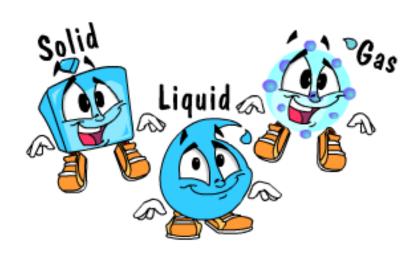
## STATES OF MATTER



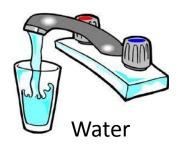
SAHAN RASIKA SALPAGE

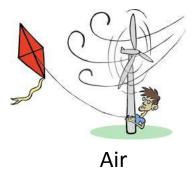
**DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY** 

## WHAT IS MATTER?

Anything that has mass and volume.



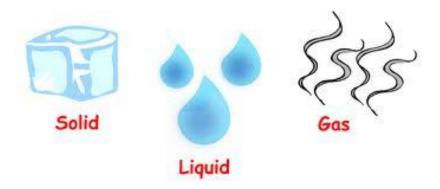




### WHAT ARE THE STATES OF MATTER?

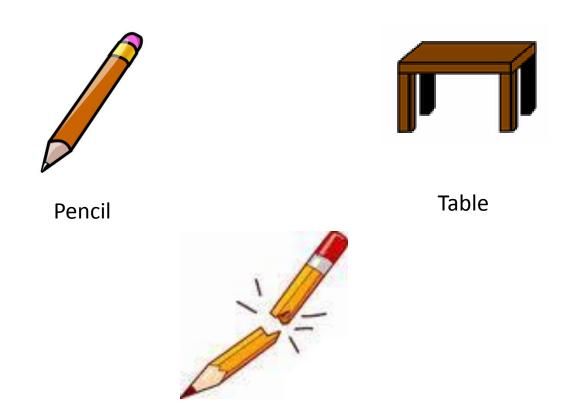
Matter exist in three states in nature

- 1. Solid state
- 2.Liquid state
- 3. Gaseous state



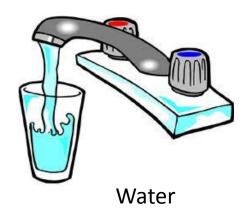
### WHAT IS A SOLID?

• Matter that has constant volume and constant shape



# WHAT IS A LIQUID?

• Matter that has a constant volume but not a constant shape





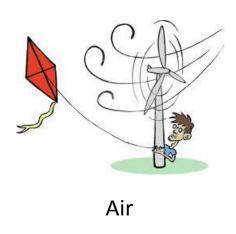
- liquid flows to take the shape of the container
- It has a certain volume





#### WHAT IS A GAS?

Matter that has neither constant volume nor constant shape





- A gas disperse to fill every space of the container
- A gas flows and take the shape of the container



### **SUMMARY**

- What is Matter
  - -Definition
  - Examples
- States of Matter
  - Solids, Liquids, Gases

State of matter	Example	Constant volume	Constant shape
1. Solid	Pencil	Yes	Yes
2. Liquid	Water	Yes	No
3. Gas	Air	No	No

## **TEST YOUR SKILLS**

1. What are the states of matter that water can have?

### **ANSWER**

- Water can exist in all three states,
- Solid state-Ice (Below 0 °C)
- Liquid state-Water (Room temperature)
- Gaseous state-Steam (Above 100 °C)

