WELCOME TO THE ONLINE CLASS

SESSION NO.: 10
CLASS: 5
SUBJECT: SCIENCE
CHAPTER NUMBER: 5
CHAPTER NAME: SOLIDS, LIQUIDS AND GASES
SUB TOPIC: CHEMICAL CHANGE

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LEARNING OBJECTIVE

To enable the learner to:

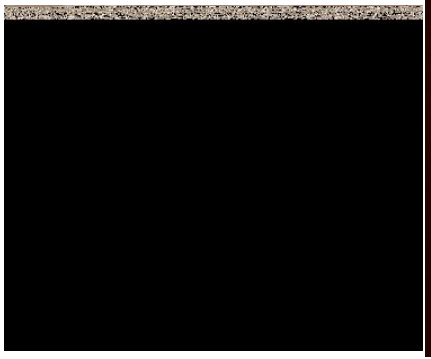
- **Understand about the chemical change**
- **Distinguish between physical change and chemical change**

WARM UP

- What happen when an egg goes in the pan?
- What happen when a candle is burning?
- What happen when a paper is burnt?
- What happen with the cake batter when it goes inside the oven?

PHYSICAL CHANGE

- A change which is temporary and can be reversed is called a physical change.
- E.g.:
  - Water changes into ice
  - Boiling of water
  - Solid wax changing into liquid wax



PHYSICAL CHANGE

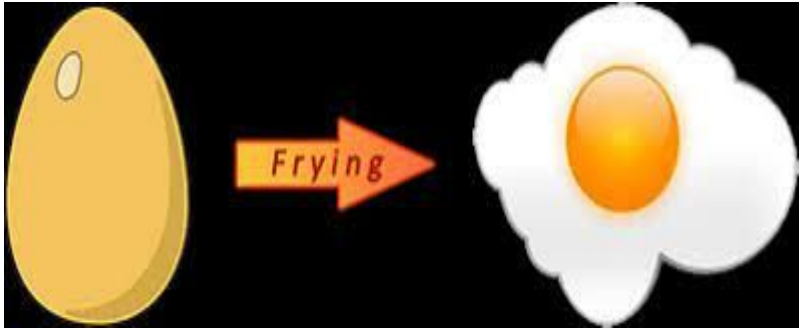
- **Properties of physical change:**
  - **Change occurs only in states of matter**
  - **It is a temporary change.**
  - **It can be easily reversed.**
  - **No new substance is formed.**

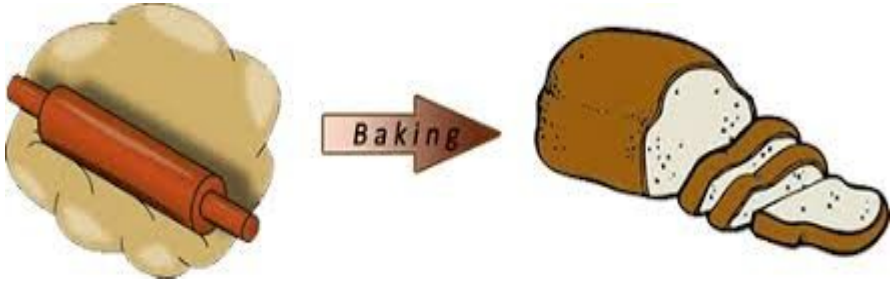
CHEMICAL CHANGE

- Change in which completely new substance is formed and we cannot get back the old substance is known as a chemical change.
- E.g.: Burning of paper, cooking of food, baking of cake, etc.
- There are many chemical changes which keeps on offering inside our body.

PROPERTIES OF CHEMICAL CHANGE

- Chemical changes are permanent.
- It cannot be reversed.
- It result in the formation of a new substance.





DIFFERENCE BETWEEN PHYSICAL AND CHEMICAL CHANGE

PHYSICAL CHANGE

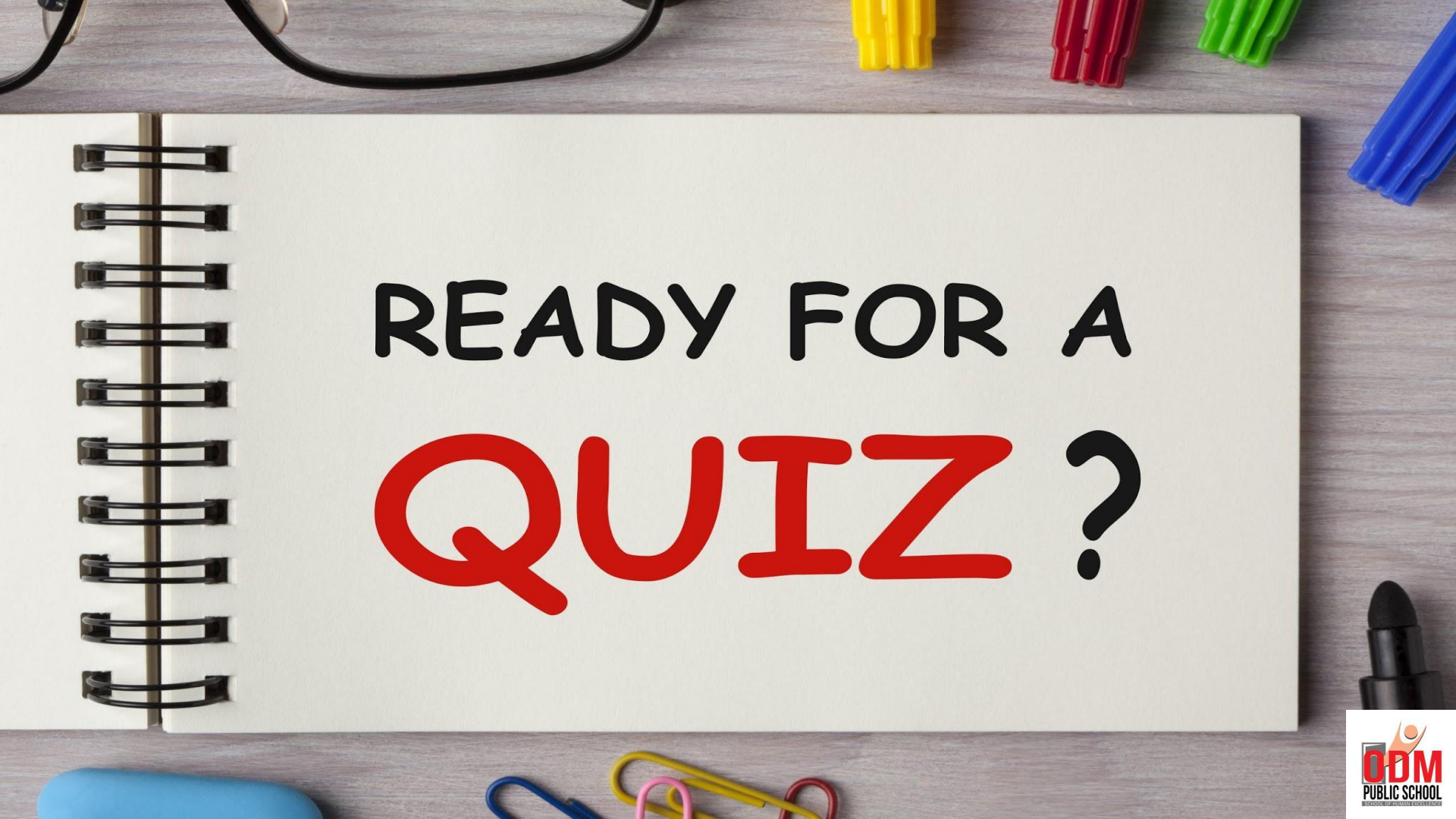
- No new substances are formed.
- It is temporary change.
- It can be easily reversed.
- E.g.: Melting of wax, freezing of water, cutting of paper, etc.

CHEMICAL CHANGE

- A new substance is formed.
- It is a permanent change.
- It cannot be reversed.
- E.g.: Burning of wax, burning of paper, digestion of food, changing of milk into curd, etc.

SUMMARY

- The change in which completely new substance is formed is a chemical change.
- Chemical changes cannot be reversed.
- They are permanent changes.


READY FOR A
QUIZ ?

1. A change in which a new substance is formed.

Ans: Chemical change

2. Differentiate between a chemical change and physical change.

Ans:

- **New substance is formed in chemical change whereas in physical change no new substance is formed.**
- **Chemical changes are permanent whereas physical changes are temporary.**
- **Chemical changes cannot be reversed whereas physical changes can be reversed.**

3. Give some examples of chemical change.

Ans: Burning of wood, burning of wax, etc.

HOMEWORK

- **Bubbles appear when you open the bottle of soda but not when you open a bottle of mineral water. Why?**

D. Answer these questions.

3. Write two differences between liquids and gases.

Ans: a. Liquids have a definite volume but gases do not have a definite volume.

b. Molecules in liquid are less closely packed whereas molecules in gases are far apart.

4. When do we say that liquids are miscible?

Ans: When two liquids mixed together and appear as one liquid. They are said to be miscible liquids.

LEARNING OUTCOME

The learner will be able to:

- **Understand about the chemical change**
- **Distinguish between physical change and chemical change**

THANKING YOU

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