

Solutions & Concentrations

Name: _____

- 1) What is the pph of a solution in which 3.5 grams of salt is dissolved in 96.5 g of water?
- 2) To give bottled water some taste, bottling companies put 0.073 grams of calcium in 500 grams of purified water. What is the ppm of calcium in the water?
- 3) A student measures the amount of arsenic in tap water. A 3000 gram sample of tap water had 0.000006 grams (6 μg) of arsenic in it. What was the ppb of the solution?
- 4) Ethanol in gasoline in Ohio can be as high as 10 pph. If a tank of gasoline has a mass of 40280 g. What would the mass of the ethanol be in the gasoline?
- 5) Soft water will have less than 25 ppm of iron in it. If 3780 grams (1 gallon) of water is 25 ppm iron, how many grams of iron are in the water?
- 6) A saturated sugar solution at 90 °C will have a concentration of 65 pph. How many grams of sugar and how many grams of water would be present in a 190.0 g sample of saturated sugar water?

7) In the following examples, determine what substances is the solute and what is the solvent.

Solution	Solute(s)	Solvent
Kool-Aid		
Air		
Gold Ring		