Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block \_\_\_\_\_\_\_\_\_ Score \_\_\_\_\_\_\_\_\_\_\_/50 points\_\_\_\_\_\_\_\_\_\_\_\_%

~Population Lab~

Directions

1. The groups starting population is 10 beans.
2. The goal of this lab is for you to calculate the growth and death rate of a population of beans over a twenty year period of time.
3. The Population Rules for Beanville are:
   1. **EACH YEAR: for every 5 beans there will be 2 offspring that are born**
   2. **EACH YEAR: 1 out of every 5 beans will die**
4. Continue using these rules to complete the chart below for 10 years. The first year has been completed for you. *Other numbers have been added to keep you on the right track.*

**Population Growth Rate Data Table**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Starting Population** | 10 | 12 |  |  |  |  |  |  |  |  |
| **Births**  **(+)** | +4 |  |  |  |  |  |  |  |  |  |
| **Deaths**  **(-)** | -2 |  |  |  |  |  |  |  |  |  |
| **Ending Population** | 12 |  |  | 19 |  |  |  |  |  |  |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Define the following vocabulary word. (3 pts)**

Carry capacity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Population: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Population Density: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **(8 pts) Compare a R-strategist to a K-strategist using 3 facts for each as well as an example of an animal that could represent each type.**
2. **Draw the 3 types of population dispersion below. (3pts)**