

Read the article and fill the gaps with appropriate words.

ELECTROLYTES

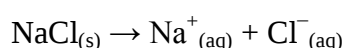
Adapted from <http://en.wikipedia.org/wiki/Electrolyte>

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



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.