Entropy is a weird and abstract concept. However, you might have encountered entropy before. The entropy we will discuss in this class is the same entropy in Gibbs free energy that you may have seen in one of your chemistry classes. You may have also heard of entropy before as being “disorder”. If this is the case, *please forget this idea*, as a lot of confusion surrounding entropy involves this concept of disorder. The idea of entropy as disorder is an outdated one, and is sometimes simply not true.

Consider a bowl of ice sitting in water. Eventually, the ice will melt, and we’ll be left with just a bowl of water. While a bowl of ice inside water may seem more “disorderly” than a uniform bowl of water, the water is a higher entropy state than the water with ice. We’ll discuss why this is in more detail in class.

Getting a handle on the concept of entropy will take some time. We are not expecting you to fully understand it through the readings, and we will work in class to help develop this concept. As always, what we do expect you to know will be listed at the top of each section, under the UMass instructor’s notes.