# Tonicity and Osmosis Worksheet

**Biology 101**
**Mary Severinghaus**
**10 Extra Credit Points**

**Name:**_____

**Section:**_____

**Date Due:** _____

Using the key below and the information given, answer the questions.

**key:**
solute particle •
cell membrane - - - - - - - -
cell wall ═══
in all solutions, the solvent is $H_2O$

**Part I. Fill in the blanks:**

A _____ is a fluid in which a substance is dissolved.
A _____ is a substance dissolved in a solvent.
A _____ is a combination of solute and solvent.
The process by which $H_2O$ diffuses across a membrane is called _____ .

**Part II. Look at the solutions illustrated below and fill in the blanks.**

1. **Solution B** is _____ to **solution A**. This is because **solution B** has a greater concentration of _____ in it than does **solution A**. **Solution C** has no solutes dissolved in it, therefore it is _____ to both **Solutions A** and **B**.

2. As the relative concentration of **solutes** in two solutions increases, of necessity the relative concentration of **water** in the same two solutions _____. **Solution A** has a lower concentration of _____ than does **Solution C**; **Solution A** is also **hypertonic** to **Solution C**.

3. [redacted]