Populations EOC Review

1. Define Ecology:
2. Fill in the chart below:

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| **Step in the Hierarchy of Ecology** | **Definition** | **Picture or Example** |
| Organism |  |  |
| Population |  |  |
| Community |  |  |
| Ecosystem |  |  |
| Biosphere |  |  |

1. Distinguish between habitat and niche:
2. Compare and contrast Biotic and Abiotic factors in environments using example
3. Define Demography:
4. Compare and contrast Population Density and Dispersion
5. Population Data: Total population size=100, Births 10, Deaths 30. Calculate the Birth Rate, Death Rate and Growth rate of this population. Based on the value of this growth rate, predict whether or not this population is growing.
6. In the space below, draw types I-III survivorship and describe what’s happening in each. How does this relate to life expectancy?
7. Compare and contrast Immigration and Emigration.
8. Compare and Contrast Density dependent and Density Independent Limiting factors. How do these relate to Carrying Capacity (K)?
9. Fill in the chart below:

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| --- | --- | --- | --- |
| **Growth Model** | **Draw Shape of Graph and Describe it** | **Assumptions** | **Birth and Death Rates** |
| Exponential Growth |  |  |  |
| Logistic Growth |  |  |  |

In the space below, draw the graph of what happens in reality. What accounts for the differences between the reality graph and the growth models above?

1. Define Demographic transition and describe how age structure graphs help demographers determine whether or not a country has completed demographic transition (be specific about the shapes of the age structure graphs at each stage).