8.2 Predicting Population Growth

Key Concepts

- Fertility rate helps demographers predict the rates at which populations will grow in the future.
- Age structure and sex ratios define a population’s potential for growth.
- The demographic transition may explain the reason that some industrialized nations have experienced a large drop in birthrates and death rates.
- Social factors, such as wealth and education, affect a nation’s population growth and its resource use.

**SKILL BUILDER** Vocabulary Preview

*Define each vocabulary term in your own words. Then, write yourself a quick note on how you will remember each. One term has been done for you.*

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>How I Remember</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fertility rate</td>
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<tr>
<td>Replacement fertility</td>
<td>The total fertility rate for a nation that would keep its population size stable</td>
<td>I think of replacement fertility as the rate at which the number of people born would replace the number of people who died.</td>
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<tr>
<td>Demographic transition</td>
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Fertility Rate

For Questions 1 and 2, circle the letter of the correct answer.

1. Fertility rates have started to decrease in many nations. How has this affected the size of the human population throughout the world?
   A. The population size is steady.
   B. The population size is decreasing.
   C. The population size is still increasing.
   D. Fertility rates are not related to population size.

2. What type of fertility rate would keep a nation’s population stable?
   A. total fertility
   B. natural fertility
   C. doubling fertility
   D. replacement fertility

3. How do fertility rates compare to overall population rates of the world?

Age Structure and Sex Ratios

4. How is information on age structure and sex ratios useful to demographers?

5. Most people in population A are pre-reproductive age. In population B, most people are post-reproductive age. Which population will likely experience a greater population growth rate over the next few decades? Explain.

6. How might human activities skew sex ratios?
The Demographic Transition

7. Fill in the flowchart with the names and brief descriptions of what happens to population growth in each stage of the demographic transition.

8. During which stage of the demographic transition do population growth rates increase?

9. In which stage of the demographic transition is the United States today?

Social Factors

10. Complete the following paragraph with terms from the word bank.

The fertility rates, infant mortality rates, and death rates of developing nations are _________________ than those of developed nations, while life expectancy is _______________. Still, developing nations tend to have _______________ populations, while the populations of developed nations stay relatively constant. Fertility rates are strongly connected to education. When women have educational opportunities and are able to decide whether and when to have children, fertility rates often _______________.

11. Provide at least three examples of national policies that can influence population size.