Created by Sheila Smith, University of Michigan- Dearborn (sheilars@umd.umich.edu) and posted on VIPEr (www.ionicviper.org) on October 17, 2009. Copyright Sheila Smith 2009. This work is licensed under the Creative Commons Attribution Non-commercial Share Alike License. To view a copy of this license visit http://creativecommons.org/about/license/.

## In class activity- Lewis Acidity

Water has a pKa of 14. What is the concentration of $\mathrm{H}^{+}$in $\mathrm{H}_{2} \mathrm{O}$ at $25^{\circ} \mathrm{C}$ ? Write the balanced chemical equation for the dissociation of water to form $H^{+}$.

When $\mathrm{H}_{2} \mathrm{O}$ is attached to $\mathrm{Zn}^{2+}\left(0.1 \mathrm{M} \mathrm{Zn}{ }^{2+}, 25^{\circ} \mathrm{C}\right)$, it's pKa is 10.0. What is the concentration of $\mathrm{H}^{+}$in this solution? Write the balanced chemical equation.

In which system is water the better acid?

