

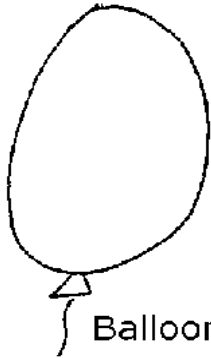
**Primary Four
Science
Semestral Assessment One**

For each question from 1 to 25, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write it in the box provided.

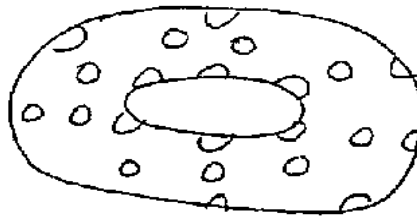
1. Which one of the following is **not** matter?

- (1) Fish Tank
- (2) Oxygen
- (3) Shadow
- (4) Cat

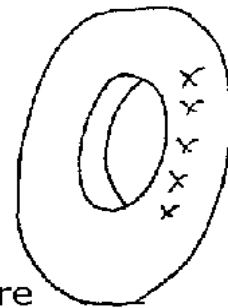
2. Air can fill these objects because it



Balloon



Air Float



Car Tyre

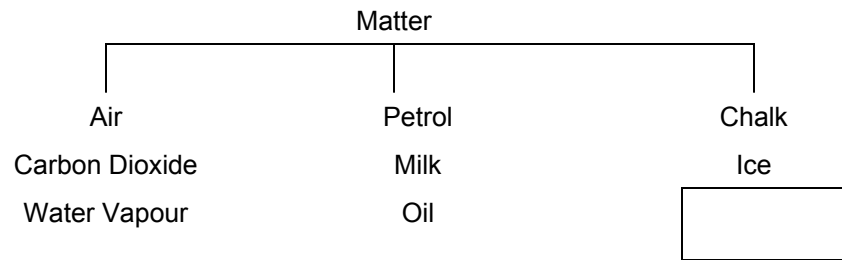
- (1) can be compressed
- (2) is colourless
- (3) has a definite volume
- (4) has no definite shape

3. Aden used a piece of plasticine to make a model of an aeroplane. Then she used the same piece of plasticine and moulded it into a car. The two models that she made have the same _____.

- A shape
- B volume
- C mass

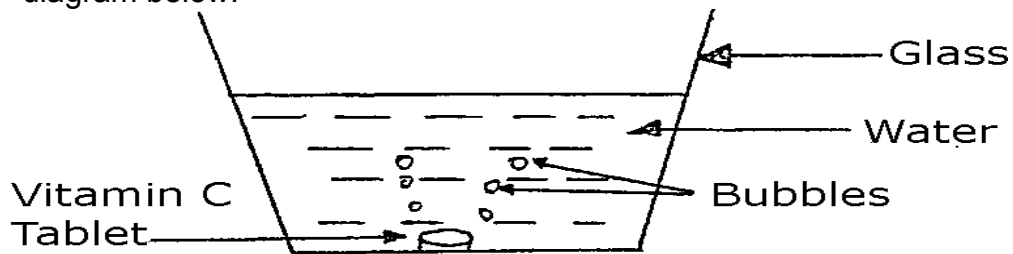
- (1) A and B
- (2) B and C
- (3) A and C
- (4) All of the above

4. The table shows how some substances can be classified under Matter.



- (1) Water Vapour
- (2) Flour
- (3) Kerosene
- (4) Mercury

5. Shawn puts a vitamin C tablet into a glass of water as shown in the diagram below.



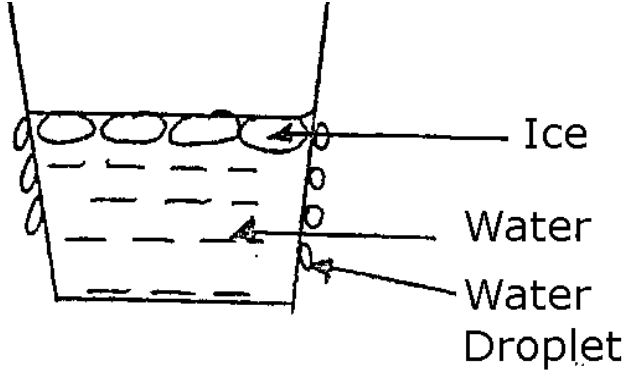
Immediately, she saw bubbles appearing. This shows that the tablet _____.

- (1) absorbed air
- (2) made the water boil
- (3) expanded when place in water
- (4) reacted with water to give out a gas

6. Kenneth uses a hair dryer to dry his hair. how does a hair dryer helps to dry his hair quickly?

- (1) Heat energy absorbs moisture.
- (2) Heat energy increases the rate of evaporation.
- (3) Water turns into heat energy.
- (4) The hot air sucks up water from his hair.

7. What causes the droplets of water to appear on the outside of the glass shown below?



- (1) water in the glass loses heat to the surroundings
- (2) the melting of ice inside the glass
- (3) condensation of water vapour from the air
- (4) water leaking from the glass

8. Which of the following clearly explains why dew is found on cars left overnight in the open?

- (1) Light rain falls at night and makes the cars wet
- (2) Water vapour in the air condenses during the cooler night
- (3) Water from the ground evaporates to form droplets of water
- (4) Humidity in the air causes water to condense at night

9. Which sequence shows the correct changes in the state of water during the water cycle?

- (1) Solid → Liquid → Gas
- (2) Gas → Solid → Liquid
- (3) Liquid → Gas → Liquid
- (4) Liquid → Solid → Gas

10. Which of the following processes is correctly matched to the change of state that takes place in water?

Process	Change of State
(1) Melting	Solid to Gas
(2) Condensation	Solid to Liquid
(3) Evaporation	Liquid to Gas
(4) Freezing	Gas to Liquid

11. David tried to lower the melting point of ice to below 0°C. What must he add to the ice to achieve that?

- (1) Sawdust
- (2) Towels
- (3) Salt
- (4) Sand

12. When a piece of ice melts, which one of the following takes place?

- (1) Ice gains heat from the surroundings
- (2) Ice loses heat to the surroundings
- (3) The temperature of the ice increases
- (4) The temperature of the ice decreases

13. While the kettle of water was boiling, Sue noticed “clouds” above the sprout of the kettle. What are the “clouds” made up of?

- (1) Water Vapour
- (2) Hot Air
- (3) Tiny droplets of water
- (4) Steam

14. Which of the following is the results of evaporation?

- (1) Sweaty face feeling cool when the wind blows on it
- (2) Body feeling warm during exercise
- (3) Sweat rolling down from a boy’s face
- (4) Body feeling cool when we shower

15. What happens when the temperature of water changes from 20°C to 5°C?

- (1) The water gains heat
- (2) The water loses heat
- (3) The water changes to a solid
- (4) The temperature of water increases

16. The process of obtaining drinking water from seawater involves _____.

- (1) condensation only
- (2) evaporation only
- (3) evaporation and condensation
- (4) evaporation and freezing

17. For the water cycle to occur,

- A there must be light
- B there must be heat
- C there must be air in the water
- D water must change state

- (1) A and B
- (2) A and C
- (3) B and C
- (4) B and D

18. Water collected in reservoirs is sent to the Water Treatment Plant for _____ before it is sent to your home.

- (1) sterilization
- (2) purification
- (3) pollution
- (4) desalination

19. Water falls from the sky as rain. Where does it go to?

- A It goes into the soil
- B It is absorbed by the plants
- C It collects in seas and rivers
- D It collects in ponds and reservoirs

- (1) A only
- (2) C only
- (3) A, B and C
- (4) A, B, C and D

20. Singapore has a limited supply of water. How can we help to conserve water?

- A Take a bath instead of a shower
- B Rinse your dishes under a running tap
- C Collect rainwater and use it to wash the floor
- D Water plants with water that was used to rinse rice and vegetables

- (1) A and B
- (2) C and D
- (3) A and C
- (4) B and D

21. How can we help to conserve water? We can _____.

- A recycle
- B reduce
- C reserve
- D reuse
- E reverse

- (1) A, B, C
- (2) A, B, D
- (3) A, C, D
- (4) B, C, D

22. Green plants in a cloudy river cannot survive because they cannot get enough _____.

- (1) oxygen
- (2) carbon dioxide
- (3) sunlight
- (4) nutrients

23. We will not be so dependent on other countries for water if we can _____.

- A recycle water
- B reuse water
- C obtain water from seawater
- D build more reservoirs to collect rainwater

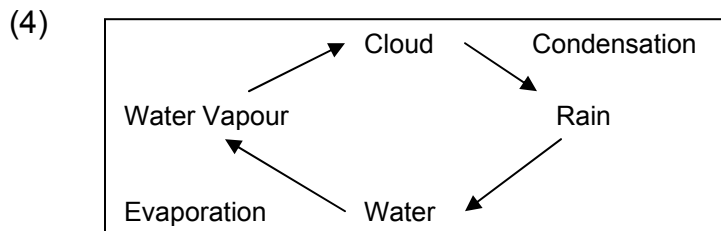
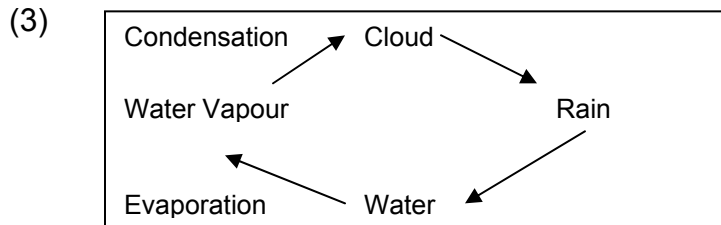
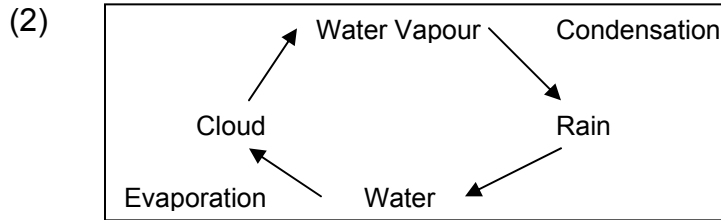
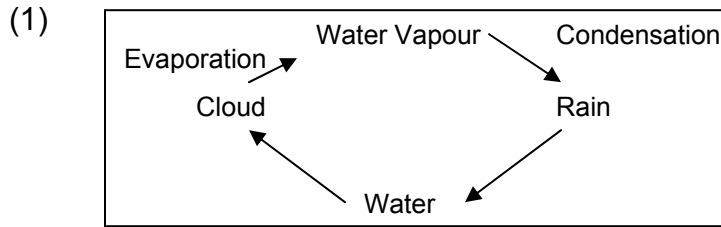
- (1) A and B only
- (2) B and C only
- (3) A, B and C
- (4) A, B, C and D

24. The main causes of water pollution are

- A oil spills
- B littering and dumping
- C burning of rubbish
- D deforestation

- (1) A only
- (2) A and B
- (3) A, B and C
- (4) A, B and D

25. Which one of the following correctly shows the water cycle?



For questions 26 to 46, write your answers in this booklet. The number of marks available is shown in the brackets () at the end of each question or part-question.

Fill in the blanks with the correct answer from the box. Use the word only **once**.

volume	shapes	grams	kilograms
space	definite	germs	temperature
heat	state	increases	decreases
desalination	deforestation	water vapour	water rationing

26. A metal can was melted and moulded into a cube. Both the items have the same _____ but different _____.
27. The mass of an object can measured in _____ and _____.
28. _____ are considered as matter even though they are too tiny to be seen by our eyes.
29. A change in temperature can change the _____ of matter.
30. _____ from the sun will help us dry our clothes.
31. As a plant grows bigger, its mass _____.
32. Water from the Earth is sent back to the sky as _____.
33. The process of removing dissolved salt from seawater to get fresh water is known as _____.
34. The Singapore Government conducts _____ exercises to teach us about water conservation.

35. The clearing of forests by cutting or burning is known as _____.

Complete each sentence with a suitable word of your own.

36. When Kevin pours a cup of fizzy drink from a bottle, _____ can be found in the drink. This shows that the drink contains _____.

37. Matter has mass and occupies _____.

38. _____ changes water from a state with definite shape to a state with no definite shape.

39. The continuous movement of water between the Earth and the sky is known as the _____.

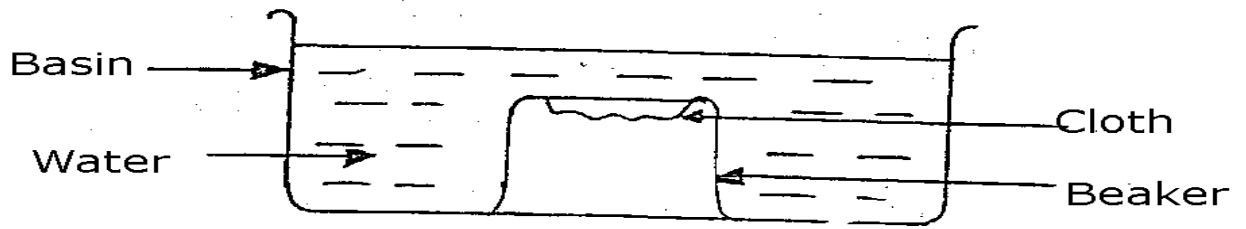
40. When harmful substances get into the water, it becomes _____ and unfit for drinking.

41. Mrs Tan bought a fish from the market. She put it in the freezer as she would only cook it the next day. When she took out the frozen fish the next day, her son noticed that it had become hard.

(a) What caused the fish to harden in the freezer? [1]

(b) The fish will become soft again if it is taken out of the freezer. Explain how this happen. [1]

42. Look at the experiment done below.

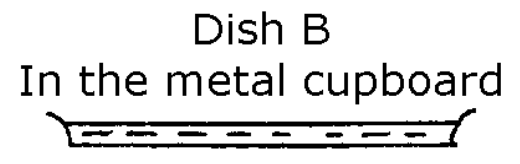
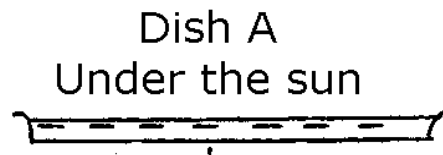


(a) After some time, will the cloth in the basin of water get wet? [1]

(b) Explain your answer for (a). [1]

43. How do we reduce the rate of melting of a block of ice? [1]

44. Eugene placed two dishes of water at different places. After a day, he discovered that one dish had less water than the other.



(a) Which dish would contain less water? [1]

(b) Explain your answer for (a). [1]

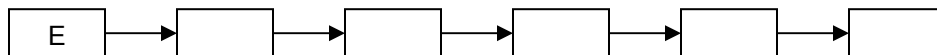
45. (a) Give a reason why seawater does not freeze at 0°C. [1]

(b) When seawater changes from a liquid state to a gas state, what is the process that takes place? [1]

46. The statements A to F describe the events that lead to the formation of rain. They are not in the correct order. [2]

- A Water evaporates
- B Condensation happens
- C Warm air rises and then cools
- D Droplets of water form clouds
- E Heat energy from the sun warms the earth
- F When the water droplets become bigger, rain falls.

Complete the diagram below to show the correct order.



47. (a) The two important processes in the water cycle are _____ and _____. [2]

(b) Why is the water cycle important to living things? [2]

48. Read the newspaper headline and answer the questions below:

The oil tanker Exxon Valdez hit sharp rocks and the oil it was carrying spilled into the sea.....

(a) How might the oil spill kill the animals and plants living in the water? [2]

(b) What happens when oil sticks to the feathers of sea birds? [2]

THE END