

Activity 28: Solutions, Colloids, and Suspensions

Learning Objectives

Distinguish solute and solvent

Distinguish solution, colloid, and suspension

Estimated Completion Time 20 Minutes

Instructor Information

This activity offers the basic start to understanding what is a solution and what is not. Often it is difficult to distinguish between a colloid and a suspension; this is not an emphasis of the activity. Instructors may wish to offer supplemental problems on this topic.

ANSWERS TO QUESTIONS

- | | |
|--------------------------|-------------------------|
| Solute: O ₂ ; | Solvent: N ₂ |
| Solute: ethanol; | Solvent: Water |
| Solute: tea compounds; | Solvent: Water |
- Solution: grape juice, air in the room

Colloid: shaving cream, mayonnaise

Suspension: Italian salad dressing, muddy water, blood

Activity 28: Skill Development

- | | |
|--------------------------------|------------------|
| a. Solute: sugar; | Solvent: water |
| b. Solute: zinc; | Solvent: copper |
| c. Solute: blue food coloring; | Solvent: ethanol |

2. a. Solute: O₂; Solvent: He
b. Solute: herbs; Solvent: alcohol
c. Solute: isoflurane; Solvent: O₂
3. a. colloid b. solution c. solution
4. a. colloid b. solution c. solution