

CLASS: 9TH STD SCIENCE FA – 1
UT 1 + UT – 2 + UT – 3 [CHEMISTRY]

FORMATIVE ASSESSMENT – 1

UNIT 1	UNIT – 2	UNIT – 3	UNIT – 4
CHEMISTRY	BIOLOGY	PHYSICS	PHYSICS
MATTER IN OUR [1] SURROUNDINGS	[5] FUNDAMENTAL UNITY OF LIFE	[8] MOTION	[9] FORCE AND LAWS OF MOTION

FORMATIVE ASSESSMENT – 2

UNIT 1	UNIT – 2	UNIT – 3	UNIT – 4
CHEMISTRY	BIOLOGY	PHYSICS	BIOLOGY
[2] MATTER AROUND US IS PURE	[6] TISSUES	[10] Gravitation	7] DIVERSITY IN LIVING ORGANISMS

FORMATIVE ASSESSMENT – 3

UNIT 1	UNIT – 2	UNIT – 3	UNIT – 4
CHEMISTRY	BIOLOGY	PHYSICS	
[3] ATOMS AND MOLECULES	[13] WHY DO WE FALL ILL	[11] WORK AND ENERGY	[15] IMPROVEMENT IN FOOD RESOURCES

FORMATIVE ASSESSMENT – 4

UNIT 1	UNIT – 2	UNIT – 3	UNIT – 4
CHEMISTRY	BIOLOGY	PHYSICS	
[4] STRUCTURE OF THE ATOM	[14] NATURAL RESOURCES	[12] SOUND	

CLASS: 9TH STD SCIENCE FA – 1

FORMATIVE ASSESMENT - 1

UT – 1 [Topic MATTER IN OUR SOURROUNDING]

MARKS : 10

ANSWER THE FOLLOWING:

1. Identify the solutions among of the following mixtures.

2

[a] Soil [b] Sea water [c] Air [d] Coal [e] Soda water

[2] Which of the following show "Tyndall effect"

2

[a] salt solution [b] Milk [c] Copper sulphate Solution [d] starch solution

[3] Which of the following are chemical changes?

2

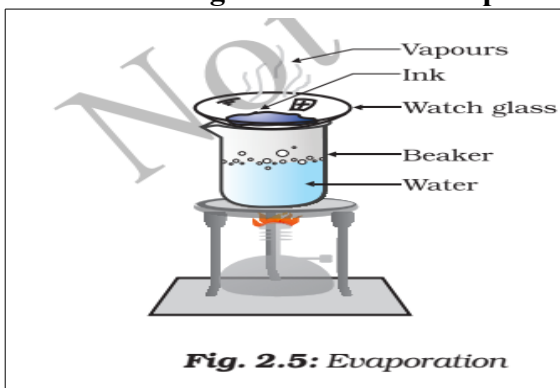
[a] Growth of a plant [b] Rusting of Iron [c] Cooking of food [d] Digestion of food
[e] Mixing of iron filings and sand [f] Freezing of water [g] burning of a candle

4. Write any two differences between metal and non- metal

2

5. Draw the diagram and label the parts

2



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FORMATIVE ASSESMENT - 1

UT – 2 [Topic : FUNDAMENTAL UNITY OF LIFE]

MARKS : 10

FILL UP THE BLANKS:

1 x 2 = 2

- 1. The fundamental organisational unit of life is the ----- [cell / Nucleus]**
- 2. Cells are enclosed by a plasma membrane composed of lipids and-----[Proteins/fats]**

1 x 2 = 2

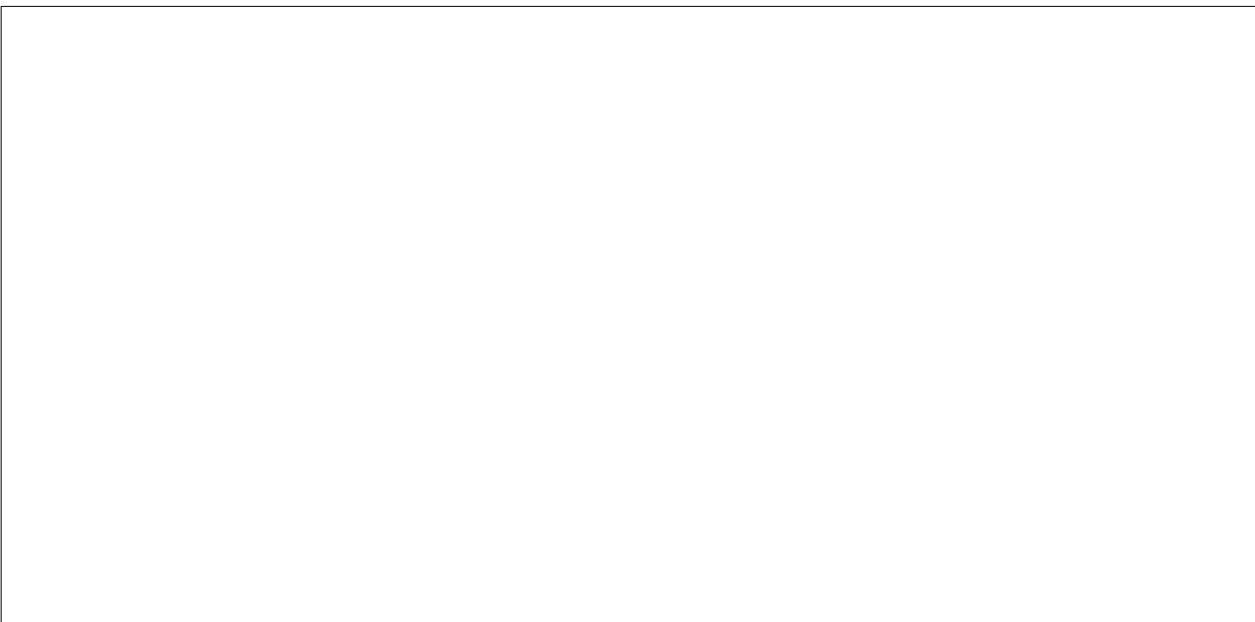
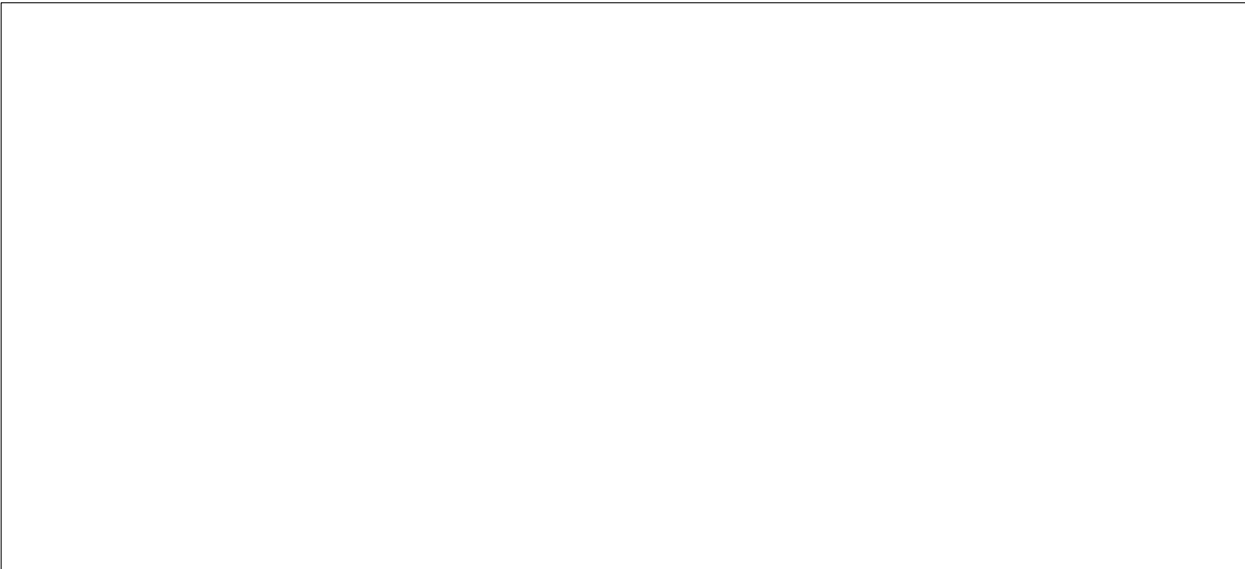
Answer the following:

- 1. What is osmosis ?**

- 2. How does an Amoeba obtain its food ?**

- 3. Draw plant cell and animal cell and label the parts.**

3 x 2 = 6



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FORMATIVE ASSESMENT - 1

UT – 3 [Topic: MOTION]

MARKS : 10

FILL UP THE BLANKS:

1. Uniform and non-uniform motions of objects can be shown through -----[graphs/chart]

1. Write three equations of Motion

1 x 3 = 3

2. Match the following:

1 x 3 = 3

Sl no	A	B	True/False
1	Average speed	$\frac{\text{Total distance covered}}{\text{Total time taken}}$	
2	acceleration	$\frac{\text{change in velocity}}{\text{time taken}}$	
3	Average velocity	$\frac{\text{Displacement}}{\text{Total time taken}}$	

3. A car accelerates uniformly from 18km h^{-1} to 36km h^{-1} in 5 s. Calculate [i] the acceleration
And [ii] the distance covered by the car in that time.

1 x 3 = 3

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FORMATIVE ASSESMENT - 1

UT – 4 [Topic: FORCE AND LAWS OF MOTION]

MARKS : 10

FILL UP THE BLANKS:

1. The unit of force is ----- [$\text{kg m s}^{-2} / \text{sq m s}^{-2}$] 1 x 4 = 4
2. Force of friction always opposes motion of -----[Objects/Particles]
3. The natural tendency of objects to resist a change in their state of rest or of uniform Motion is called -----[Inertia / displacement]
4. What is the momentum of an object of mass 'm' moving with a velocity 'v' ?
 [a] $(mv)^2$ [b] mv^2 [c] $\frac{1}{2} mv^2$ [d] mv Ans:- -----

2. Match the following:

3

A	B	Answer
An object continues to be in a state of rest or of uniform motion along a straight line unless acted upon by an unbalanced force.	IIInd Law of motion	
The rate of change of momentum of an object is proportional to the applied unbalanced force in the direction of the force.	IIIrd Law of motion	
To every action, there is an equal and opposite reaction and they act on two different bodies	Ist Law of motion	

5. A motorcar is moving with a velocity of 108km/h and it takes 4 s to stop after the brakes are applied. 3
 Calculate the force exerted by the brakes on the motor if its mass along with the passengers is 1000kg.