

**AQA – Chemical Changes – GCSE Chemistry**1. **May/2020/Paper\_8462/1F/No.1.4**

Why did the teacher do the investigation in a fume cupboard?

**[1 mark]**Tick (✓) **one** box.

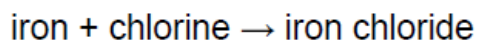
Chlorine gas is coloured.

Chlorine gas is flammable.

Chlorine gas is toxic.

2. **May/2020/Paper\_8462/1F/No.1.5**

The word equation for the reaction is:



Iron chloride is a solid.

The teacher weighed the glass tube and contents:

- before the reaction
- after the reaction.

What happened to the mass of the glass tube and contents during the reaction?

Give **one** reason for your answer.**[2 marks]**

The mass of the glass tube and contents \_\_\_\_\_.

Reason \_\_\_\_\_

\_\_\_\_\_

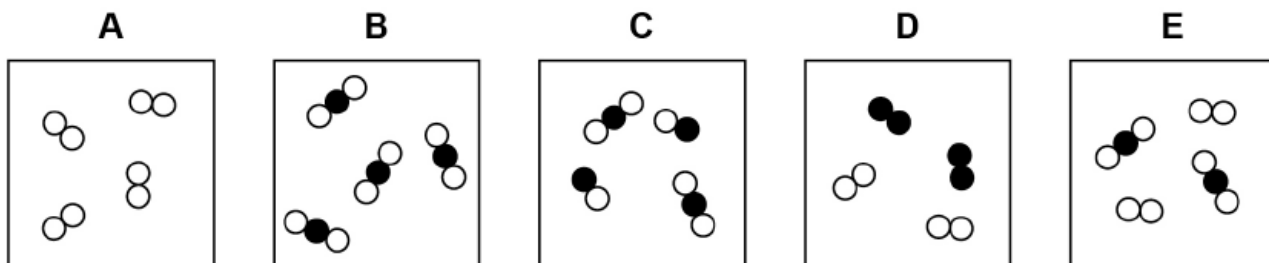
3. May/2019/Paper\_8462/1F/No.3

This question is about elements, compounds and mixtures.

Figure 5 shows five different substances, A, B, C, D and E.

○ and ● represent atoms of different elements.

Figure 5



Use Figure 5 to answer Questions 03.1 to 03.3

Which substance is only one compound?

[1 mark]

Tick (✓) **one** box.

A       B       C       D       E

Which substance is a mixture of elements?

[1 mark]

Tick (✓) **one** box.

A       B       C       D       E

Which substance is a mixture of an element and a compound?

[1 mark]

Tick (✓) **one** box.

A       B       C       D       E

Substances are separated from a mixture using different methods.

Draw **one** line from each method of separation to the substance and mixture it would separate.

**[2 marks]**

**Method of separation**

**Substance and mixture**

chromatography

blue food colour from a mixture of food colours

copper from an alloy of copper and zinc

copper sulfate from copper sulfate solution

crystallisation

ethanol from a mixture of ethanol and water

Sand does not dissolve in water. A student separates a mixture of sand and water by filtration.

Draw a diagram of the apparatus the student could use.

You should label:

- where the sand is collected
- where the water is collected.

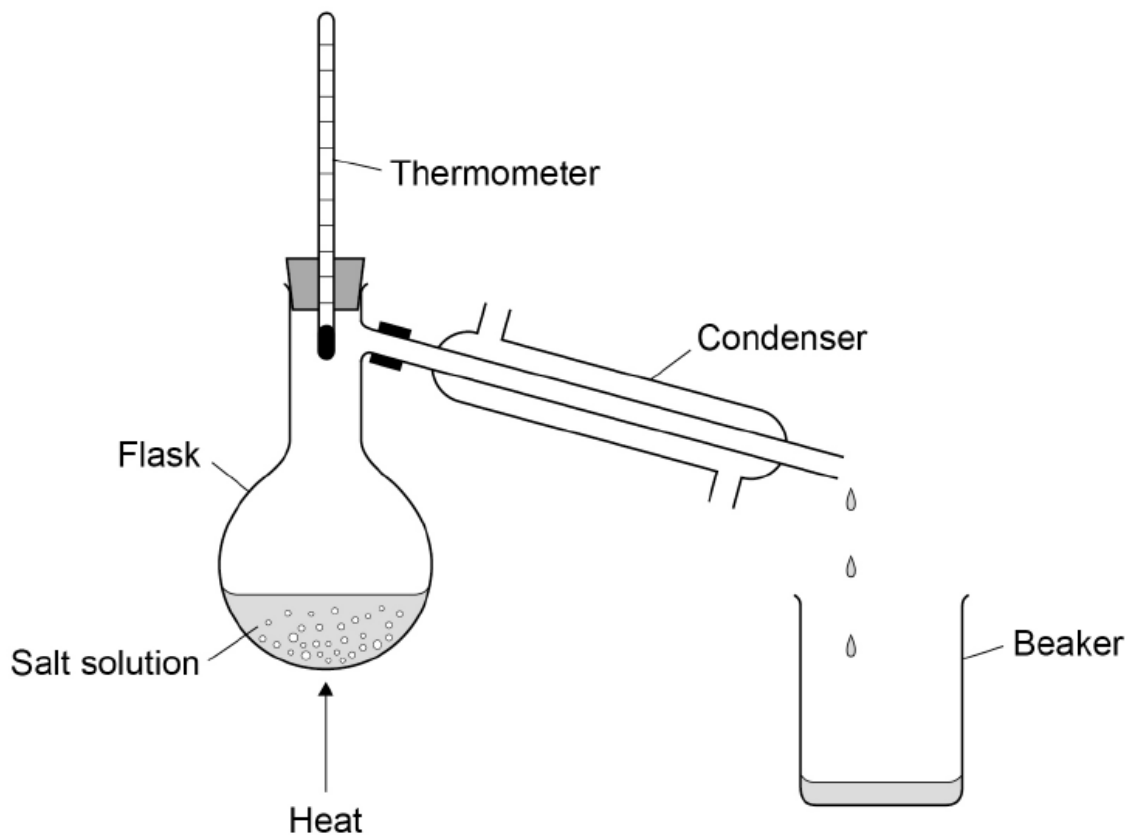
**[3 marks]**

**Diagram**

A student distils a sample of salt solution to produce pure water.

**Figure 6** shows the apparatus.

**Figure 6**



What temperature would you expect the thermometer to show?

[1 mark]

Tick (✓) **one** box.

0 °C

10 °C

50 °C

100 °C

Describe how the process of distillation shown in **Figure 6** produces pure water from salt solution.

**[4 marks]**

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