

# Reasoning Worksheet

Practice. Learn. Succeed

Sub : Science

Grade: IX

Date: .....

Name: .....

ID No.....

## Tick the Choice Question

### 1. Read the following statements:

For an object in motion;

P : If its speed changes, its velocity must change

Q : If its velocity changes, its speed must change

R : If its speed changes, but direction of motion does not change, its velocity may remain constant

S : If its velocity changes, speed may not change, and it must have some acceleration

**Choose the correct alternative:**

(a) only P and Q are correct

(b) all the statements are correct

(c) P and S are correct but Q and R are incorrect

(d) only P is correct

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### 2. Two balls of different masses are dropped from the same point at the same time. If value of $g$ is constant and air resistance is neglected; then

A : The heavier ball reaches the ground before the lighter one does

B : Both balls reach the ground at the same time

C : The heavier ball hits the ground with a higher speed

D : Both the balls reach the ground with the same speed

**Choose the correct alternative:**

(a) only B is correct

(b) none of the above statements are correct

(c) only B and D are correct statements

(d) only C is correct

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