

Solutions Introduction DCI

Name _____ Section _____

1. Define the following terms:

solution

solute

solvent

dissolution

concentration

2. Describe your observations of the following experiments performed by the instructor.

a) Sodium chloride added to water

b) Sodium metal added to water

3. Complete the following table by providing physical examples of solute/solvent combinations.

Solute	Solvent	Example
Gas	Gas	
Gas	Liquid	
Liquid		
Solid		
Gas	Solid	
Liquid		
Solid		

6. Briefly describe each of the following types of intermolecular attractive forces. Sketch the orientations of molecules and/or ions involved in the following intermolecular attractive forces. Include at least one specific example where each attractive force is important. For each one, tell what causes the force and describe its strength relative to the others.

dipole-dipole forces

London dispersion forces

hydrogen-bonding forces