Read the article and fill the gaps with appropriate words.

ELECTROLYTES

Adapted from http://en.wikipedia.org/wiki/Electrolyte

solid	**solvent**	**conductive**	**due**
concentrated	**dissolves**	**result**	**solute**
dilute	**salts**	**conducts**	
charged	**ions**	**electrolysis**	

In chemistry, an electrolyte is any substance containing free **1.** ..... that make the substance electrically **2.** ..... . The most typical electrolyte is an ionic solution, but molten electrolytes and **3.** ..... electrolytes are also possible.

Commonly, electrolytes are solutions of acids, bases or **4.** ..... . Furthermore, some gases may act as electrolytes under conditions of high temperature or low pressure. Electrolyte solutions can also **5.** ..... from the dissolution of some biological (e.g., DNA, polypeptides) and synthetic polymers (e.g., polystyrene sulfonate), termed polyelectrolytes, which contain **6.** ..... functional groups.

Electrolyte solutions are normally formed when a salt is placed into a **7.** ..... such as water and the individual components dissociate **8.** ..... to the thermodynamic interactions between solvent and **9.** ..... molecules, in a process called solvation. For example, when table salt, NaCl, is placed in water, the salt (a solid) dissolves into its component ions, according to the dissociation reaction

$$NaCl_{(s)} \rightarrow Na^{+}_{(aq)} + Cl^{-}_{(aq)}$$

It is also possible for substances to react with water producing ions, e.g., carbon dioxide gas **10.** ..... in water to produce a solution which contains hydronium, carbonate, and hydrogen carbonate ions.

Note that molten salts can be electrolytes as well. For instance, when sodium chloride is molten, the liquid **11.** ..... electricity.

An electrolyte in a solution may be described as **12.** ..... if it has a high concentration of ions, or **13.** ..... if it has a low concentration. If a high proportion of the solute dissociates to form free ions, the electrolyte is strong; if most of the solute does not dissociate, the electrolyte is weak. The properties of electrolytes may be exploited using **14.** ..... to extract constituent elements and compounds contained within the solution.