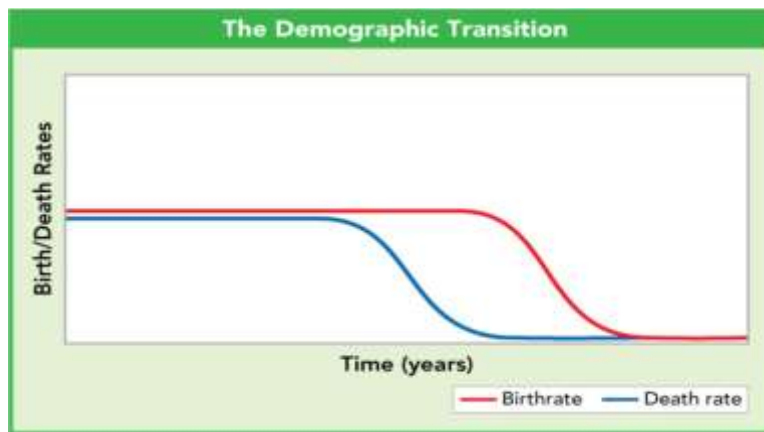


Simulation: Investigate Population Growth Rates

Name _____

ClassLink → Pearson → Pearson Realize → Orange Heading “Biology” → **Interactivity: Human Population Growth**

- Human Population Growth:** Analyze the graph about the history of the human population of Earth
 - What appears to have been the carrying capacity of humans for most of human history?
 - Which 4 important events of human history are given?
 - Of these 4 events, which two events appear to have increased the human carrying capacity on Earth?
 - Which density-dependent limiting factor is given in the graph?
 - How long has the human population on Earth been greater than 1 billion?
- Human Population Growth Rates 1950-2050:** Analyze the given graph
 - According to the graph what is the estimated human population for the year 2042?
- Demographic Transition:** Use the information given to show the 3 stages of demographic transition
 - Divide the given graph into the three stages of demographic transition and label the stages:



EXIT THE INTERACTIVITY AND BEGIN THE SIMULATION FOR SECTION 5.3

ClassLink → Pearson → Pearson Realize → Orange Heading “Biology” → **Simulation: Investigate Population Growth Rates**

- Population Growth:** Read the information given about population growth
 - What 4 factors affect population growth?
 - What 5 factors affect a country’s human population growth?
- Studying Growth Rates:** Read the information given about population growth rates
- Population Growth Rates:** Read the information given about demographic transition
 - Describe what happens during the 3 stages of demographic transition:
 - Stage 1:
 - Stage 2:
 - Stage 3:

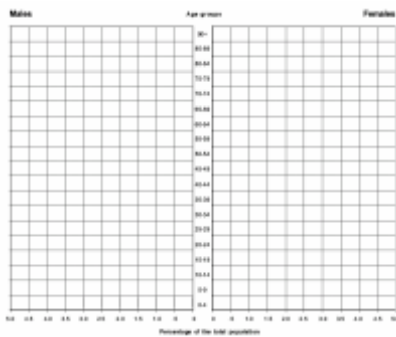
b. What stage do you think the USA could be in?

c. Fill in the table by reviewing the data given:

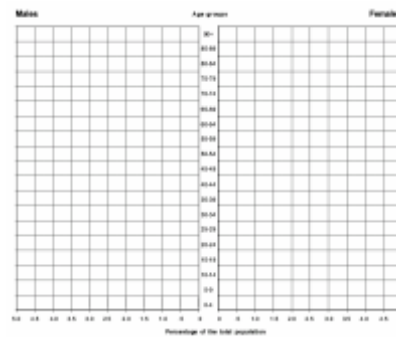
<u>Birthrate</u>	<u>Type of Country</u>	<u>High Death Rate</u>	<u>Low Death Rate</u>
High Birthrate			
Low Birthrate			

d. How did the demographic transition graphs of Angola and Kenya differ from the graphs of Denmark and Canada? **Sketch the rough shape of a demographic transition graph for developing countries and developed countries:**

DEVELOPING:



DEVELOPED:



4. Record Data:

a. Fill in the table (**don't fill it in on the computer**) using the given country data:

<u>Country</u>	<u>Birth Rate</u> <u>(per 1000)</u>	<u>Death Rate</u> <u>(per 1000)</u>	<u>Immigration Rate</u> <u>(per 1000)</u>	<u>Growth Rate</u> <u>(per year)</u>	<u>Median Age</u> <u>(years)</u>	<u>Life Expectancy</u> <u>(years)</u>
Angola						
Kenya						
Canada						
Denmark						

5. Drawing Conclusions:

a. Based on the data, determine which stage of demographic transition each country is in, AND EXPLAIN WHY:

Angola:

Canada:

Denmark:

Kenya:

6. Drawing Conclusions:

a. Based on the data, make a prediction about the population growth of each country; will it increase, decrease, or stabilize?

Angola:

Canada:

Denmark:

Kenya: