



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

27, Ballygunge Circular Rd, Kolkata- 700019



**Term: First**

**Date: 20.08.20**

**Subject: Science**

**Class: 4**

**Lesson: Matter- Solid, Liquid and Gas**

**Topic: States of Matter**

## ANSWER WORKSHEET – 10

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### Answer the following questions in detail:-

1. What is matter?

**Ans: Matter is everything that we see around us. Matter is composed of tiny particles called molecules. These molecules go on to build the things we see and touch everyday. Matter is defined as anything that has mass and takes up space. If more matter is added to an object, its mass increases and makes the object heavier. Adding more, mass also increases the size of the object. Matter exists in nature as solids, liquids and gases and these are the three basic states of matter.**

2. What is mass?

**Ans: Mass is a measure of the amount of matter in an object, which means quantity of matter, contained in an object. Mass is usually measured in grams or kilograms. Mass measures the quantity of matter regardless of both its location in the universe (whole world) and the gravitational force applied to it. An object's mass is same in all circumstances, but when we compare this with its weight, the force depends on the gravity. Our mass on the earth and the moon are same, but our weight on the moon is about one- sixth of our weight on the earth.**

3. What is volume?

**Ans: Volume refers to the amount of space the object takes up. In other words, volume is a measure of the size of an object, including the height and width. If the object is hollow (empty), volume is the amount of water it can hold. Take a large bowl and a small bowl. Fill the small bowl with water. Then pour the water into the large bowl. What do we notice? The amount of water that filled the small bowl is not enough to fill the large bowl. This figures out that the smaller bowl has less volume. We should also keep in mind that volume is not the same as weight.**

4. What are states of matter?

**Ans: States of matter are generally described on the basis of qualities that can be seen or felt. Matter that feels hard and maintains a fixed shape is called a solid. Matter that feels wet and maintains its volume but not its shape is called liquid. Matter that can change both shape and volume is called gas.**

- **Solid**- A solid has a definite shape and volume because the molecules that make up the solid are packed closely together and move slowly. For example – wood, metal, plastic, paper etc.
- **Liquid**- A liquid has a definite volume but takes the shape of its container. Examples of liquids include water and oil. Molecules in a liquid are not as tightly packed as in solids. There is space between molecules to move around and slide past one another. This gives them the ability to flow.
- **Gas**- A gas has neither a definite volume nor a definite shape. Molecules in gases are loosely packed, so they can move around randomly. For example- oxygen, hydrogen. Carbon-dioxide etc.

**Ms. Margaret Das**