

ACROSS

- **5** A ______ solution is a solution in which the solvent is water.
- 7 ______'s law states that the vapor pressure of an ideal solution is dependent on the vapor pressure of each chemical component and the mole fraction of the component present in the solution.
- 8 The ______-ion effect is a term used to describe the effect on a solution of two dissolved solutes that contain the same ion.
- 9 ______ is the natural or artificial process of formation of solid crystals from a uniform solution.
- 10 The term _____ refers to a solution that contains more of the dissolved material than could be dissolved by the solvent under normal circumstances.
- 13 ______'s law states that at a constant temperature, the amount of a given gas dissolved in a given type and volume of liquid is directly proportional to the partial pressure of that gas in equilibrium with that liquid.
- 14 _____'s law states that the total pressure exerted by a gaseous mixture is equal to the sum of the partial pressures of each individual component in a gas mixture.
- 15 _____ equilibrium is any chemical equilibrium between solid and dissolved states of a compound at saturation.
- **18** Boiling-point ______ is a colligative property that states that a solution will

- have a higher boiling point than that of a pure solvent after the addition of a dissolved solute.
- 19 A ______, emulsion or dispersion is a type of heterogeneous mixture consisting of a dispersed phase made of tiny particles or droplets distributed evenly throughout a continuous phase.
- 21 Freezing-point ______ is the difference between the freezing points of a pure solvent and a solution mixed with a solute.
- 22 ______ is the measure of how much of a given substance there is mixed with another substance.
- 23 _____ occurs when carbon dioxide is dissolved in water or an aqueous solution.
- 24 The mole ______ of a component in a mixture is the relative proportion of molecules belonging to the component to those in the mixture, by number of molecules.
- 25 ______ is a general process in which ionic compounds separate or split into smaller molecules, ions, or radicals, usually in a reversible manner.
- 26 In chemistry, a ______ is a substance made by combining two or more different materials in such a way that no chemical reaction occurs.

DOWN

1 _____ or dissolution is the process of attraction and association of molecules of

- a solvent with molecules or ions of a solute.
- **2** A _____ solution is one that contains one mole of solute per liter.
- 3 A ______ is a substance containing free ions that behaves as an electrically conductive medium.
- 4 A _______, dispersion or colloid is a mixture of two immiscible substances in which a dispersed phase made of tiny particles or droplets is distributed evenly throughout a continuous phase.
- 6 ______ is a physical property referring to the ability for a given substance, the solute, to dissolve in a solvent.
- 10 A solvation ______ is a structure of any chemical species acting as a solvent, surrounding a solute species.
- 11 _____ solution is a form of concentration expression often preferred to molarity within the biological sciences in which a 1 percent solution would have 1 g of solute dissolved in a final volume of 100 ml of solution.
- **12** _____ is the formation of a solid in a solution during a chemical reaction.
- 16 ______ properties are properties of solutions that depend on the number of particles in a given volume of solvent and not on the mass of the particles.
- 17 _____ water is plain water into which carbon dioxide gas has been dissolved.
- **20** A _____ is a homogeneous mixture composed of two or more substances.