

PHYSICAL AND CHEMICAL CHANGES

SUBJECT-CHEMISTRY

CHAPTER NO- 2

Physical and chemical changes-chemical change-
characteristics and examples

PERIOD-5

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

Students will be able to

- Understand the meaning of chemical change
- Familiarize with the characteristics of chemical change
- Sensitize different examples of chemical change



WARM UP QUESTIONS

Recapitulation of the previous topic by asking following questions

- Differentiate between physical and chemical change
- What do you mean by condensation point, melting point and boiling point ?

Chemical Changes

The chemical property of a substance is those characteristic of a substance that describes its chemical nature.

Metal rusting



Candle burning



Bananas turning brown



Fire extinguisher foaming



➤ Some chemical properties are given below



Toxicity



Oxidation States



Heat of Combustion



Chemical Stability



Flammability



Coordination Number



Reactivity



Possible Chemical Bonds



Enthalpy of Formation

Show a video for better understanding of the concept

<https://youtu.be/yIJ2qnU00wQ>

Characteristics of Chemical Changes

- ❑ During a chemical change, one or more new substance are formed.
- ❑ Chemical changes are permanent. Thus, a chemical change cannot be reversed by simple physical methods.
- ❑ During a chemical change, relatively larger amount of heat, light or any other radiation may be given out or absorbed.
- ❑ During a chemical change, both the physical and chemical properties of a substance are changed.

Examples of chemical changes

Chemical Changes



Iron Rusting



Burning Wood



Metabolism



Cooking an Egg



Baking a Cake



Electroplating



Rotting Banana



Vinegar and Baking Soda Mixture



Fireworks



Chemical Battery

HOME ASSIGNMENT

- Exercise-8,9
- Write the characteristics of chemical changes
- Give some examples of chemical changes

THANKING YOU
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