



First Quarter Assessment

Encircle the letter of the best answer.

1. A mixture is a combination of two or more substances. When it appears uniform all throughout, it is called a _____.
 - a. homogeneous mixture
 - b. heterogeneous mixture
 - c. homozygous mixture
 - d. heterozygous mixture
2. Which of the following does NOT describe a heterogeneous mixture?
 - a. The composition of the mixture is the same all throughout.
 - b. The composition of the mixture is visible.
 - c. The composition of the mixture can be easily identified.
 - d. None - all are correct
3. A mixture that is formed when one substance dissolves into another is called a _____.
 - a. solute
 - b. solvent
 - c. solution
 - d. compound
4. Which of the following statements is correct?
 - a. A solution is a heterogeneous mixture.
 - b. A solvent is the substance that is being dissolved.
 - c. A solute is the substance that does the dissolving.
 - d. Water is called the "universal solvent" because it is able to dissolve more substances than any other liquid.
5. Which of these factors affect solubility?
 - a. the size of the solute
 - b. the amount of the solvent
 - c. the temperature of the solvent
 - d. all of the above



Science 6

6. True or false – A solution always consists of a liquid solvent and a solid solute.
 - a. True
 - b. False

7. Steel is an example of a _____.
 - a. colloid
 - b. compound
 - c. solution
 - d. suspension

8. Clean air is an example of a _____.
 - a. colloid
 - b. compound
 - c. solution
 - d. suspension

9. Which of these mixtures is homogeneous?
 - a. colloid
 - b. solution
 - c. suspension
 - d. all of the above

10. Which of these mixtures is heterogeneous?
 - a. colloid
 - b. solution
 - c. suspension
 - d. a and c

11. Three beakers contain a solution, a colloid, and a suspension, but you don't know which is which. You notice that in one of the beakers, particles have settled at the bottom. This must be the _____.
 - a. colloid
 - b. solution
 - c. suspension



12. Three beakers contain a solution, a colloid, and a suspension, but you don't know which is which. In one of the beakers, particles have NOT settled at the bottom over time, and when you shine a light through it, the light scatters, like car headlights in a fog. This must be the ____.
- colloid
 - solution
 - suspension
13. The ____ is used to determine whether a mixture is a true solution or a colloid.
- Tydings-McDuffie law
 - Tyndall effect
 - Tycho Brahe test
 - Tympanic membrane
14. Aerosol, foam, emulsion, and sol are types of ____.
- colloids
 - solutions
 - suspensions
 - all of the above
15. This is a type of mixture where liquid or solid particles are dispersed in a gas. Examples include fog, mist, and smoke.
- emulsion
 - aerosol
 - gel
 - foam
16. When you go to the beach, you notice that rough waves or swimmers can disturb the sand in the sea but it usually settles back down to the bottom. This is an example of a ____.
- colloid
 - compound
 - solution
 - suspension



17. At construction sites, stones and all sorts of debris can get mixed into the sand. To get the stones out, construction workers often use which separation technique?
- sieving
 - evaporation
 - decantation
 - distillation
18. You can use a magnet to separate _____.
- sand from gravel
 - sand from aluminum powder
 - sand from iron filings
 - sand from sugar
19. You need to separate two liquids that have different densities. Which separation technique can you use?
- filtration
 - decantation
 - using a magnet
 - sieving
20. When you dry your clothes by spinning them in the washing machine, you are using a separation technique called centrifugation. But when you dry the clothes by hanging them outside, on a clothesline, under the heat of the sun, you are using which separation technique?
- still centrifugation
 - filtration
 - evaporation
 - distillation