

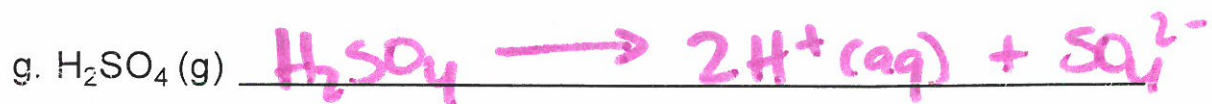
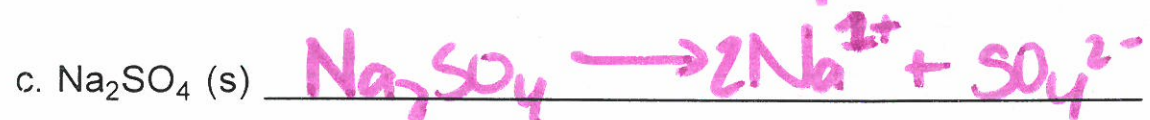
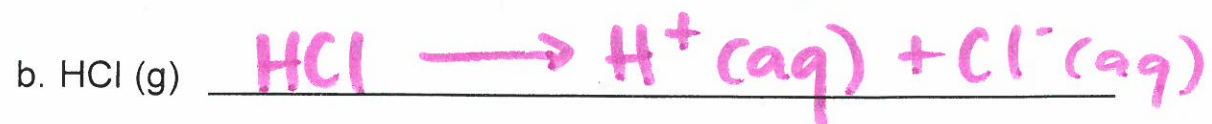
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Name: Key  
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Chemistry 11  
Assignment #3

PART I  
DISSOCIATION AND IONIZATION

1. Write an equation to show the dissociation/ionization of each of the following:



2. The most commonly used solvent in chemistry is water. Suggest some reasons why water is such a common solvent.

It is abundant, cheap, not harmful, reacts with both polar + non polar solutes!

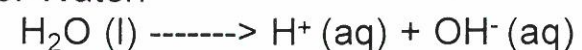
neutral pH

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PART II

A. CONDUCTIVITY OF AQUEOUS SOLUTIONS

The **ionization** of Water:



The presence of IONS in solution can result in either a very conductive, a mildly conductive, a slightly conductive or an almost negligible conductivity. Examine the table below:

solution tested	result
distilled H <sub>2</sub> O	slightly conductive
pure alcohol C <sub>2</sub> H <sub>5</sub> OH	negligible conductivity
NaSCN in H <sub>2</sub> O	very conductive
HCl in H <sub>2</sub> O	very conductive
NaOH in H <sub>2</sub> O	very conductive
C <sub>12</sub> H <sub>22</sub> O <sub>11</sub> (sugar) in H <sub>2</sub> O	slightly conductive
Na <sub>3</sub> PO <sub>4</sub> in H <sub>2</sub> O	very conductive
pure glycerine C <sub>3</sub> H <sub>5</sub> (OH) <sub>3</sub>	negligible conductivity
KOH in H <sub>2</sub> O	very conductive
pure acetone CH <sub>3</sub> COCH <sub>3</sub>	negligible conductivity

1. What is true about the chemical formula of non-conductive compounds (except H<sub>2</sub>O )

*They contain C, H and O ∴ are molecular compounds.*

2. HCl is an example of what type of a compound?

*It is an acid*

3. KOH and NaOH are examples of what type of compound?

*They are bases*

4. How would you classify the compounds NaSCN and Na<sub>3</sub>PO<sub>4</sub> ?

*They are ionic compounds*

*↳ salts!*

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