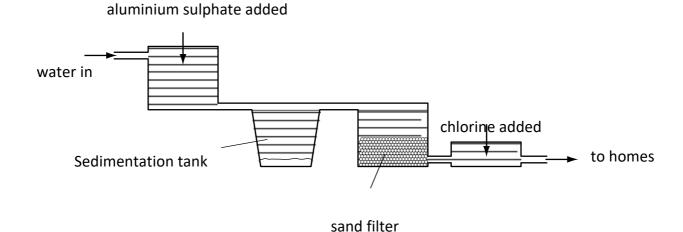
1. The diagram shows a water treatment works.



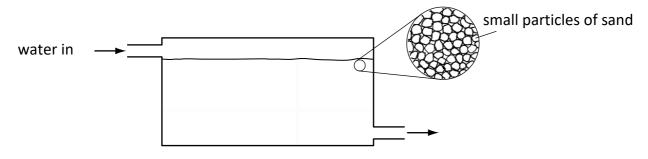
- (a) State one use of water in industry. (1mark)

 (b) Explain how the sand filter helps purify the water. (1mark)

 (c) Why is chlorine added to the water? (1mark)

 (d) (i) Explain why chlorine is used in water purification. (1mark)
 - (ii) Impure water contains particles of minerals and remains of dead plants and animals.

One stage in water purification is the removal of these particles by filtration. The diagram below shows a water filter.



Explain how this water filter works. Fish live in water which is neutral (neither acidic nor alkaline). Acid rain
decreases the pH of water in lakes and rivers. Both of the bases, calcium oxide and calcium carbonate, can
neutralise this acid and increase the pH. Explain why calcium carbonate is a better choice.

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S1 sample questions

23. To gain understanding of mixtures and concept of separation of mixtures, prepare a poster to help breast feeding mothers in your community find the element of iron in iron-fortified breakfast cereal flakes.



On the poster, explain the type of mixture iron-fortified cereal breakfast flakes is, how the iron component in mixture retains its properties and can thus can be separated by physical means. (15marks).