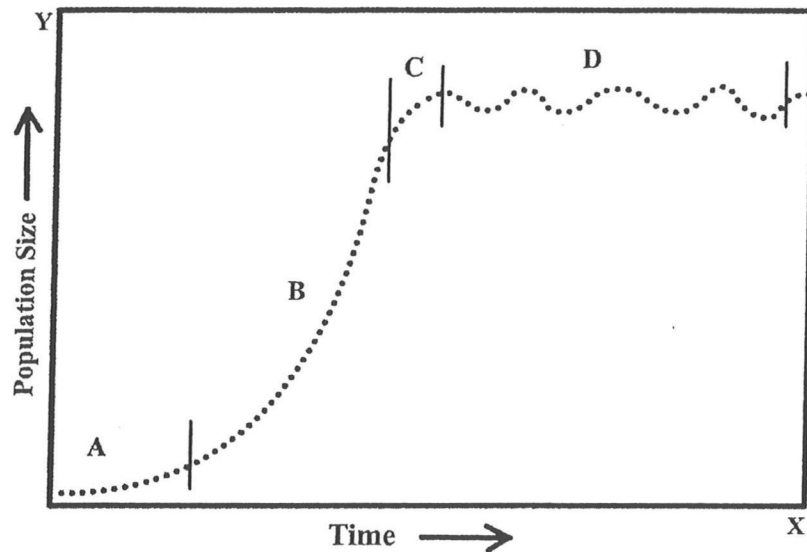


Name: _____

Period: _____

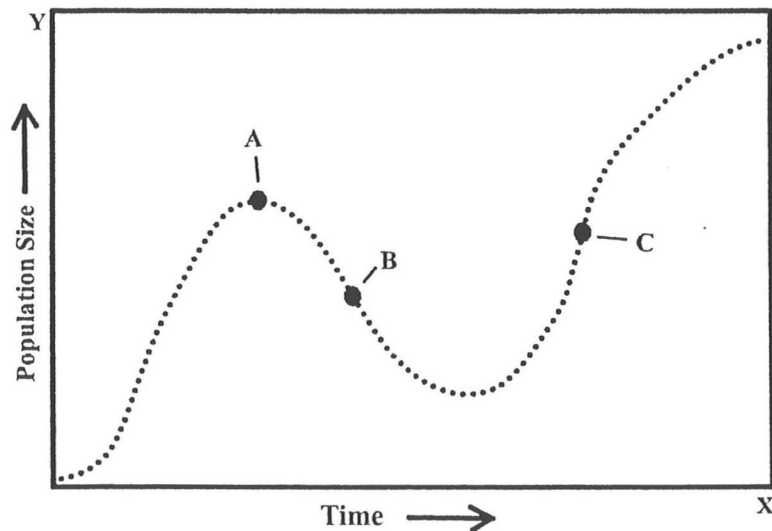
Worksheet: Interpreting Population Growth

Part 1: Examine the graph below to answer questions 1 - 4.



1. This graph represents which type of growth?
2. Time intervals **A** and **B** together can be characterized as which type of growth?
3. Which of the following is true of the time interval marked **D** on the graph?
 - a. Carrying capacity has been reached.
 - b. Population is growing.
 - c. Population is declining.
 - d. Birth rate is higher than the death rate.
 - e. Emigration is greater than immigration.
4. At which time interval do you begin to see the effects of limiting factors (such as limited food, water, space, etc...) on the population?

Part 2: Examine the graph below to answer the following questions.



Population: explain what is happening to the population growth at each point in the diagram using the terms: increasing, decreasing, stable

Point A _____

Point B _____

Point C _____

Birth Rate: explain what is happening to the birth rate at each point in the diagram using the terms: increasing, decreasing, stable

Point A _____

Point B _____

Point C _____

Death Rate: explain what is happening to the death rate at each point in the diagram using the terms: increasing, decreasing, stable

Point A _____

Point B _____

Point C _____

Relationships: Use the symbols below to describe the relationships in the following situations.

Relationship	Symbol
greater than	$>$
less than	$<$
equal to	$=$

1. At point **A**, birth rate is _____ death rate.
2. At point **C**, emigration is _____ immigration.
3. At point **B**, death rate is _____ birth rate.
4. At point **A**, immigration is _____ emigration.
5. The population at point **A** is _____ the population at point **B**.
6. The population at point **C** is _____ the population at point **A**.

Name: _____ Date: _____ Period: _____

Human Population Growth Graphing Activity

Directions: Use the following data sheet to graph the human population starting in the year 1650 through 2050, and the y-axis from 0 to 8 billion people (the x- and/or y-axis has been labeled and scaled for you if you have chosen one of the non extra-credit versions). Make sure that you 1) label your axis, 2) scale the axes so that it uses most of the graph (if you choose an extra credit version), 3) plot the points, 4) draw a best-fit line; and 5) provide a title for your graph.

Year A.D.	Number of People (in billions)
1650	.50
1750	.70
1850	1.0
1925	2.0
1956	2.5
1970	3.6
1980	4.4
1991	5.5
2000	6.0
2004	6.4
2008	6.7
2011	6.9

Analysis

- It took 1,649 years for the world population to double from .25 billion people to .50 billion people.
 - How long did it take for the population to double a second time? _____
 - How long did it take for the population to double a third time? _____
 - How long did it take for the population to double a fourth time? _____
- According to this information, the human population has increased / decreased (circle one) at a decelerated / accelerated rate (circle one).
- Based on your graph, in what year will the population reach 8 billion? _____