NEW STANDARD ACADEMY

Semri Kothi Super Market, Raebareli
CLASS 9 DPP (Academy) 14-07-2025

PHYSICS

1. All the cars are provided with seat belt give reason
2. What is the reason packing glassware with soft material
3. Prove that Newton second law motion contains the first law of motion also
4. Calculate the force to provide an acceleration of 2.5 metre per second 2
5. in a body of mass 4 kg
6. Give relations for momentum force in term of momentum and impulse in term of momentum

CHEMISTRY

1. What about a rubber band ,can it change its shape on stretching ? Is it a solid?
2. What about a sponge? It is a soild,yet we are able to compress it,why?
3. Why do gases exert pressure?
4. Why does the kinetic energy decrease in the order,
   Gases> Liquids > Solids
   Or why is kinetic energy of liquids more than solids?
5. Why do gases diffuse more readily than liquids ?

BIOLOGY

1. Describe the two types of endoplasmic reticulum
2. Name the four type of mechanism used for the moment of substance across the plasma mebrain
3. Differentiate between diffusion and osmosis
4. Give the function of lysosome
5. Give the name of smallest cell organel of cell also give the function

MATHS

1. If x = $\frac{\sqrt{3}+1}{2}$, find the value of $4x^3 + 2x^2 - 8x + 7$
2. $\frac{9^{x+1}\times\left(3-\frac{x}{2}\right)^2-27^x}{(3^y\times 2)^3} = \frac{1}{729}$,prove that y – x =2
3. $If\ a+b+c=9\ and\ a^2$+b^2+c^2=35 find the value of a^3+b^3+c^3-3abc.
4. Determine the point on the graph of the linear equation $2x + 5y = 19$, whose ordinate is $1\frac{1}{2}$ times its abscissa.
5. If $(m - 2, 2m + 1)$ lies on equation $2x + 3y - 10 = 0$ find m
6. Find the reflection of the point(-7,-2) in the x-axis.
7. $\frac{p}{q}\ form\ of\ -.000\bar{2}$ is equal to
8. If $\frac{\sqrt{7}-1}{\sqrt{7}+1}+\frac{\sqrt{7}+1}{\sqrt{7}-1}$= a+b$\sqrt{7}$ find the value of a and b.
9. If $2^x = 98^y = 7^z$, prove that $z = \frac{2xy}{x-y}$
10. Find the value of 'a' if remainder is same when polynomial f(x) =$x^3 + 8x^2 + 15x + ax - 6$ is divided by $(x + 2)$ or $(x + 1)$