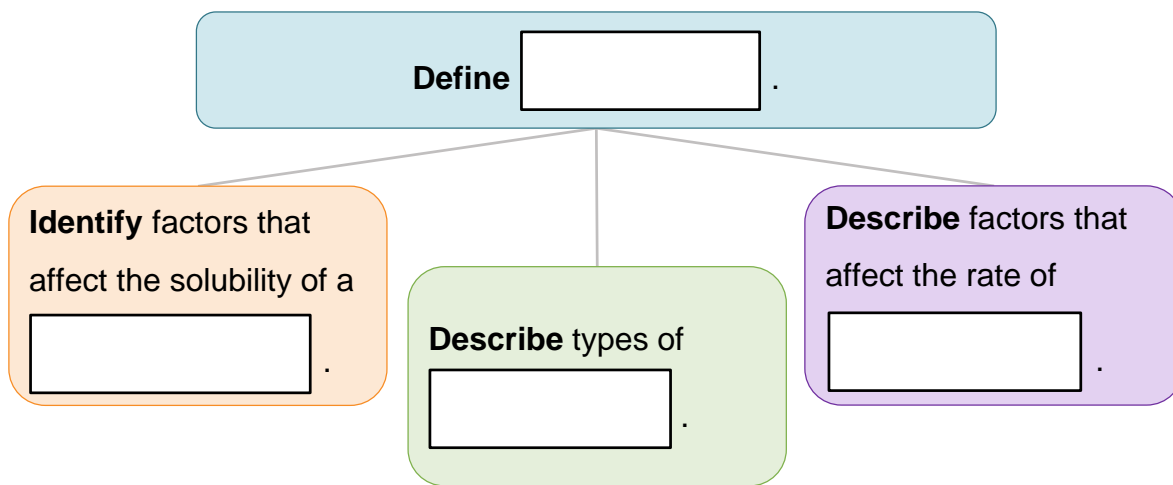


Warm-Up | Solubility

?

Lesson Question

Lesson Goals

W
2K

Words to Know

Write the letter of the definition next to the matching word as you work through the lesson. You may use the glossary to help you.

_____ solubility

A. a heated solution with more dissolved solute than the solution can hold at a lower temperature

_____ concentration

B. the ability of one substance to dissolve in another

_____ saturated solution

C. a solution that holds less dissolved solute than is possible at a given temperature

_____ unsaturated solution

D. the amount of one substance in a certain volume of another substance

_____ supersaturated solution

E. a solution with as much dissolved solute as the solution can hold at a given temperature

**Solutions**

are mixtures made of a solute and a solvent.

- A is a substance that gets broken down in a solution.
- A is a substance that breaks down a solute.

Instruction | Solubility

Slide

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Solubility

- is the ability of one substance to dissolve in another.
 - The a solute can be dissolved, the greater its solubility.

Temperature and Solubility

- Each has its own level of solubility.
 - Example: About 6 times more sugar than salt can dissolve in water.
- The solubility of a substance will depending on its:
 - .
 - .
 - properties.

Solute	Temperature	g/100 g water
	20°C	204
Sugar		487
Salt		36
	100°C	
Nitrite salt		81
Nitrite salt	100°C	

Instruction | Solubility

Slide

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Pressure and Solubility

- An increase in results in increased solubility.
 - Example: More gas dissolves in liquid drinks with an increase in pressure.

Chemical Properties and Solubility

- Solutes and solvents must have similar chemical to form a solution.
 - Example: Water dissolves many substances and is called the universal solvent.

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Concentration

- is the amount of one substance in a certain volume of another substance.
 - A solution has a small amount of solute compared to solvent.
 - A solution has a large amount of solute compared to solvent.

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Saturated Solutions

- A is a solution with as much dissolved solute as it can hold at a given temperature.
 - Examples: honey and pancake syrup

Instruction | Solubility

Slide

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Unsaturated Solutions

- An is a solution that holds less dissolved solute than is possible at a given temperature.
 - Examples: juice beverages, sodas, and sports drinks

Supersaturated Solutions

- A is a heated solution that holds more dissolved solute than is possible at a lower temperature.

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Rate of Dissolving: Temperature

- The the temperature of the solvent, the the solute will dissolve.

Rate of Dissolving: Surface Area

- The the surface area of the solute, the the solute will dissolve.
 - Smaller particles have a greater surface area than larger particles.

Rate of Dissolving: Shaking or Stirring

- The a solution is shaken or stirred after adding a solute, the the solute will dissolve.



Summary

Solubility



Lesson Question

What is solubility?



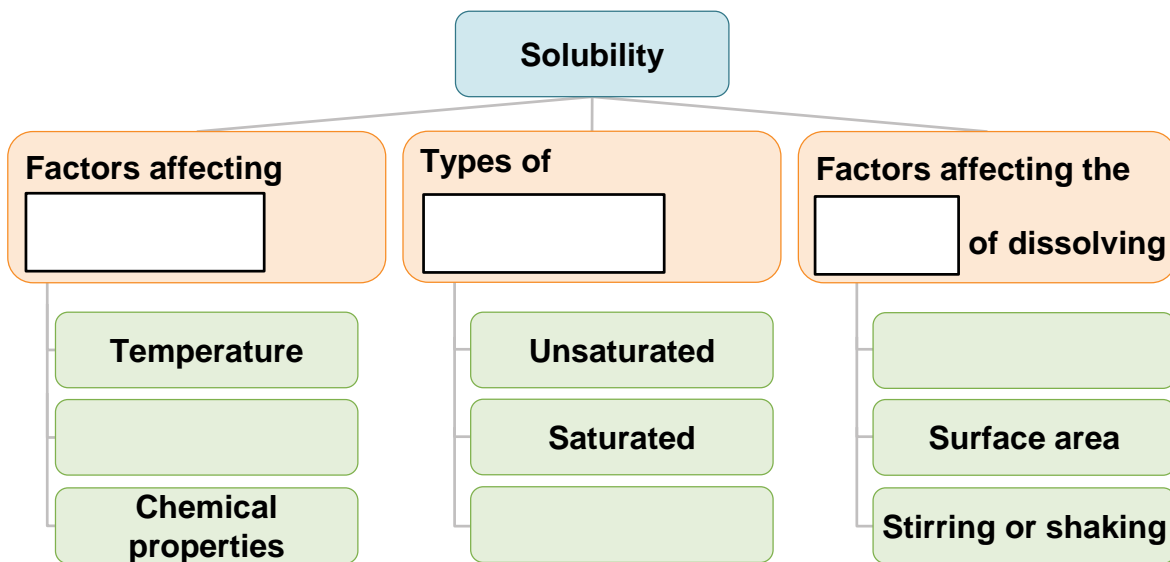
Answer

Blank area for the answer to the lesson question.

Slide

2

Review: Key Concepts





Summary

Solubility

Use this space to write any questions or thoughts about this lesson.