

LESSON PLAN (PERIOD -WISE)

SUBJECT: SCIENCE

GRADE: VIII

Chapter Number and Title of Chapter	CHAPTER 11, FORCE AND PRESSURE
Period Number	1 (approx. 40 min each)
Learning Objectives	- To understand the idea of force and its effects - Calculation of net (total) force applied
Teaching Aids / Resources	Textbook , examples of familiar situations involving motion, a heavy object, table, rubber ball, ruler, other reference books, multimedia (videos downloaded from internet), magnets, empty bottle, water, ppt, blackboard
Previous Knowledge/ Curiosity Questions	- What do you do to make a football move? - How does a goal keeper stop a ball? - What happens when you press a ball? - What happens when you stretch a rubber band? - What happens when you hit a ball with bat?
Announcement of topic	On finding the students unable to answer the last question, the teacher would announce that you have already studied about force in previous class, so today we will begin with the effects of force.
Teaching Methodology/ Strategy	Transaction would proceed in the following manner- Suggestive Methodologies: <i>Brain Storming –</i> <i>Why the box don't move when equal force is applied from opposite sides?</i> <i>What do you mean by magnitude of force?</i> <i>What happens when you apply force on dough with hands?</i> <i>What does it mean when we say there is a change in state of motion?</i> Active learning- Active interaction of students with teacher through activities, Mind map, audio visual aids, research,project making will be there. Group learning- Students will have group discussions, Report making in pairs, Team quiz, experimenting. Questioning- Students will be asked different questions relating to concept of pressure exerted by liquids. Guided practice followed by Independent Practice- NCERT questions to be discussed in the classroom.

Content Obligatory Vocabulary (Keywords)	Pull, push, force, state of motion, shape
Learning Concepts/ Teaching Points	• A push or a pull is called force. • A force can change the shape of the object, size of the object, direction and speed of the object. • The speed and direction of moving object is called its state of motion. And change in speed and direction of moving object is called change in state of motion. • To calculate net force applied
Hard Spots/ Focus Spots	Numerical based on calculation of total force in same direction and opposite direction. When are the forces to be added and when are the forces to be subtracted as they ignore the direction of force applied. Students simply add the forces ignoring the direction of forces due to which complete numerical goes wrong.
Experiential Content	Students will experience force through activities like rolling the ball on ground and stopping it, stretching the rubber band, pressing the rubber ball, hitting a ball with bat.
Subject Enrichment Activities for Internal Assessment	Make a list of the impact of forces applied in five different daily life situations while doing some work in project file.

Recapitulation :	1. What two things describe a force completely? 2. Give one example where force changes: a. Shape b. Size c. Direction d. Speed 3. What is magnitude? 4. How would you describe state of motion?
Assignment:	Give five examples each of a push and a pull respectively. How can the state of motion be effected by force?