

# WELCOME TO THE ONLINE CLASS

**SESSION NO.: 3**

**CLASS: 4**

**SUBJECT: SCIENCE**

**CHAPTER NUMBER: 5**

**CHAPTER NAME: SOLIDS, LIQUIDS AND GASES**

**SUB TOPIC: STATES OF MATTER ARE INTERCHANGEABLE**

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**CHANGING YOUR TOMORROW**

# LEARNING OBJECTIVE

To enable the learner to:

- Understand the changing states of matter

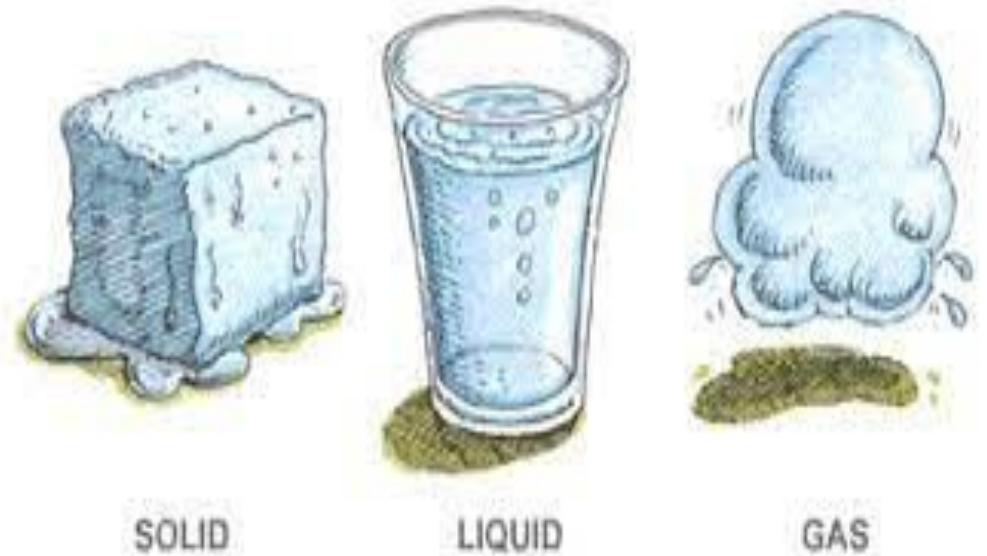
# WARM UP

- Liquid can be poured in \_\_\_\_\_ and take the shape of it.
- How are molecules packed in the liquid state?
- Which state occupies less space than gaseous state?
- Molecules in \_\_\_\_\_ can move and compressed easily.
- Air is mixture of how many gases?
- Which state of matter has no fixed shape and volume?

# STATES OF MATTER INTERCHANGES

- Solid ,liquid and gas are interchangeable states.
- We have already studied about the three forms of water

1. Solid
2. Liquid
3. Gaseous



# ACTIVITY: Look at figure very carefully. Follow the sequence and fill in the table

Step	initial state	heating/cooling	final state	process
A	Ice	heating	water	melting
B				boiling
C		cooling		
D			ice	



HEAT → HEAT

( STEP A ) ( STEP A )



COOL → COOL

( STEP C ) ( STEP D )

# DIFFERENT WAYS OF CHANGING THE STATES OF MATTER



**HEATING**



**BOILING**



**MELTING**



**COOLING**



**FREEZING**

## ***Activity: Observe and note it down***

It is clear from the figure that one form of matter can be changed into another by heating or cooling.

***LET US DO!!***

- **Take a wax candle .**
- **Light it and let it burn.**
- **Observe it carefully.**

**What happens to the wax after some time?**

**>Solid wax melts on getting heated.**



# Write the short answers

**Q1. What is matter made up of?**

**Ans:** . All matter in the world is made up of molecules.

**Q2. What are molecules?**

**Ans:** . Molecules are the smallest substances in the matter that can exist independently.

**Q3. Name a solid that turns to liquid when taken out from refrigerator.**

**Ans:** Ice is a solid that turns to liquid when taken when taken out from refrigerator.



# SUMMARY

- **Solid, liquid and gas are interchangeable states.**
- **We have three forms of water in solid, liquid and gaseous.**
- **Water on heating can be converted into water vapour.**
- **Water on cooling can be converted into ice cubes or in a freezing form.**
- **Burning of candle can get melted into wax.**



**Q1.How water can be converted into solid state?**

**Ans: freezing**

**Q2. In which state do molecules move easily?**

**Ans: Gases**

**Q3.What happens to the burning candle?**

**Ans: Candle starts melting into wax**

**Q4. Which method can be used to convert ice into water?**

**Ans: melting**

# HOMework

- Draw a picture to show the states of matter are interchangeable.

# LEARNING OUTCOME

The learner will be able to:

- Understand the changing states of matter



**THANKING YOU**  
**ODM EDUCATIONAL GROUP**