

Quiz 9.1 – Solutions and Solubility

Name: _____

Question 1How many moles are in 5.12 g of $\text{CuSO}_4 \cdot 5 \text{H}_2\text{O}$ **Question 2**

Water (H_2O) and diethyl ether ($\text{CH}_3-\text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_3$) are both solvents used in a chemistry laboratory. Which of these solvents would you expect to dissolve wax ($\text{C}_{45}\text{H}_{92}$)?

Question 3

Find the molar concentration if 2.5 g of NaCl are dissolved to make 15.00 ml of solution

Question 4

Find the mass/mass % if 0.750 g of naphthalene are dissolved in 5.00 g of dichloromethane solvent

Question 5

Solvation of sodium hydroxide is an exothermic process. If you want to increase the solubility of sodium hydroxide, should you raise or lower the temperature?

O Me! O Life!

Answer.

That you are here—that life exists and identity,
That the powerful play goes on, and you may contribute a verse.