Final Project Proposal:

There are a number of science-based ideas about our world that are taught in elementary school and high school that many adults have the wrong impression about. For one reason or another, the picture that we build in our mind does not correspond with reality. An example of this is scale. It is very hard to imagine the relative size of things. This project (<http://scaleofuniverse.com/>) does a really good job of comparing the scale of the things that make up the universe in an exploratory way. I would like to do a similar, either physical or web based, interactive that explains some other misunderstood idea.

My current idea is to try and demonstrate what causes the seasons but I would like to do some research to see if there is another better misunderstood concept. Ideally, this would be a tool that people could play with and, by observing the changes in the system, come to understand the idea rather than just having it dictated to them (as they probably once did).

Many people are scared away by science (and technology) because they think that science is complicated and hard and that in order to be a scientist you have to be really smart. However, science is just another way of observing and commenting on our world and the way it works. I would want this tool to be a way for the user to “play scientist” and make discoveries based on experimentation and observation rather than memorize facts.