



SCIENCE

SAMPLE BOOK



SCIENCE



I'm the
Intelli Kid

and
I'm becoming the
Best Version
of myself with





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GRADE-2





I AM PROGRESSING

(Tick mark the columns after achieving the Learning Milestones)



TOPIC	1 st Learning	Exercise Solving	1 st Revision	2 nd Revision
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 Food & Health				
 Plant Life				
 Animal Life				
 Housing & Clothing				
 Matter				

SCIENCE

SAMPLE THEORY

CHAPTER 7

MATTER

Matter

Anything that has mass and occupies volume (space).

Matter is commonly said to exist in 3 states (or phases): Solid, Liquid and Gas.

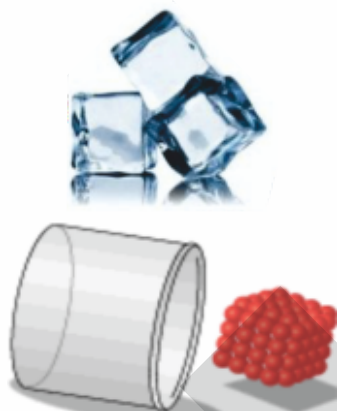
States of Matter

Solid

A solid substance has a definite shape.

The molecules are packed tightly together.

It can't be compressed.



Liquid

A liquid substance has no definite shape. It takes the shape of the container it is in.

The molecules are farther apart. It can't be compressed.



Gas

A gas substance has no definite shape. It takes the shape of the container it is in and spreads out to fill the container.

The molecules are much far apart. It can be compressed.



Comparison Table

S.No.	Properties	Solids	Liquids	Gases
1	Mass	Definite	Definite	Definite
2	Shape	Definite	Acquires the shape of the container	Acquires the shape of the container
3	Volume	Definite	Definite	Indefinite
4	Space between particles	Most closely packed	Less closely packed	Least closely packed
5	Example	Table, chair, ice etc.	Water, milk, juice etc.	Water vapour, air etc. (mixture of gases)

States of matter are interchangeable

Melting

Melting is the process by which a substance changes from the solid phase to the liquid phase.

Example: Melting of ice-cream.



Sublimation

When anything solid turns into a gas without first becoming liquid, it is known as sublimation.

Example: Dry ice (Solid carbon dioxide) sublimates to form gas, similarly Naphthalene balls and Camphor sublimate into a gaseous state.



Evaporation

Evaporation is the process in which a substance in a liquid state changes to a gaseous state due to an increase in temperature.

Example: Evaporation of water from sea to form clouds.



Freezing

Freezing is the process through which a substance changes from a liquid to a solid state.

Example: Freezing of water to form ice.



Deposition

Changing of a substance from a gaseous state to a solid state is called Deposition. It is the reverse of Sublimation.

Example: Deposition of carbon due to candle flame.



Condensation

Condensation is the change of the physical state of matter from the gaseous phase into the liquid phase, and it is the reverse of evaporation.

Example: Water droplets forming on a glass of cold drink.



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SAMPLE EXERCISE



EXERCISE

GRADE-2
Matter



Directions: Solve the following multiple choice questions by choosing the most appropriate option.

1. Which of these is the conversion of solid into liquid ?

- (1) Melting a wax candle
- (2) Slicing a loaf of bread
- (3) Turning milk into ice cream
- (4) Mixing ingredients to make dough

2. A substance melted. Later, it froze. Which states of matter was the substance in during the whole process ?

- (1) Solid only
- (2) Liquid and solid
- (3) Liquid and gas
- (4) Solid, liquid and gas

3. What happens to a liquid if it is cooled enough ?

- (1) It begins to boil.
- (2) It turns into a gas.
- (3) It turns into a solid.
- (4) It turns into a new substance.

4. What will make the ice cube melt ?

- (1) The plate
- (2) The window
- (3) Heat from the Sun
- (4) Water



5. Complete the sentence. When a substance melts, it-

- (1) changes from a solid to a liquid.
- (2) changes from a liquid to a solid.
- (3) changes from a liquid to a gas.
- (4) changes from a gas to a liquid.

6. How do you know that air is matter ?

- (1) Air can be attracted by a magnet.
- (2) You cannot see air, so it is not matter.
- (3) You can smell air.
- (4) Air takes up space and has mass.

7. Water vapour turns into liquid water droplets and sticks to the outer side of a cold glass. in this process the water _____.

- (1) boiled
- (2) condensed
- (3) frozen
- (4) melted

8. When a liquid evaporates, it-

- (1) becomes a solid.
- (2) changes colour.
- (3) boils.
- (4) becomes a gas.

9. What are the states of matter you see in the picture ?

- (1) Gas and liquid
- (2) Solid, liquid and gas
- (3) Solid and liquid
- (4) Only solid



10. Which of the following is a gas ?
 (1) Air (2) Honey (3) Wood (4) Milk
11. What is anything that takes up space and has mass ?
 (1) Mass (2) Volume (3) Melting (4) Matter
12. _____ is the process in which a solid converts into a liquid.
 (1) Evaporation (2) Condensation (3) Melting (4) Matter
13. Which states of matter do not have a definite shape ?
 (1) Liquid and gas (2) Solid and gas (3) Solid and liquid (4) All of these
14. The least closely packed particles are found in a _____.
 (1) solid (2) liquid (3) gas (4) matter
15. Milk is an example of which state of matter ?
 (1) Solid (2) Liquid (3) Gas (4) None of these
16. What changes shape when it is moved to another container ?
 (1) Matter (2) Liquid (3) Texture (4) Solid
17. What is everything around you called ?
 (1) Solid (2) Mass (3) Gases (4) Matter
18. Which change in state is illustrated in the given figure ?
 (1) Melting (2) Freezing (3) Evaporation (4) Condensation
19. The diagram best represents which cycle ?
 (1) Rock cycle (2) Water cycle (3) Carbon cycle (4) Nitrogen cycle
20. When your mother puts sweet milk into a freezer, how does it become ice-cream ?
 (1) Sweet milk melts and becomes ice-cream.
 (2) Sweet milk freezes and hardens to become ice-cream.
 (3) Sweet milk evaporates.
 (4) None of these

