

**Drag and drop (fill in the blank)**

|           |             |                |                |
|-----------|-------------|----------------|----------------|
| solute    | solute      | solvent        | increases      |
| increases | decreases   | temperature    | nonpolar lower |
| polar     | electrolyte | nonelectrolyte | higher         |

In a solution, the 1.\_\_\_\_\_ does the dissolving and the 2.\_\_\_\_\_ is the substance being dissolved. For solids dissolving in liquids, the speed of dissolving 3.\_\_\_\_\_ with increased surface area, with increased temperature, and with stirring. For gases in liquids, the speed of solubility 4.\_\_\_\_\_ with increased temperature and stirring, but 5.\_\_\_\_\_ with increased pressure.

In general, polar solutes dissolve in polar solvents and do not dissolve in 6.\_\_\_\_\_ solvents. Usually, nonpolar solvents dissolve nonpolar solutes and do not dissolve 7.\_\_\_\_\_ solutes.

Solubility is usually express as the maximum number of grams of 8.\_\_\_\_\_ that will dissolve in 100 grams of solvent at a certain 9.\_\_\_\_\_

A substance that forms charged ions in solution and can conduct electricity is called a(n) 10.\_\_\_\_\_. A(n) 11.\_\_\_\_\_ does not ionize in water and cannot conduct electricity. The boiling point of a water solution of any substance is 12.\_\_\_\_\_ than the boiling point of water. The freezing point of a water solution of any substance is 13.\_\_\_\_\_ than the freezing point of pure water.