**Deer Population Growth Worksheet KEY:**

1. What is the birth rate?

*720/1200 = 0.6*

1. What is the death rate?

*240/1200 = 0.2*

1. What is the growth rate (r) *=*

*birth rate- death rate = 0.4*

1. At the end of year 1, how much growth (G) will there be? Hint: what is the equation for G = ?

*G = rN; G = 0.4(1200) = 480*

1. The total population size at the end of year 1 will be?

*480 + 1200 = 1680*

1. What will the population size be at the end of year 2? \_

*2352*

*G = rN; G = 0.4(1680) = 672 🡪 1680 + 672 = 2352*

1. At the end of year 3?

*3293*

*0.4 (2352) = 941; 2352 + 941 = 3293*

1. Draw the two models of population growth that you learned about. Write their equations too:

Exponential Logistic



Equations? \_\_\_*G= rN*\_\_\_\_\_ *G = rN \* (K-N)/K* \_

1. There are only two real options for slowing the growth of local deer populations: \_*decrease*\_\_\_\_ the birth rate or \_\_\_\_*increase*\_\_\_\_\_\_\_ the death rate.

If you are given time and have internet access, see if you can research a few ways that some suburbs have controlled the deer population.

*(Deer birth control to decrease birth rate or urban archery/traditional hunting to increase death rate.)*