



GAIL DAV PUBLIC SCHOOL
GAIL GAON, DIBIYAPUR
ASSESSMENT WORKSHEET
SUBJECT-SCIENCE (2026-27)

Exploring Mixtures and their Separation
CLASS-IX

Q.NO	ANSWER THE FOLLOWING QUESTIONS
1	<p>Alloys can be described as homogeneous solid solutions (when two solids are mixed such that they can't be separated physically) in which the atoms of one metal are distributed randomly among the atoms of the other.</p> <p>Characteristics of alloys</p> <ol style="list-style-type: none">1. Alloys are tougher than the non-metals and metals they are formed off.2. Alloys are more corrosion resistant than metals.3. Show better conductivity than the constituent elements.4. Alloys have lower melting points as compared to their constituent elements.5. Tenacity of alloys is better than the metals. That is, they have higher resistance to deform or break down.
	<ol style="list-style-type: none">a) Is brass a mixture or a compound?b) What type of mixture is brass?c) Why do alloys have different properties than their components?d) Can alloys be separated by simple physical methods?
2	<p>A housewife churned full creamed milk with a churner.</p> <ol style="list-style-type: none">a) What will she observe after churning the milk?b) What could be the possible reason for observation?
3	<p>Write differences between pure substance and mixture?</p>
4	<p>Why milk is a colloid?</p>
5	<p>Can a mixture be called pure, Explain?</p>
6	<p>What is distillation?</p>
7	<p>Which of the following is a colloidal solution?</p> <p>a) Starch Solution b) Copper Sulphate solution c) Chalk powder in water d) Kerosene oil and water</p>
8	<p>What determines whether a solution is dilute, concentrated or saturated?</p> <ol style="list-style-type: none">a) The temperature of solutionb) The relative proportion of solute and solvent.c) The type of soluted) The colour of solution.
9	<p>40 g of common salt dissolved in 320 g of water? The mass percentage of salt is?</p>
10	<ol style="list-style-type: none">a) Is rain water or distilled water a pure substance?b) Can we separate a mixture of alcohol and water by a separating funnel?

	c) The 'sea water' can be classified as a homogeneous as well as heterogeneous mixture. Comment.
11	Write the constituent elements of potassium hydroxide and sodium chloride?
12	Which of the following are homogeneous in nature? i. Ice ii. Wood iii. Soil iv. Air
13	Give some examples of the Tyndall effect observed in your surroundings?
14	How can you show that solubility of gas in a liquid increases on increasing pressure?
15	Write the difference between solute and solvent?
16	Why calcium carbonate is a compound?
17	When we dissolve sand in water it forms a mixture not a compound? Explain.
18.	Write the principle of chromatography?
19.	Why salt solution is a homogenous mixture?
20.	Why hydrogen sulphide is a pure substance?
21.	Write the difference between face cream and sponge?
22.	Write different ways to express the concentration of solution?
	In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as: (a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A). (b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A). (c) Assertion (A) is true but reason (R) is false. (d) Assertion (A) is false but reason (R) is true.
23.	Assertion : When a beam of light is passed through a colloidal solution placed in a dark place the path of the beam becomes visible. Reason : Light gets scattered by the colloidal particles.
24.	Assertion : A solution of table salt in a glass of water is homogeneous. Reason : A solution having different composition throughout its solution.
25.	Why iron is classified as a metal?