Name _____ **Pd.** _____ Date _____

Chapter 8   Using Census Data

Problem   *Is my local population growing too fast, not at all, or is it declining?*

Your Prediction

1. Does your town's population diagram more closely resemble that of Canada or Madagascar? (See **Figure 9,** on page 236 of your textbook.)

       _____

Background

In 2010, the world population exceeded six billion, and continues to grow at a rate of 1.3 percent yearly (an increase of 80 million people). Understanding population growth—or lack of it—at the local level helps environmental scientists understand how resources are used and wastes created. Comparing current population data with historical data and regional or national statistics may reveal patterns of change that can be useful in resource management.

An age structure diagram provides a quick basis for assessing the population structure of a country or region and using it to predict population trends. A pyramid-shaped diagram—fewer elderly individuals, many young individuals—indicates rapid growth. In contrast, a diagram shaped more like a pillar or column indicates little or no growth. And a population in which the smallest groups are the youngest (for which the diagram can look like a column with a pinched-in base) is actually experiencing negative growth. In this case, the population is decreasing over time and cannot replace itself.

Research Your Local Environment

Procedure

Materials   Computer with Internet access or pre-printed census data tables; graph templates (in lab) or graph paper

Step 1   Use the Data in the back to construct TWO Age-Sex Pyramids - Use the Percentage!

Step 2   Answer the Questions

Name_____ Period_____

2000 Census - Union Township - Age Structure Diagram

Males	Females

Age (Years)		
90 & up		
85 to 89		
80 to 84		
75 to 79		
70 to 74		
65 to 69		
60 to 64		
55 to 59		
50 to 54		
45 to 49		
40 to 44		
35 to 39		
30 to 34		
25 to 29		
20 to 24		
15 to 19		
10 to 14		
5 to 9		
0 to 5		

10 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 10

Population

2010 Census - Union Township - Age Structure Diagram

Males	Females

Age (Years)

90 & up
85 to 89
80 to 84
75 to 79
70 to 74
65 to 69
60 to 64
55 to 59
50 to 54
45 to 49
40 to 44
35 to 39
30 to 34
25 to 29
20 to 24
15 to 19
10 to 14
5 to 9
0 to 5

10 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 10

Population

Name_____   Period_____

Using Census Data Lab Activity

1. **Look at the data for your town for 2000.** Which age group is the largest? _____

2. Which age group is the smallest?_____

3. Graph an age structure diagram for 2000 data.

4. How do the numbers of men and women compare? (answer after you make your graph)

    _____

    _____

    _____

    _____.

5. **Look at the data for your town for 2010.** Which age group is the largest? _____

6. Which age group is the smallest?_____

7. Graph an age structure diagram for 2010 data.

8. How do the numbers of men and women compare? (answer after you make your graph)

    _____

    _____

    _____

    _____.

9. What differences do you see between the 2000 and the 2010 data?

10. **Interpret the Graphs.** Describe the general shape of Union's Age Structure Diagram for 2000.

    _____

    _____.

11. Does this show rapid growth, no growth, little growth, or negative growth? Explain your answer.

_____

_____

_____

12. Describe the general shape of Union's Age Structure Diagram for 2010.

_____

_____.

13. Does this show rapid growth, no growth, little growth, or negative growth? Explain your answer.

_____

_____

_____

14. What might be the cause of why these graphs are different?

_____

_____.

15. Are you concerned about the population patterns you observed? _____ Why?

_____

_____

16. Some experts predict that the world's population will reach 8 billion by 2030. How do you think will this affect pollution?

_____

_____

_____

_____

_____

QT-P1	Age Groups and Sex: 2000
	Census 2000 Summary File 1 (SF 1) 100-Percent Data

NOTE: For information on confidentiality protection, nonsampling error, definitions, and count corrections see http://factfinder.census.gov/home/en/datanotes/expsf1u.htm.

Age	Union township, Union County, New Jersey					
	Number			**Percent**		
	Both sexes	**Male**	**Female**	**Both sexes**	**Male**	**Female**
Total population	54,405	25,446	28,959	100.0	100.0	100.0
Under 5 years	2,994	1,525	1,469	5.5	6.0	5.1
5 to 9 years	3,568	1,841	1,727	6.6	7.2	6.0
10 to 14 years	3,538	1,842	1,696	6.5	7.2	5.9
15 to 19 years	3,600	1,800	1,800	6.6	7.1	6.2
20 to 24 years	3,242	1,595	1,647	6.0	6.3	5.7
25 to 29 years	3,068	1,480	1,588	5.6	5.8	5.5
30 to 34 years	3,896	1,802	2,094	7.2	7.1	7.2
35 to 39 years	4,527	2,150	2,377	8.3	8.4	8.2
40 to 44 years	4,433	2,105	2,328	8.1	8.3	8.0
45 to 49 years	3,842	1,859	1,983	7.1	7.3	6.8
50 to 54 years	3,507	1,664	1,843	6.4	6.5	6.4
55 to 59 years	2,597	1,221	1,376	4.8	4.8	4.8
60 to 64 years	2,166	959	1,207	4.0	3.8	4.2
65 to 69 years	2,050	886	1,164	3.8	3.5	4.0
70 to 74 years	2,135	899	1,236	3.9	3.5	4.3
75 to 79 years	2,245	845	1,400	4.1	3.3	4.8
80 to 84 years	1,606	566	1,040	3.0	2.2	3.6
85 to 89 years	917	293	624	1.7	1.2	2.2
90 years and over	474	114	360	0.9	0.4	1.2

U.S. Census Bureau

AMERICAN FactFinder

QT-P1

Age Groups and Sex: 2010

2010 Census Summary File 1

NOTE: For information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/sf1.pdf.

Geography: Union township, Union County, New Jersey

Age	Number			Percent		
	Both sexes	Male	Female	Both sexes	Male	Female
Total population	56,642	26,786	29,856	100.0	100.0	100.0
Under 5 years	3,082	1,575	1,507	5.4	5.9	5.0
5 to 9 years	3,124	1,629	1,495	5.5	6.1	5.0
10 to 14 years	3,421	1,753	1,668	6.0	6.5	5.6
15 to 19 years	4,347	2,200	2,147	7.7	8.2	7.2
20 to 24 years	4,026	2,070	1,956	7.1	7.7	6.6
25 to 29 years	3,313	1,645	1,668	5.8	6.1	5.6
30 to 34 years	3,608	1,680	1,928	6.4	6.3	6.5
35 to 39 years	3,691	1,707	1,984	6.5	6.4	6.6
40 to 44 years	4,088	1,902	2,186	7.2	7.1	7.3
45 to 49 years	4,499	2,159	2,340	7.9	8.1	7.8
50 to 54 years	4,644	2,219	2,425	8.2	8.3	8.1
55 to 59 years	3,794	1,776	2,018	6.7	6.6	6.8
60 to 64 years	3,053	1,420	1,633	5.4	5.3	5.5
65 to 69 years	2,094	940	1,154	3.7	3.5	3.9
70 to 74 years	1,642	664	978	2.9	2.5	3.3
75 to 79 years	1,442	554	888	2.5	2.1	3.0
80 to 84 years	1,313	473	840	2.3	1.8	2.8
85 to 89 years	947	288	659	1.7	1.1	2.2
90 years and over	514	132	382	0.9	0.5	1.3

01/31/2012