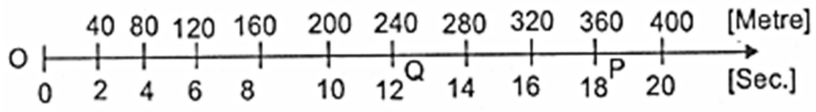
NEW STANDARD ACADEMY

Semri Kothi Super Market, Raebareli
CLASS 9 (Academy) 12-05-2025

PHYSICS

1. Give two examples to explain that motion is relative.
2. A car is moving along x-axis. As shown in figure it moves from O to P in 18 s and returns from P to Q in 6 second. What is the average velocity and average speed of the car in going from (i) O to P and (ii) from O to P and back to Q.



3. A car covers the 1st half of the distance between two places at a speed of 40 km h^{-1} and the 2nd half at 60 km h^{-1}. What is the average speed of the car?
4. A non-stop bus goes from one station to another station with a speed of 54 km/h, the same bus returns from the second station to the first station with a speed of 36 km/h. Find the average speed of the bus for the entire journey.
5. What is the S.I. unit of velocity ?

CHEMISTRY

1. Define saturated solution.
2. Define solubility.
3. Cheese is an example of one type of colloidal solution name it. Give reason.
4. Under which category of mixtures will you classify alloys and why?
5. Explain the following terms giving examples.
   (i) Pure substance (ii) Colloid (iii) Suspension

BIOLOGY

1. Who discovered the plastids
2. Light reaction take place in which part of chloroplast
3. Draw labelled diagram of chloroplast
4. What is a leucoplast
5. Define chromoplast with example

MATH

1. Show that x – 3is a factor of the polynomial $x^3+x^2-17x+15$.
2. Verify that (x-1),(x-2) and (2x+1) are factors of the polynomial $2x^3-5x^2+x+2$.
3. If x-1 and x+1 are factors of ax^3+x^2-2x+b, then find the values of a and b.
4. Factorise $y^2- 5y + 6$ by using factors of 6.
5. If x^2-3x+2 is a factor of x^4-ax^2+b, then find the values of a and b.