**What is a Wave? Pre-assessment**

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| **Directions** |
| Answer the following questions this assignment will be graded. |

1. What cells did our network consist of and how many of each type?

10 Pyramidal cells and 2 interneurons

1. Which of these is required for the **synaptic weight** of a cell to grow?
   1. Iron
   2. Potassium
   3. Calcium
2. Describe how our circuit learns fear and what happens to that fear over time (i.e.: extinction phase)

The circuit learns fear when the excitatory synapses are raised in the pyramidal cells connected to both tone and shock when both are administered at the same time. This causes calcium to flood in and raise the plasticity of the synapse. This is like how the amygdala in our own brain learns fear.

1. What python package did we use to create this circuit and what does it interact with in order to run?

Our circuit uses Brain Modeling Toolkit (BMTK) and it interfaces with NEURON in order to work.