Force and Pressure

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LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- force and its effects
- causes of force
- types of force
- pressure, pressure in liquids and gases
- atmospheric pressure and its applications

TEACHING AIDS

Pictures/charts/models/animations on the effects of force, cause of force, two forces applied in same direction, two forces applied in opposite direction; muscular force, frictional force, magnetic force, gravitational force, electrostatic force; pressure in liquids and gases, applications of atmospheric pressure.

LESSON PLAN

- Teacher will start the chapter by going through the points given in 'Know these points before you start' section.
- Now, teacher will define force and discuss effects and cause of force by demonstrating activities given in the chapter.
- Teacher will ask students to solve Check Point 1.
- Now, teacher will discuss the effects of two forces when applied in same direction and in opposite direction on an object.
- Teacher will discuss different types of contact and noncontact forces.
- Now, teacher will ask students to solve Check Point 2.
- Teacher will define pressure and discuss its applications.
- Teacher will explain pressure in liquids and gases by demonstrating related activities given in the chapter.
- Now, teacher will explain atmospheric pressure and its applications.

- Now, teacher will ask students to solve Check Point 3.
- 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.
- Students should be encouraged to explore more examples of effects of force and contact and noncontact forces in everyday life.
- Teacher should give more examples of application of atmospheric pressure from everyday life.

EXPECTED LEARNING OUTCOMES

The students know about

- force, its effects and causes.
- action of more than one forces in same direction and in opposite direction on a body.
- different kinds of contact and noncontact forces.
- pressure and its applications.
- pressure in liquids and gases.
- definition of atmospheric pressure and its applications.

EVALUATIVE QUESTIONS

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

1. Define force and mention its two effects.
2. How is a force caused?
3. Write the kinds of contact forces with one example each.
4. Write the differences between magnetic and gravitational forces.
5. Name the force applied per unit area.
6. Define atmospheric pressure and write its applications.