

A3: UASA**Section A (5 marks)**

1. Which of the following processes releases heat?

- A Melting
- B Boiling
- C Evaporation
- D Condensation

[Remembering]

2. Diagram shows the arrangement of particles in substance S.

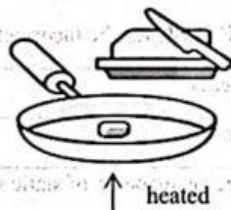


Which of the following is the substance S?

- A Mirror
- B Oxygen
- C Apple juice
- D Carbon monoxide

[Understanding]

3. Diagram shows the condition of a piece of butter on a pan.



What is the change in the state of matter that occurs to the butter?

- A Melting
- B Evaporation
- C Sublimation
- D Condensation

[Understanding]

4. The information is about the substance P.

The particles of substance P are very far apart from one another.

Which of the following represents substance P?

- A Ice
- B Alcohol
- C Cooking oil
- D Carbon dioxide

[Understanding]

5. Diagram shows the changes of particles in a process Y.



What is the process Y.

- A Boiling
- B Melting
- C Sublimation
- D Condensation

[Understanding]

Section B
(20 marks)

1. a) Underline the correct answers about the changes in the state of matter.

- i) During melting, the particles (absorb / release) heat and vibrate faster.
- ii) The particles absorb heat, move faster and further apart with one another during (condensation / boiling).



[2 marks]

[Remembering]

b) Write **TRUE** for the correct statements or **FALSE** for the incorrect statements.

Statements	TRUE or FALSE
i) Vapour produced from hot coffee is gas.	
ii) Kinetic theory of matter states that matter is made up of static small particles.	
iii) Particles in coffee move freely in all directions.	

[2 marks]

[Understanding]

2. a) Fill in the blanks using the words given.

i). Heat is _____ when water is heated.

ii). Heat is _____ when water is cooled.

absorbed

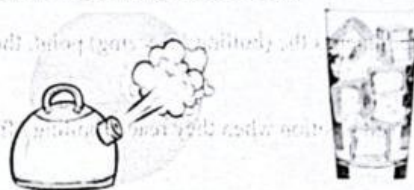
released

increase

[2 marks]

[Remembering]

b) Diagrams show two changes in states of matter, P and Q.



P

Q

Mark (✓) the correct statements.

Statements	Mark (✓)
i) Boiling is a process in which the particles of substances are heated from low temperature area to a high temperature area.	
ii) One example of process Q in daily life is the formation of water droplet in the cloud.	
iii) Energy is released during the process Q.	

[2 marks]

[Understanding]

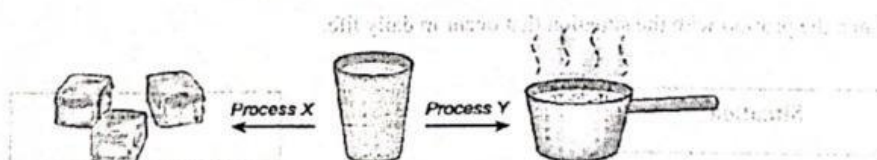
3. a) Underline the correct answers.

- i) When heated, the distance between the particles in a substance will (increase / decrease).
 ii) The particles in the (solid / gas) have the highest kinetic energy.

[2 marks]

[Remembering]

b) Diagram shows the effect of heat on matter.



Write **TRUE** for the correct statements or **FALSE** for the incorrect statements.

Statements	TRUE or FALSE
i) Process X absorbs heat while process Y releases heat.	
ii) The kinetic energy increases when process Y occurs.	
iii) Process X causes the kinetic energy to increase.	

[2 marks]

[Understanding]

4. a) Circle the correct answers about the temperature during freezing and boiling.

- When the temperature of water reaches the (boiling / freezing) point, the particles move freely and randomly.
- Particles start to vibrate at a fixed position when they reach (boiling / freezing) point.

[2 marks]

[Remembering]

b) Diagrams show the changes of states of matter that occur in daily life.

P: Preparation of salt from seawater



Q: Cloud formation



R: Mothballs shrink



Write **TRUE** for the correct statements or **FALSE** for the incorrect statements.

Statements	TRUE or FALSE
i) Process P and R absorb heat while process Q releases heat.	
ii) The kinetic energy increases when process Q occurs.	
iii) Process R causes the kinetic energy to decrease.	

[2 marks]

[Understanding]

5 a) Match the process with the situation that occur in daily life.

Situation	Process
i	Evaporation Condensation Freezing
ii	

[2 marks]

[Remembering]