Plans

* Weather sampling
  + Use baseline HEX values and global values to sample weather for the hex
    - Save the generated weather for multiple samplings, reset each day
  + Smooth weather. Each HEX will have a set of values for weather. There will be defaults based off of the type of hex at creation
    - Average HUMIDITY between neighboring hexes
    - Water tiles create humidity, grasslands+forests are sinks?
* Hex General
  + Hex color should be determined based off of temperature, humidity, and altitude
    - biodiversity
    - temperature
    - rainfall
    - fertility
  + So a little function-doodle that calculates RGB
    - Altitude decreases saturation
    - Humidity scales green
    - Temperature scales red
  + Add notes to hexes
  + Add fun features to the hexes
  + Draw noteworthy features
  + Different kinds of water
    - fresh
    - saline
    - potability ?
  + Have it discover regions of similar biomes
* Time tracking
  + Hexmap should keep track of time of day
  + Allow time skips
  + Keep track of seasons, moon phase, etc…
* Party
  + Keep track of party location
  + Allow travel.
    - Use local hex to determine travel time
    - Move time forward accordingly
* Procedural description
  + Use local data to provide a description of the landscape and weather
* World generation

Current ToDo:

* World Gen
  + Simulate temperature gradient based on zenith angle
  + Run a riversim
    - Rivers start in places of high altitude + rainfall. On a vertex between three such hexes
    - River checks neighbor vertices. At each average altitude of vertex’s neighbors and then propagate in the direction of lowest altitude.
    - Repeat until reaches ocean OR has moved ~15-20 tiles
    - IF river forms closed shape, make it into a lake.
  + Biodiversity based on Conway’s game of life?
    - Should be influenced by rainfall, temperature, and altitude. Big bonus if near a lake.
* Map Run Mode
  + Used for playing the game
* Civ Edit Mode
  + Add map features
  + cities, towns, roads