

LESSON PLAN

SPECIFIC OBJECTIVES

- The students will learn about
- ✧ acids, their properties and uses
 - ✧ bases, their properties and uses
 - ✧ indicators and their types—natural and synthetic or artificial indicators
 - ✧ neutralisation reaction and its uses in daily life

TEACHING AIDS

Pictures/charts/models/animations on amla, curd, green apple, tamarind, baking soda, litmus papers, china rose flower, turmeric powder, etc.

LESSON PLAN

- ✧ Teacher will start the chapter by going through the points given in 'Know these points before you start' section.
- ✧ Teacher will discuss tastes of various food items and ask students to do related activity given in the chapter.
- ✧ Teacher will define acids, their natural sources, properties and uses.
- ✧ Teacher will also name some acids commonly used in laboratories.
- ✧ Teacher will define bases, their properties and uses. Teacher will also name some commonly used bases.
- ✧ Teacher will define indicators and their different kinds, i.e., natural and artificial indicators.
- ✧ Teacher will discuss natural indicators such as litmus, china rose, turmeric and red cabbage, and synthetic indicators such as phenolphthalein and methyl orange by performing related activities given in the chapter.
- ✧ Teacher will also discuss differences between acids and bases.
- ✧ Now, teacher will ask students to solve Check Point 1.
- ✧ Then, teacher will discuss the neutralisation reaction by performing related activity given in the chapter.

- ✧ Teacher will discuss applications of neutralisation in everyday life.
- ✧ Teacher will describe the salts as the products of neutralisation reaction.
- ✧ Now, teacher will ask students to solve Check Point 2.
- ✧ Teacher will make students revise the new terms given under the head 'Know These Terms'.
- ✧ Finally, teacher will help students to solve the questions given in exercises under the head 'Practice Time' and 'Think Zone'.

BOOST UP

- ✧ Teacher should demonstrate and explain activities given in the chapter.
- ✧ Teacher should discuss the information given under the head 'Something More'.
- ✧ Teacher should discuss the conversation of Annu and Mannu given in between the topics.
- ✧ Teacher should encourage students to watch Discovery, National Geographic and Animal Planet channels to know more about plants and animals.
- ✧ Teacher may ask students to find some more examples of acidic and basic substances from everyday life.
- ✧ Teacher should also discuss the precautions taken while handling acids, bases, indicators or any other chemicals in the laboratory.
- ✧ Teacher should make aware the students about the dangers of tasting any chemical in the laboratory.

EXPECTED LEARNING OUTCOMES

The students know about

- ✧ acidic, basic and neutral substances.
- ✧ acids and bases, their natural sources, properties and uses.
- ✧ differences between acids and bases.
- ✧ natural and artificial indicators.
- ✧ neutralisation reaction and its uses in daily life.
- ✧ salts.

EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating the understanding of students.

1. List some acidic and basic substances.
2. Define acids and write their two uses.
3. Define bases. What do you know about the taste of a base?
4. Mention few differences between acids and bases.
5. What is meant by an indicator?
6. Categorise the natural and artificial indicators.
7. What is meant by neutralisation reaction? Write its few uses in daily life.