The Weebles
Exponential Decay

When looking for something you dropped on the ground, you discovered a new colony of insects which you call “weebles.” You have been observing them in a contained environment that you created for them. However, the weebles are dying off and you want to estimate how many days until they all die off so you can determine how long to keep them in the container you built before putting them back in the wild.

In order to simulate the weebles unfortunate demise, you decide to use M&M’s. For this experiment, a round represents 1 year.

1. Take the bag of M&M’s that your group is given and count out how many there are on a napkin and record the number in the chart under round 0.

2. Fold up the napkins corners and carefully shake the M&M’s inside. Then, lay it back down.

3. Count the number of M&M’s with the “m” facing upwards. Those are the survivors. Record the number of survivors for that round.

4. Remove the candies whose “m” is not facing up from the napkin.

5. Now, fold up the corners again and shake the napkin with the candy survivors inside.

6. Repeat this process until there are no more survivors.