Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: Particle Model Of Matter (High Demand)

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Name of the Student:_____
Max. Marks : 14 Marks **Time : 14 Minutes**

Q1.

An athlete runs in a marathon race. As he runs, his body gets hotter.

His body produces sweat to help him cool down.

(a) Explain in terms of particles, how sweating helps the athlete to cool down.

(4)

(b) At the end of the race, the athlete is covered with a 'space blanket' made from shiny foil to prevent him from cooling too quickly.

He wraps the space blanket around his body to reduce energy transfer to the surroundings.

How does the space blanket reduce energy transfer to the surroundings?

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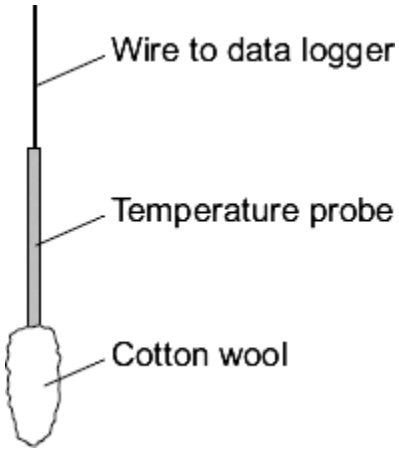
(3)

(Total 7 marks)

Q2.

A student investigated the evaporation of three different liquids using the apparatus shown.

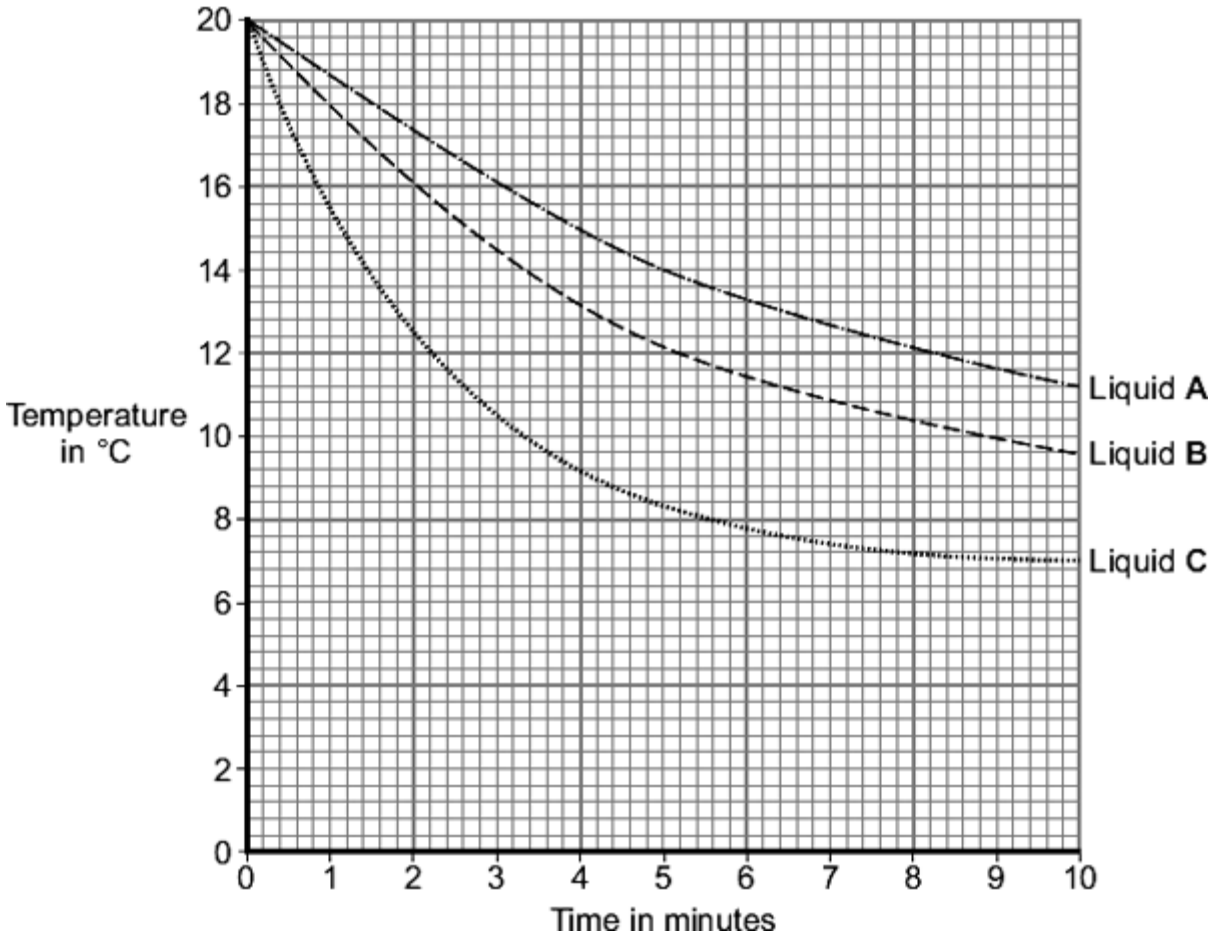


Identical pieces of cotton wool were soaked in one of three liquids, **A**, **B** or **C**, that have different boiling points. The same volume of liquid, at the same starting temperature, was used each time.

The temperature of the cotton wool was measured during a ten minute period.

The results are shown on **Graph 1**.

Graph 1



(a) Which liquid has the lowest boiling point?

Explain your choice.

Liquid _____

Explanation _____

_____

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_____

(2)

(b) Room temperature is 20 °C.

The line for liquid **C** reached a lower limit of 7 °C.

Explain why the temperature did **not** fall below 7 °C.

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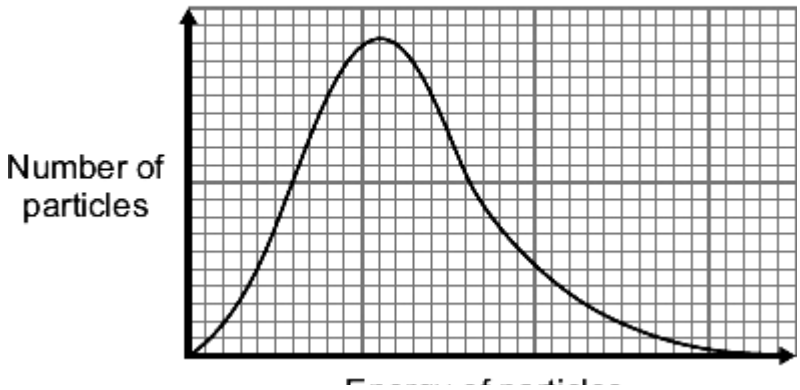
(1)

(c) **Graph 2** shows the distribution of energy among particles in a liquid.

Graph 2



Explain, in terms of the particles in a liquid, why evaporation causes cooling.

You may use information from **Graph 2** to help you with your answer.

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(4)

(Total 7 marks)