## Unit 9, Topic 2: Human Population Activity

Estimated Human Population Size

| Year | Population in Millions |
| :---: | :---: |
| 1 | 170 |
| 200 | 190 |
| 400 | 190 |
| 600 | 200 |
| 800 | 220 |
| 1000 | 265 |
| 1200 | 360 |
| 1400 | 350 |
| 1600 | 545 |
| 1800 | 900 |
| 1850 | 1210 |
| 1900 | 1625 |
| 1950 | 2556 |
| 2000 | 6060 |
| 2007 | 6625 |
| $2025^{*}$ | 7965 |

1. In the space at the bottom of this page graph the Human Population (in millions) over Time (Year).
2. Add a dashed line of your projection for the size of the human population through the year 2100.
3. What reasons do you have for your projection?

* Projected by the Population Reference Bureau



## Human Population Growth: Power of the Pyramids

1. The table below represents the population in thousands of each age group within each gender for the United States in 2007. In order to construct a population pyramid you must first calculate the percentage of the population in each subgroup. For example, the United States's total population in 2007 was $301,140,000$. The population of males up to age four was 10,635,000.

$$
\frac{10,635,000}{301,140,000}=0.035 \text { or } 3.5 \%
$$

2. Complete these calculations for each age group in the table below.

| Age Group | Male Population | Male Population \% | Female Population | Female Population \% |
| :---: | :---: | :---: | :---: | :---: |
| 0-4 | 10,635,000 |  | 10,181,000 |  |
| 5-9 | 10,156,000 |  | 9,718,000 |  |
| 10-14 | 10,360,000 |  | 9,880,000 |  |
| 15-19 | 11,115,000 |  | 10,551,000 |  |
| 20-24 | 10,794,000 |  | 10,241,000 |  |
| 25-29 | 10,570,000 |  | 10,242,000 |  |
| 30-34 | 9,786,000 |  | 9,596,000 |  |
| 35-39 | 10,558,000 |  | 10,491,000 |  |
| 40-44 | 10,878,000 |  | 11,003,000 |  |
| 45-49 | 11,280,000 |  | 11,567,000 |  |
| 50-54 | 10,272,000 |  | 10,721,000 |  |
| 55-59 | 8,855,000 |  | 9,424,000 |  |
| 60-64 | 6,889,000 |  | 7,531,000 |  |
| 65-69 | 5,027,000 |  | 5,758,000 |  |
| 70-74 | 3,857,000 |  | 4,727,000 |  |
| 75-79 | 3,084,000 |  | 4,208,000 |  |
| 80+ | 3,891,000 |  | 7,298,000 |  |

3. Using the space at the bottom of this page, construct a population pyramid for the United States using the data in the table you constructed. An example of a population pyramid is provided below. The figures along the $X$-axis represent the calculated percentages of the population, while points along the Y -axis represent age groups. A line drawn down the middle of the graph separates the male and female populations. You should use a different color for each side of the graph.


Using the U.S. population pyramid you constructed answer the following questions.
4. Is there a relatively large or a relatively small gender difference in the youngest age groups? Why is this the case?
5. Is there a relatively large or a relatively small gender difference in the oldest age groups? Why is this the case?
6. What is the cause of the bulge in the middle of the pyramid?

