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Metals and Nonmetals

LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ✧ occurrence of metals and nonmetals in nature
- ✧ physical and chemical properties of metals and nonmetals
- ✧ reactivity series of metals
- ✧ uses of metals and nonmetals

TEACHING AIDS

Pictures/charts/models/animations on ores of metals, objects made of metals, liquid metal and nonmetal, rusted metals; Reactivity series.

LESSON PLAN

- ✧ The teacher should start the chapter with Gear Up and ask students the questions given in this section.
- ✧ The teacher should discuss occurrence of metals and nonmetals in nature.
- ✧ Now, the teacher should explain physical and chemical properties of metals and nonmetals by demonstrating Activities 1 to 16. They should also be asked to study knowledge desk.
- ✧ The teacher should discuss the Reactivity series of metals and its significance.
- ✧ The teacher should discuss the uses of metals and nonmetals in everyday life.
- ✧ Now, the teacher should ask students to solve Check Points 1, 2 and 3.
- ✧ At last, the teacher will sum up the lesson by going through the points given under the head 'Wrap Up Now'.
- ✧ The teacher will help the students to solve all the questions given in exercises under the head 'Practice Time' and will also discuss the topics given under the head 'Formative Tasks'.

BOOST UP

- ✧ The teacher should encourage students to learn the names of metals and nonmetals.
- ✧ Students should be encouraged to explore more uses of metals and nonmetals in everyday life and also in different fields of science and technology.
- ✧ The teacher may discuss the role of metals in the progress of a country.

EXPECTED LEARNING OUTCOMES

The students know about

- ✧ metals and nonmetals.
- ✧ physical and chemical properties of metals and nonmetals.
- ✧ reactivity series of metals and its significance.
- ✧ uses of metals and nonmetals.

EVALUATIVE QUESTIONS

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

1. Write names of two metals and two nonmetals.
2. Define ore.
3. What is the difference between ductility and malleability?
4. Are metals good conductors of electricity? Which one is the best conductor of electricity?
5. Name one metal and one nonmetal which are liquid at room temperature.
6. What is meant by displacement reaction? Mention one example of it.
7. Why is hydrogen not included in the reactivity series?