PhET Simulation worksheet

**Directions: Play around with the simulation for five minutes. Click all the buttons and see what they do.**

**Step 1**: Click the add friend button once, and watch what happens. Pause the simulation and record the results in the space provided.

**Step 2**: Add the mutation of brown fur and let the simulation run for two more generations. What happened?

**Step 3**: Add the mutation for long teeth and observe what happens over the course of the next three generations.

**Step 4**: Add the selection factor of food and record for two generations. Using the graph what changes are you seeing in the population?

**Step 5**: Select the wolves’ factor and record the changes over the next four generations. How is the graph changing?

**Repeat steps 1-5 but in the Artic. Record your results below**.

Step 1:

Step 2:

Step 3:

Step 4:

Step 5:

**Summary of learning**: How did the factors influence the population to the rabbits? Looking at the mutations and knowing you can change the recessive and dominant traits which mutations would you change and why to produce the largest population to rabbits? Does location play a role in population growth? Use details from the simulation to support answer.