

## Inspire science grade 5

### States of matter

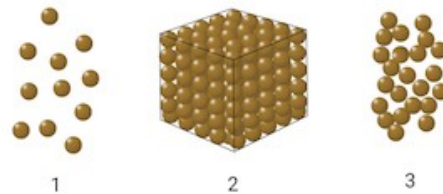
### الإجابات أسفل الصفحة

Select the best choices to answer the questions

1) The image shows the particles in a solid, a liquid, and a gas.

Which option has the correct description of the particles?

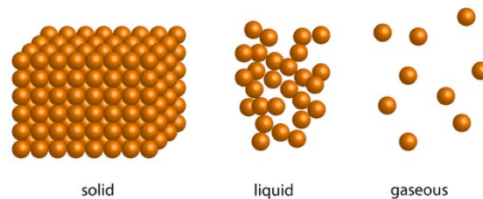
- A. Image 1 is a gas.
- B. Image 2 is a gas
- C. Image 3 is a solid.
- D. Image 1 is a solid



2) which are examples of a liquid?

- A. Milk
- B. Oil
- C. Ice
- D. Water vapor
- E. Steam
- F. Salt

3) Which statement best describes the arrangement and movement of particles in a solid?



- A. They are far apart from each other and move freely.
- B. They are tightly packed and vibrate in place
- C. they are held together by weak attractive forces so they can move freely
- D. they are close to each other and vibrate in place

4) which statement explains why water flows smoothly down this waterfall?



- A. the particles are far apart from each other and move freely in all directions
- B. The particles are tightly packed and move freely in all directions
- C. the particles are close together and slide past each other
- D. the particles are tightly packed and vibrate in place

5) A ..... has a fixed shape and a fixed volume

- A. solid
- B. liquid
- C. gas



6) A liquid has a fixed..... but does not have a fixed shape.

- A. density
- B. mass
- C. volume



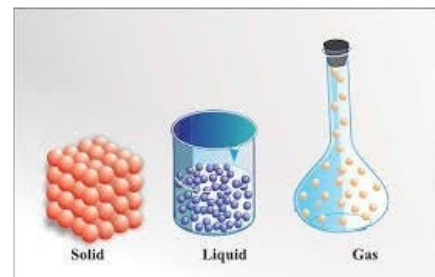
7) Which of the following statements is TRUE about gases?

- A. Gases have a fixed shape and a fixed volume.
- B. Gases have no fixed shape and no fixed volume.
- C. Gases have a fixed volume, but no fixed shape.



8) The particles in a solid are tightly packed together and .....in place

- A. Vibrate
- B. Slide
- C. move freely



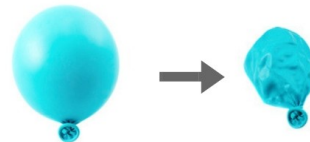
9) Liquid poured from a bottle into a glass is able to flow because the liquid does not have a definite shape.

- A. TRUE
- B. FALSE



10).....change both shape and volume when placed in different spaces or containers. They have no fixed shape and volume.

- A. Gases
- B. Solids
- C. liquids



11) In which state of matter are the particles farthest apart?

- A. Solid
- B. Plastic
- C. Liquid
- D. Gas

12) How are gases and liquids different?

- A. Gases do not have a fixed volume. Liquids have a fixed volume.
- B. Gases have a fixed shape. Liquids do not have a fixed shape.
- C. Gases have a fixed volume. Liquids do not have a fixed volume.
- D. Gases do not have a fixed shape. Liquids have a fixed shape.

13) Solids have.....shape and volume.

- A. no fixed
- B. an unfixed
- C. a fixed
- D. a changing



14) Rain is water in the.....state.

- A. Liquid
- B. Gaseous
- C. solid



15) Ice is water in the.....state

- A. Liquid
- B. Gaseous
- C. Solid



16) Vapor is water in the..... state

- A. Liquid
- B. solid
- C. gaseous



17) Gas has.....

- A. No fixed shape and volume
- B. Fixed shape and volume
- C. No fixed shape and fixed volume

18) Liquid has.....

- A. No fixed shape and volume
- B. Fixed shape and volume
- C. No fixed shape and fixed volume

19) Which statements about the book are TRUE?



- A. The particles are far apart from each other and move freely in all directions.
- B. The particles are tightly packed and move freely in all directions.
- C. The particles are tightly packed and vibrate in place.
- D. The book has a fixed shape and volume.

20) Particles within a solid.....

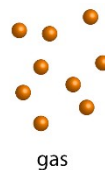
- A. move about freely
- B. vibrate in fixed positions
- C. do not move
- D. change place easily

21) Gases, like air in a balloon,.....have a fixed shape or a fixed volume.

- A. sometimes
- B. definitely
- C. always
- D. do not

22) Which of the following is NOT true about a gas such as air?

- A. A gas has a definite shape.
- B. A gas has no definite shape.
- C. A gas fills all of the space it is placed
- D. A gas has no definite volume



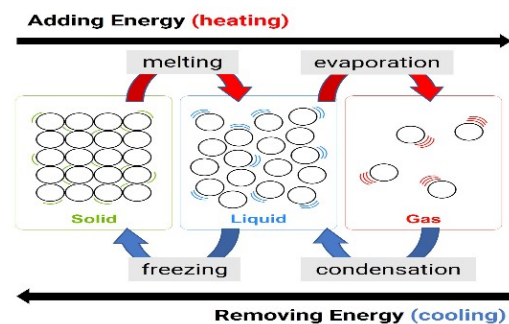
23) The change in state shown on the glass is caused by

- A. releasing energy
- B. producing energy
- C. adding energy
- D. removing energy



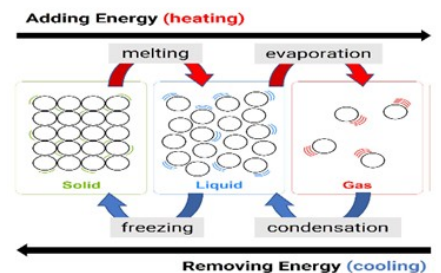
24) What word is used to describe liquid water changing to ice?

- A. condensing
- B. freezing
- C. evaporating
- D. melting



25) What causes a change in the state of matter?

- A. Removing Energy
- B. adding or removing energy
- C. adding energy
- D. creating energy and destroying energy



26) Freezing is when a liquid becomes a .....

- A. Solid
- B. Gas
- C. liquid



27) Which of the following must happen for solid ice to change to liquid water?

- A. energy must be kept the same
- B. energy must be removed
- C. the particles must move slower
- D. energy must be added
- E. the particles must move faster
- F. the particles must move closer together



28) The ice cream is melting. How can you get the ice cream to return to a solid?

- A. cool it in the freezer
- B. keep holding it in your hand
- C. remove it from the cone
- D. heat it on the stove



29) Which process does this picture shows?

- A. evaporation
- B. melting
- C. condensation
- D. freezing



30) Which process does this picture shows?

- A. Evaporation
- B. melting
- C. condensation
- D. freezing





31) Which process does this picture shows?

- A. Evaporation
- B. melting
- C. condensation
- D. freezing



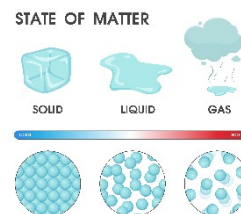
32) Which process does this picture shows?

- A. Evaporation
- B. melting
- C. condensation
- D. freezing



33) If the temperature of a liquid is increased enough, it will become a

- A. Gas
- B. Solid
- C. liquid



34) What are the differences between evaporation and condensation?

- A. During condensation, energy is added.
- B. During evaporation, energy is removed.
- C. During condensation, a liquid becomes a gas.
- D. During condensation, a gas becomes a liquid.
- E. During evaporation, a gas becomes a liquid.
- F. During evaporation, energy is added.

35) What is condensation?

- A. the process by which a liquid becomes a solid
- B. the process by which a liquid becomes a gas
- C. the process by which a solid becomes a liquid
- D. the process by which a gas becomes a liquid



36) What word is used to describe liquid water changing to ice?

- A. freezing
- B. condensing
- C. evaporating
- D. melting

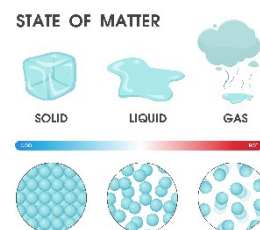


37) In which state of matter are the particles farthest apart?

- A. Liquid
- B. Plastic
- C. Gas
- D. Solid

38) For matter to change from a gas → to a liquid → to a solid, energy must be.....

- A. removed
- B. added



### Answers

1. A
2. A/B
3. B
4. C
5. A
6. C
7. B
8. A
9. A
10. A
11. D
12. A
13. C
14. A
15. C
16. C
17. A
18. C
19. C/D
20. B
21. D
22. A
23. D
24. B
25. B
26. A
27. D/E
28. A
29. A
30. B
31. C
32. D
33. A
34. D/F
35. D
36. A
37. C
38. A