



BAL BHARATI PUBLIC SCHOOL, PITAMPURA, DELHI – 110034

SUBJECT:-PHYSICS CLASS:-VIII

CHAPTER:-FORCE AND PRESSURE

TOPIC:-RECAPITULATION EXERCISE/ASSIGNMENT

Note: As you have experienced in class 7 that 20 marks paper in Science is objective type,so from class 8 onwards you will be experiencing a variety in these questions. These may include MCQS, True/false, Assertion reasoning, analogy and case study questions. This recap exercise will make you familiar with some of these.

SOLVE THE RECAPITULATION EXERCISE IN PHYSICS NOTEBOOK

I.COMPLETE THE FOLLOWING ANALOGY:

1. Pull: _____ : : Taking out a bucket from a well:_____
2. Non Contact : _____ : : Electrostatic force:_____
3. _____: change in speed: : squeezing a lemon_____
4. _____: frictional force: : lifting a school bag:_____

II.Assertion-Reason Questions

Note: Read the Assertion and the Reason statements carefully and mark the correct option out of the following options:

(a) If both the assertion and the reason are true and reason is correct explanation of the assertion.

(b)If both the assertion and the reason are true and reason is not the correct explanation of the assertion.

(c) If the assertion is true but the reason is false.

(d)If both the assertion and the reason are false.

1. Assertion:-A straw acquires electrostatic charge after it has been rubbed with a sheet of paper.

Reason:- This is due to the magnetic force.

2. Assertion:- Objects or things fall towards the earth when thrown upward.

Reason:- This is due to the fact that force of gravity acts on all the objects.

3.Assertion:-The force exerted by a magnet is an example of a non contact force.

Reason:- As magnet can attract magnetic materials.

4.Assertion : A moving ball comes to rest after some time.

Reason:- A moving ball comes to rest after some time as force of friction acts on the ball.

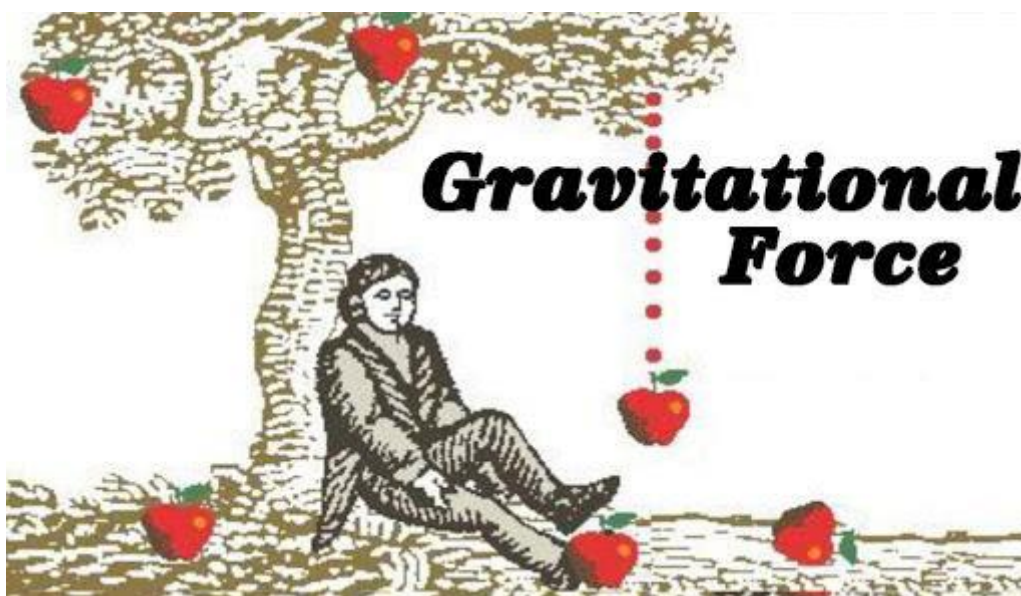
5. **Assertion**:-Muscular force is a contact force.

Reason:- This is due to the fact that muscular force is caused by the actions of muscles.

III. CASE STUDY QUESTIONS

ANSWER THE QUESTION NUMBERS 1(a) to 1(d) and 2(a) to 2(d) ON THE BASIS OF YOUR UNDERSTANDING OF THE FOLLOWING PARAGRAPHS AND THE RELATED STUDIED CONCEPTS.

1. A noncontact force is a force which acts on an object without being physically in contact with it. The most familiar example of a non contact force is gravity. It is the force of attraction that exists among all bodies that have mass. The force of gravity acts on all objects. This force acts on all of us all the time without us being aware of it.



1(a) Why does a coin fall to the ground when it slips off your hand?

1 (b) Is gravity a property of earth alone? Justify giving certain suitable examples.

1 © Is gravitational force the only attractive force in nature. Comment.

1(d) Adya combed her hair and kept the comb on her dressing table. She noticed that some small pieces of paper lying nearby got stuck to the comb. She said that the pieces were attracted due to gravitational pull of the comb. Is she right in this interpretation? Comment.

2. A force can be described by stating its magnitude and the direction in which it acts. When two forces act on an object in the same or opposite direction, the effect on the object is due to the net force acting on it. In this case it is the sum or difference of the two forces. Two or more forces act on an object in different directions, the effect on the object is due to the magnitude and the direction of the net force acting on it.

2(a) Does a force acting on a body always cause a change in the state of motion?

2(b) Two forces A and B acting on an object bring about the change in the shape of the object. What should be the magnitude and direction of these forces acting on the object?

2(c) Why do we categorize force as a vector quantity?

2 (d) Calculate the magnitude and the direction of the net force acting on the rectangular object in the following case:

