Name: _____ Date: _____

2017 Census Data: Working for a Living 3

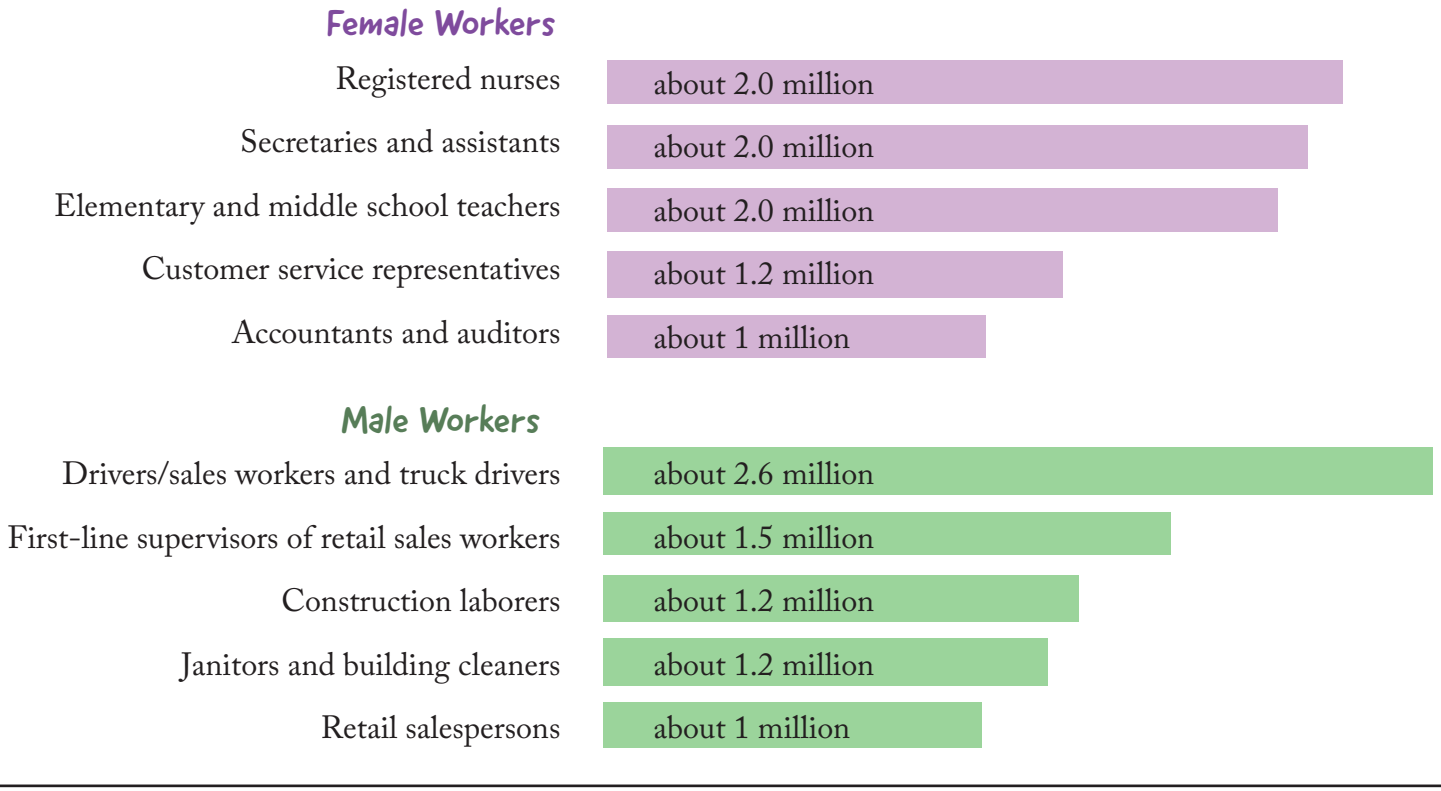
Answer Key

A census is a count of the number of people in a country, city, or town. The United States Census Bureau is responsible for collecting data on American citizens and the economy. The Census Bureau conducts a census every ten years and annual surveys in between the census.

Directions: Consider the data in the graph. Then answer questions about the data.

Working for a Living

Selected jobs with more than one million full-time, year round workers



1. What does the graph represent? Sample Answers

The graph shows how many people work in specific jobs full-time in the United States. The graph separates the data into two groups: males and females. The graph also ordered the number of jobs from greatest to least in both the male and female section. The number of jobs in the millions are written in decimals to the tenths place.

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2. Describe the numbers in the graph using vocabulary about place value.

I can tell each of the numbers are rounded because of the word "about" before the number. For example, 2.6 million represents 2,600,000. It seems unlikely that the total number of jobs would have zeros all the way to the hundred thousands place. The word "millions" shows me the value of the number 2.6 is really in the millions place.

Fifth graders might add that the person who created the graph moved the decimal to the left 6 times and wrote the value of the number 2 in 2.6 to show the true value of the number (i.e., millions). Alternatively, the person who created the graph could have divided 2,600,000 using their understanding of the powers of 10 (e.g., $2{,}600{,}000 \div 10^6 = 2.6$ millions).

Hint: Write 2.6 million onto a whole number place value chart where the 2 is at the millions place the 6 is in the hundred thousands place. Then add zeros all the way to the ones place to get the standard notation of the number (i.e., 2,600,000).

3. Consider the two job categories "construction laborers" and "janitors and building cleaners." Why would the horizontal bars in the graph show there are more construction workers than janitors and building cleaners when they have the same value of about 1.2 million?

Since the numbers were rounded to the nearest hundred thousand, there may be some workers that are not represented if the number was rounded down. Rounding these job totals changed the number of the workers in the job by either increasing or decreasing the total. That means that the numbers are no longer precise and some of the values represent more than the actual amount of workers in that occupation, or some occupations are underrepresented. I can conclude there are more construction workers than janitors and building cleaners given the length of the horizontal bars.

4. Add up the total number of jobs for both females and males. Which group has more full-time workers?

Female total: 2.0 + 2.0 + 2.0 + 1.2 +1.0 = 8.2 million female workers

Male total: 2.6 + 1.5 + 1.2 + 1.2 + 1.0 = 7.5 million male workers

The female group has more full-time workers represented in this graph.

5. What is the total number of workers represented in this graph?

8.2 million female workers + 7.5 million male workers = 15.7 million workers