A Country's Shape Is More Than Its Borders

What Is A Population Pyramid?

A population pyramid is one way to look at the demographics of a country. Demographics are population characteristics, such as age, gender, race, religion, or language. A population pyramid looks at only age and gender. It is constructed to show how many people in a particular age group are male or female. This is done using a horizontal bar graph. The result is a clear picture of how a country's population breaks down according to gender and age, and where the most people occur according to those two pieces of information.

How To Read A Population Pyramid

The first step is to look at the scale across the bottom of the pyramid. It tells if the numbers represent thousands or millions. Next, look at the age groupings. These are usually going up the middle of the pyramid. Then notice that males are shown on the left side of the graph, females on the right. Lastly, to determine how many males or females are in a certain age group, find that age group in the center, go to the end of the horizontal bar either left or right, then go down to the scale to see how many.

Interpreting A Population Pyramid

Population pyramids can show if a country's population growth is slow, rapid, or negative (little to none). A country with rapid growth will have a wide base and narrow top. A country with slow growth will have almost equal numbers from top to bottom. A country with negative growth will have fewer at the bottom and top, and most of the population in the middle. Determining growth rate leads to questions of what kinds of services would a government expect to need to provide. Do more children mean more schools, daycare facilities, and the need for more teachers? Do more elderly mean more retirement centers, pension plans, and health care? Does a large number in the middle mean more jobs, job training programs, and universities? Why are so few at the bottom? Are more children due to economics (children provide farm labor or money from work they perform) or high mortality rates (many die before age 2 or 3)? What does a government need to do to change this—more jobs for adults, better health care? Using this information, a government can make plans and solve problems.

Another thing a population pyramid can show is differences in numbers of males and females in certain age groups. For instance, why would a certain age group have more females than males? Are there age groups where both males and females are less than the groups above and below them? Why? These questions can be answered by looking at the history of that country. Was there a war, natural disaster, or economic problem, which reduced the population at that time?

Population pyramids can be used to interpret the past, see the present, and plan for the future.

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Practice Sheet   **Name**_____

     Use the population pyramid of the United States to practice reading and interpreting a population pyramid. Look at the U.S. population pyramid and answer the questions that follow.

U.S. Census Bureau

Population Pyramid for United States
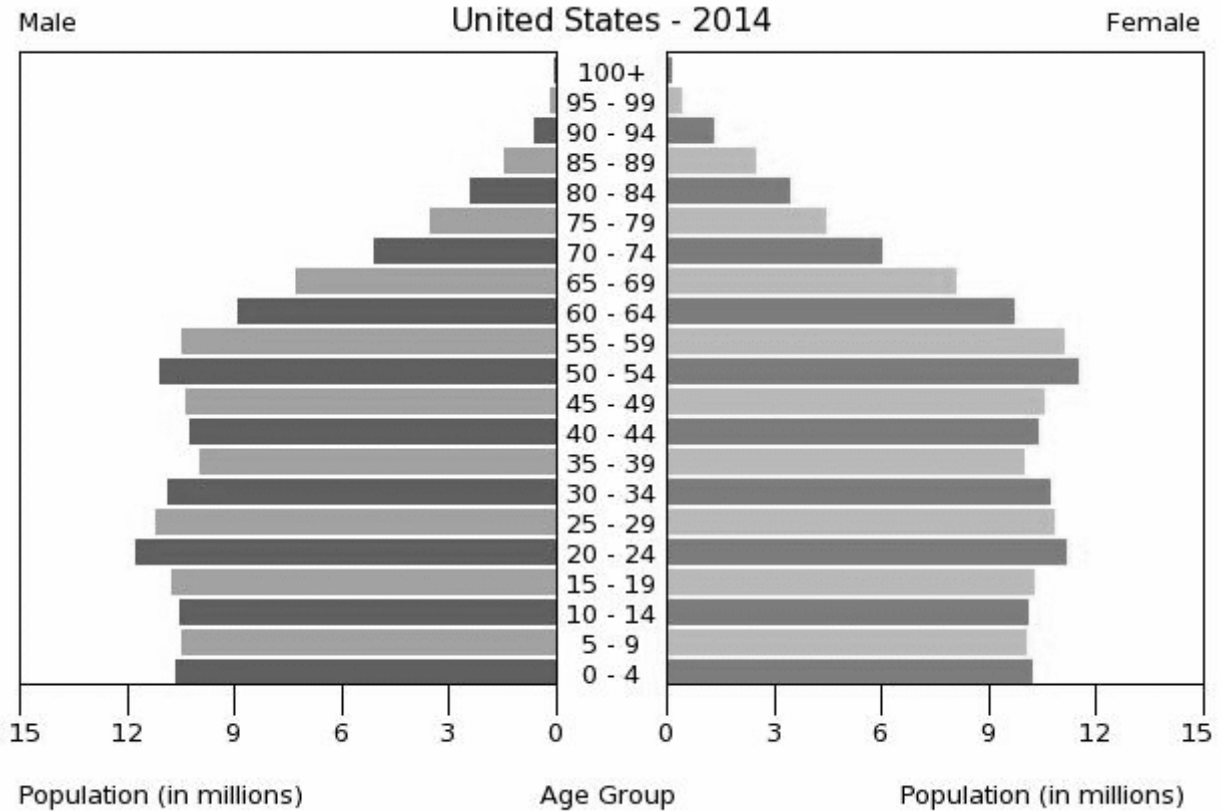
Source: U.S. Census Bureau, International Data Base

1. Define demographics.

2. What demographics does this pyramid show?

3. What is the scale used?

4. How many years are contained in each age group?

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5. How many males are in the 25-29 age group?

6. How many females are in the 45-49 age group?

7. How many males and females are in the 60-64 age group?

8. In what age groups are most of the population located?

9. Does this pyramid show a country with slow, rapid, or negative growth? Why?

10. Why do you think fewer males and females are in the 30-39 age groups than the groups above and below that?

11. Why do you think fewer males are in the 70-85+ age group than females?

12. What services and programs would a government need to consider now? Why?

13. What services and programs will a government need to plan for in the future? Why?

Population Pyramid Assessment   **Name**_____

Directions: Using the population pyramids for Australia, India, and France, answer the following questions:

1. What is the scale used on the Australia population pyramid?
    a. hundreds   c. thousands
    b. millions   d. billions

2. On the India population pyramid, how many years are in each age group?
    a. 5   c. 2
    b. 1   d. 10

3. Demographics are
    a. population characteristics.   c. government preference characteristics.
    b. economic characteristics.   d. religion characteristics.

4. Which is <u>not</u> true of a population pyramid?
    a. It shows gender and age.   c. It shows trends.
    b. Males are on the left.   d. Females are on the left.

5. Which population pyramid shows rapid growth?
    a. Australia   c. France
    b. India   d. none of them

6. Which population pyramid shows slow growth?
    a. Australia   c. France
    b. India   d. none of them

7. Which population pyramid shows negative growth?
    a. Australia   c. France
    b. India   d. none of them

8. On the India population pyramid, how many males are in the 35-39 age group?
    a. 50 million   c. 35 million
    b. 30 million   d. 10 million

9. On the France population pyramid, how many females are in the 50-54 age group?
    a. 2 million   c. 2.4 million
    b. 2.2 million   d. 1.8 million

10. On the France population pyramid, which age group is smaller than the ones above and below it?
    a. 0-10   c. 15-24
    b. 75-84   d. 45-49

Assessment Answer Key

1. C
2. A
3. A
4. D
5. B
6. C
7. A
8. A
9. B
10. C

Writing Prompt and Scoring Guide for the Paragraph

Pretend you are a demographics expert hired by the government of Australia, India, or France to interpret that country's population pyramid. Using one of the three population pyramids (Australia, India, or France) write a paragraph explaining the type of growth that country is experiencing, and what type of programs and services the government should create to meet the needs of their population now and in the future.

Paragraph (worth 100 points)
- Describes type of growth (20 points
- Describes programs needed now (40 points)
- Describes programs needed in the future (40 points)

Population Pyramid for France

France - 2014

Male

Female

Age Group
100+
95 - 99
90 - 94
85 - 89
80 - 84
75 - 79
70 - 74
65 - 69
60 - 64
55 - 59
50 - 54
45 - 49
40 - 44
35 - 39
30 - 34
25 - 29
20 - 24
15 - 19
10 - 14
5 - 9
0 - 4

Population (in millions)

Age Group

Population (in millions)
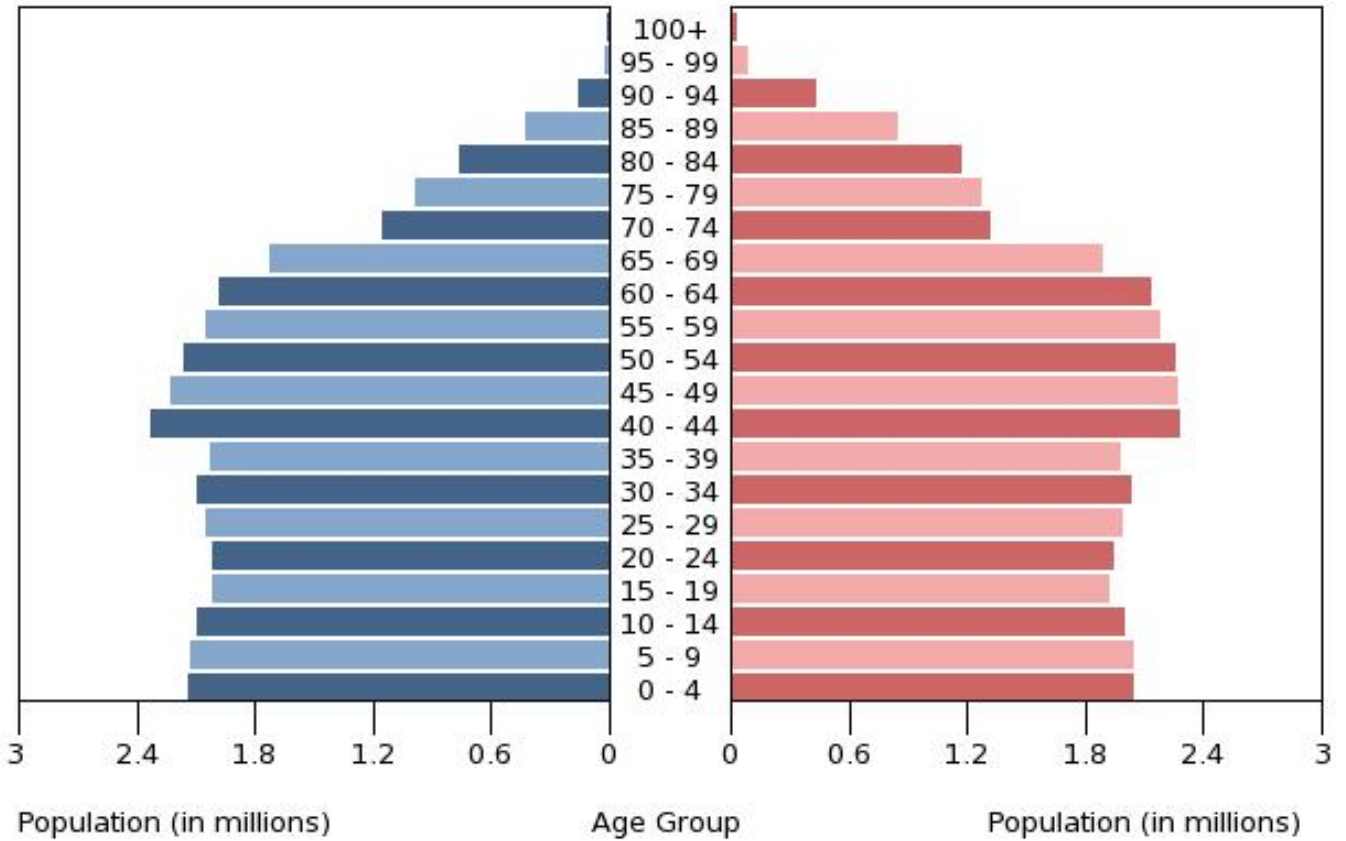
Population Pyramid for Australia

Australia - 2014

Male

Female

Age Group
100+
95 - 99
90 - 94
85 - 89
80 - 84
75 - 79
70 - 74
65 - 69
60 - 64
55 - 59
50 - 54
45 - 49
40 - 44
35 - 39
30 - 34
25 - 29
20 - 24
15 - 19
10 - 14
5 - 9
0 - 4

820   656   492   328   164   0   0   164   328   492   656   820

Population (in thousands)   Age Group   Population (in thousands)
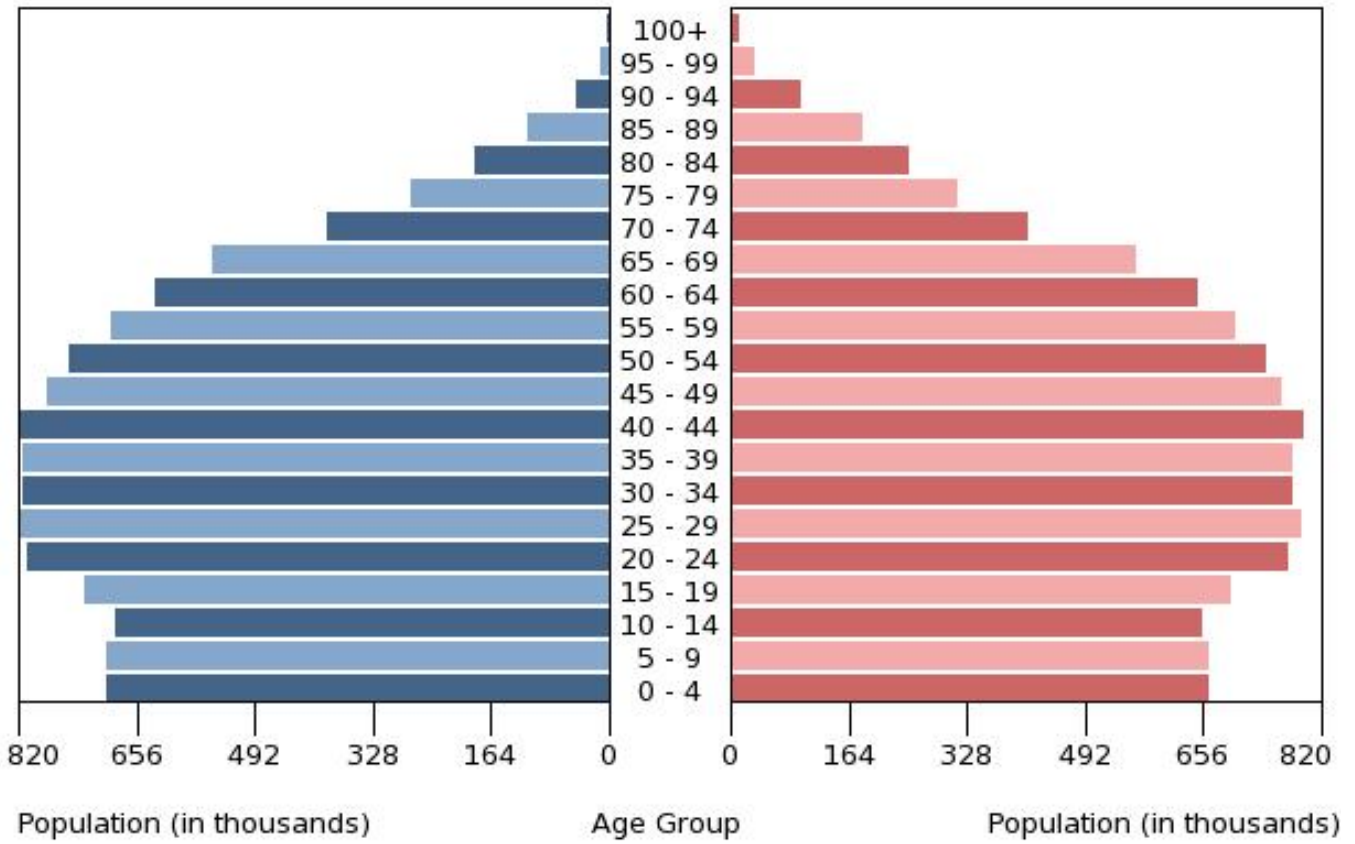
Population Pyramid for India

Male

India - 2014

Female

Age Group
100+
95 - 99
90 - 94
85 - 89
80 - 84
75 - 79
70 - 74
65 - 69
60 - 64
55 - 59
50 - 54
45 - 49
40 - 44
35 - 39
30 - 34
25 - 29
20 - 24
15 - 19
10 - 14
5 - 9
0 - 4

65   52   39   26   13   0   0   13   26   39   52   65

Population (in millions)   Age Group   Population (in millions)