtration → sedimentation
D sedimentation → filtration → chlorination

29 Water is added separately to anhydrous copper(II) sulfate and to anhydrous cobalt(II) chloride.

Which row shows the colour changes?

	anhydrous copper(II) sulfate	anhydrous cobalt(II) chloride
A	blue to white	blue to pink
B	blue to white	pink to blue
C	white to blue	blue to pink
D	white to blue	pink to blue

28 A sample of water taken from a river contains harmful microbes.

What is a source of harmful microbes in the river water?

- A** sewage
B fertilisers
C detergents
D plastics

29 Anhydrous copper(II) sulfate and anhydrous cobalt(II) chloride change colour when water is added to them.

Which row shows the correct colour changes?

	copper(II) sulfate	cobalt(II) chloride
A	blue to white	blue to pink
B	blue to white	pink to blue
C	white to blue	blue to pink
D	white to blue	pink to blue

31 A sample of river water contains a high concentration of nitrates from fertilisers.

Which statements about the river water are correct?

- 1 It has a boiling point of 100 °C.
2 Its melting point is below 0 °C.
3 It turns anhydrous cobalt(II) chloride from pink to blue.
4 It turns anhydrous copper(II) sulfate from white to blue.

- A** 1 and 3 **B** 1 and 4 **C** 2 and 3 **D** 2 and 4

32 Which statements about the treatment of domestic water supplies are correct?

- 1 The water undergoes sedimentation to remove dissolved solids.
2 The water is filtered to remove insoluble solids.
3 The water is treated with carbon to improve the taste.
4 The water is chlorinated to decrease the pH.

- A** 1 and 2 **B** 1 and 4 **C** 2 and 3 **D** 3 and 4