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Preparing a solution of known concentration

Molarity

Molarity is a measurement of concentration.

Specifically for molarity, it is the number of moles in a given volume

$$\textit{Molarity} = \frac{\textit{moles}}{\textit{liters}}$$

There are 6 moles of NaCl in 3 liters of water, so the Molarity (Concentration) is 2 moles / liter. The molarity of the solution is 2.0

[http://www.youtube.com/watch?v=kuD2bDHVP90&feature=player_embedded]

The main equation for calculating molarity is that molarity = the number of moles in one liter of solution

The video below shows exactly how to setup and use the molarity equation to determine the number of moles needed to make 100mL of a 0.1M solution

[http://www.umich.edu/~chem125/softchalk/Exp2_Final/]

Now use the equation in the video to solve these problems. You may need to determine the molecular weight of compounds as well, so have your periodic table

[<http://www.webelements.com/>] ready!

Still wanting some extra practice on calculating molarities, and volumes and moles? Visit the link below for a bottomless molarity worksheet!

[<http://www.college-cram.com/study/chemistry/molarity-and-stoichiometry/bottomless-worksheet-of-molarity/>]