

PHYSICAL AND CHEMICAL CHANGES

SUBJECT-CHEMISTRY

CHAPTER NO- 2

Physical and chemical changes-physical change- characteristics
and examples

PERIOD-3

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

Students will be able to

- Understand the meaning of physical change
- Distinguish the two types of changes- physical and chemical changes
- Familiarize with the characteristics of physical change
- Sensitize different examples of physical changes



WARM UP QUESTIONS

- Recapitulation of the previous topic by asking following questions.
- Differentiate between periodic and non periodic changes. Give some example
- Differentiate between desirable and non desirable changes
- Differentiate between reversible and irreversible changes

Physical change

- Physical Properties of a substance are those characteristic of a substance that describes its physical nature.
- For Example color, density, shape, size and volume are some physical properties.
- Physical Change is a change which occurs when there is an alteration in the physical properties of a substance.
- The physical change does not result in the formation of any new substance but can alter the shape and size of the existing substance.

- Demonstrate activity 5, 6 and 8 in the class
- Show a video for better understanding of the concept
- <https://youtu.be/qXGGQW0mpxE>

Physical properties

See

Gold is shiny



Hear

Metal is sonorous



Feel

Rubber bends



Touch

The ceramic pot is hard



Smell

Acid smells sour



Measure

The temperature is high



Characteristics of physical change

Characteristics of Physical Changes

- During a physical change, only physical properties (such as size, shape, colour and state) change.
- During a physical change, no new substances are formed.
- A physical change can be either reversible or irreversible (Dissolving sugar in water is a reversible change).
- No very small amount of energy is either absorbed or evolved during a physical change.

Different examples of physical changes

Physical Changes

 <p>Crushing a can</p>	 <p>Melting an ice cube</p>	 <p>Boiling water</p>	 <p>Mixing sand with water</p>	 <p>Breaking glass</p>
 <p>Dissolving sugar in water</p>	 <p>Shredding paper</p>	 <p>Chopping wood</p>	 <p>Mixing green and red marbles</p>	 <p>Sublimation of dry ice</p>

- **Demonstrate** any one of each type of change by showing images based on real life examples- like burning of fuel for cooking, cutting of trees, floods
- Show a video for better understanding of the concept
- <https://youtu.be/FuZKaM5X1L8>

HOME ASSIGNMENT

Exercise-4,5

Q. Write the characteristics of physical changes

Q. Give some examples of physical changes

THANKING YOU
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