Test: Chapter: Matter Class 8

Note: (1) Think and Answer (2) Don't use gel or ink pen on question paper

(2) Answer all objective question in test paper (4) Read the questions properly

Name: **Date:**

Areas of Improvement:

Maximum Marks (Objective)	**9**
Marks Obtained	
%	
Maximum Marks (Subjective)	**20**
Marks Obtained	
%	
Maximum Marks	**29**
Marks Obtained	
%	

Parent's Signature	**Parent's Signature**

I. Objective Questions:

A. Multiple Choice Questions [0.5 x 10 = 5]

1. What is the process called when a solid changes directly into a gas?

a) Evaporation

b) Condensation

c) Sublimation

d) Deposition

2. During a physical change, what happens to the mass of the substance?

a) It increases

b) It decreases

c) It remains the same

d) It becomes zero

3. Which of the following is a characteristic of a solid?

a) It takes the shape of its container

b) It has a fixed volume

c) It has indefinite shape and volume

d) Its particles are highly separated

4. What is the state of matter of a substance that has neither a fixed shape nor a fixed volume?

a) Solid

b) Liquid

c) Gas

d) Plasma

4. Which of the following is a physical property of matter?

a) Ability to react with acids

b) Ability to decompose

c) Ability to conduct electricity

d) Ability to tarnish

5. Which of the following is a chemical property of matter?

a) Boiling point

b) Solubility

c) Reactivity with water

d) Color

6. What happens to the density of a substance as it changes from a liquid to a gas?

a) It increases b) It decreases c) It remains the same d) It becomes zero

7. What is the measure of how much space an object occupies?

a) Mass b) Density c) Volume d) Weight

8. What happens to the volume of a substance during a physical change?

a) It decreases b) It remains the same c) It increases d) It becomes zero

9. Which of the following is a physical change?

a) Burning paper b) Rusting of iron c) Dissolving sugar in water d) Freezing water

10. What is the measure of how much space an object occupies?

a) Mass b) Density c) Volume d) Weight

B. Fill in the blanks: **[0.5 x 6 = 3]**

1) Any matter which has a definite volume but no definite shape is called a _____.
2) The molecules are at a greater distance in _____ compared to liquids.
3) The physical state of a substance, which has a fixed volume but no fixed shape is _____.
4) Molecules in a _____ are packed very closely.
5) Liquids have no definite _____.
6) Matter is anything that has _____and occupies _____.

II. Short Answer Questions: (Attempt any 6 questions only) [6 x 2 = 12]

Q1. Explain interconversion of states of matter. What are the two factors responsible for the change of state of matter?

Q2. When sodium chloride is added to a definite volume of water and stirred well, a solution is formed, but there is no increase in the level of water. Why?

Q3. Why can a piece of chalk be broken easily into smaller pieces while a coal piece cannot be broken easily?

Q4. In which of the three states of matter - solids, liquids or gases is the movement of atoms about their own position. Give a reason for the same.

Q5. 'Inter-particle attraction between atoms of gases is very weak'. State five properties of gases which correlate as a consequence of the weak inter-particle attraction between particles of gases.

Q6. On the basis of kinetic theory explain why, ammonium chloride sublimes and goes from solid state directly into vapour state.

Q7. With reference to the liquid state of matter — answer the following:

1. On heating the liquid, do the particles gain or lose energy.
2. The heat energy supplied to the liquid is absorbed by its molecule & stored as which form of energy.
3. How does the stored energy, have effect on inter-particle space.
4. State why the inter-particle attraction decreases to negligible.
5. At what point will the particles become free and escape as gas.

Q8. Imagine you have a glass of ice water. Describe what happens to the ice cubes over time as they sit in the water at room temperature. Explain the changes in terms of states of matter.

Q9. What is the relation between intermolecular space and intermolecular force?

III. Long Answer Questions: (Attempt any 2 questions only)

Q1. Give reasons for the following: **[4 x 2 = 8]**

1. Particles of matter possess energy called kinetic energy.
2. Solids cannot be compressed, but gases are highly compressible.
3. Kinetic energy of molecules of gases is very large & of solids, the least.
4. On heating a sublimable solid, the molecules break free & escape from surface of the solid directly into vapour.
5. Particles of matter move more rapidly on application of heat.

Q2. With reference to inter-conversion of matter - on the basis of kinetic theory - explain in brief the conversion of:

(a) A solid into a liquid

(b) A liquid into vapour [or gas]

(c) Vapour [or gas] into a liquid

(d) A liquid into a solid

With special reference to inter-particle space & inter-particle attraction at the different stages of conversion.

Q3. Draw a labelled schematic diagram representing the terms - (a) to (e) involved in the inter-conversion of matter.

Q4. Give reasons:

(a) A gas can fill the whole vessel in which it is enclosed.

(b) Solids cannot be compressed.

(c) Liquids can flow.

(d) When magnesium is burnt in air, there is an increase in mass after the reaction.