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Acids, Bases and Salts

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 artificial indicators
- ✧ neutralisation reaction and its uses in daily life
- ✧ salts and their uses

TEACHING AIDS

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

LESSON PLAN

- ✧ The teacher will start the lesson with ‘Science Vocabulary’ section by telling the meaning/definition of new terms which are used in the chapter.
- ✧ Now, teacher should discuss about tastes of various food items by performing the Activity 1.
- ✧ The teacher should define acids, their natural sources, properties and uses.
- ✧ The teacher should also name some acids commonly used in laboratories.
- ✧ The teacher should define bases, their natural sources, properties and uses. The teacher should also name some commonly used bases.
- ✧ The teacher should define indicators, their different kinds, i.e., natural and artificial indicators and their uses.
- ✧ The teacher should discuss about litmus, china rose, turmeric and phenolphthalein indicators by performing Activities 1, 2, 3, 4 and 5.
- ✧ The teacher should discuss the neutralisation reaction by performing Activity 6 and applications of neutralisation in everyday life.
- ✧ The teacher should describe the salts, their formation and uses. The teacher should also name some salts and their common names.
- ✧ Students should be asked to solve ‘Check Points’ 1 and 2.

- ✧ The teacher will help the students to solve the questions given in exercises under the head 'Let's Drill Our Skills' and to complete the flowchart given under the head 'Let's Memorise'.

BOOST UP

- ✧ The teacher may ask students to name some examples each of acidic and basic substances from everyday life.
- ✧ The teacher should also discuss the precautions taken while handling acids, bases, indicators or any other chemicals in the laboratory.
- ✧ The 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.
- ✧ definition of acids and bases, their natural sources, properties and uses.
- ✧ natural and artificial indicators.
- ✧ neutralisation reaction and its uses in daily life.
- ✧ salts and their uses.

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 properties and uses.
3. Define bases. Name the bases soluble in water.
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.