Bar graphs are a handy way to illustrate numbers. For example, if we were to graph the number of males and females in Canada for various age groups according to the 1961 Census, the result would be the illustrations below.

Males

Females
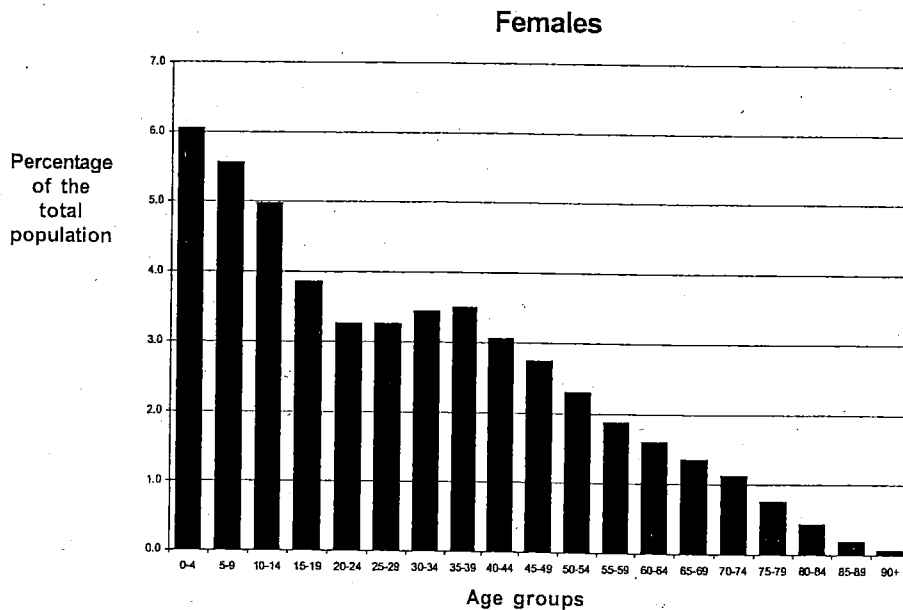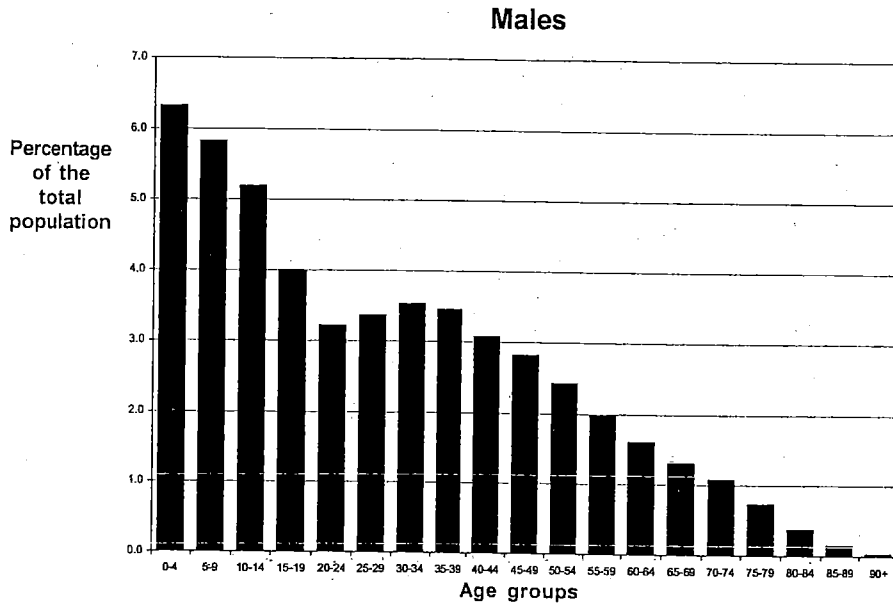
If we were to display these graphs horizontally, make a mirror image of the one for women, and then join them together, we would have a **population pyramid**—exactly as you see on the next page.

Population Pyramid, 1961

Males

Age Groups

Females

Age	Percentage
90+	
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	

7.0 6.0 5.0 4.0 3.0 2.0 1.0 0 0 1.0 2.0 3.0 4.0 5.0 6.0 7.0

Percentage of the total population
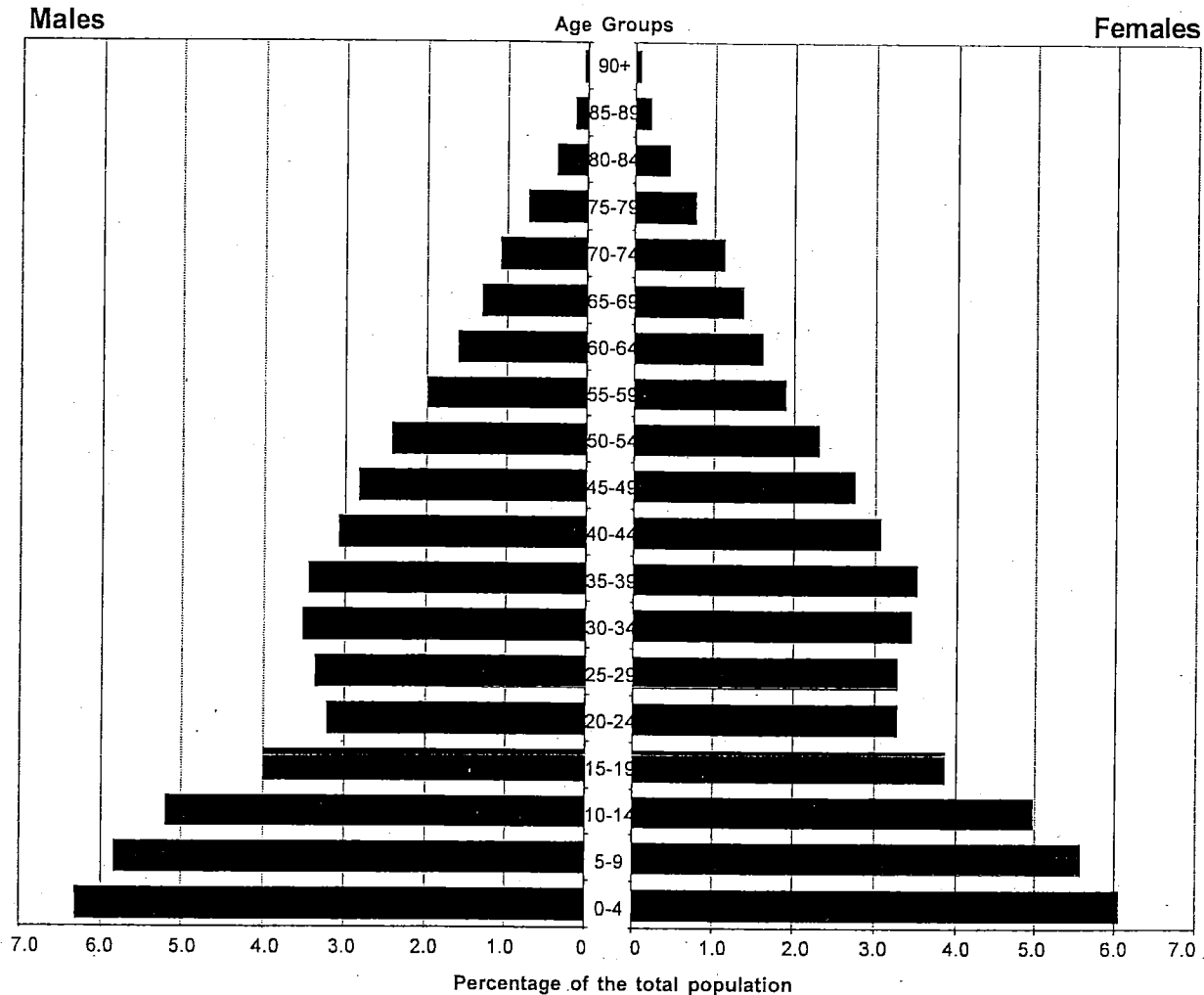
This population pyramid shows at a glance the distribution of the Canadian population in 1961.

You can see that the pyramid narrows toward the top. This is because the death rate is higher among older people than among younger people.

There are also a few bulges and narrower parts in the middle part of the pyramid. For example, there are not as many people in their 20s as in their 30s in Canada in 1961. The people in their 20s in 1961 were born during the Great Depression, a time of economic hardship in Canada when people were having fewer children.

In 1961 the pyramid had a wide base. In fact, when we add the percentages for the three lowest age groups, we find that 35% of the population was under 15. These are "baby boomers," the large group of people born between 1947 and 1966 when the economy was growing and prospering.
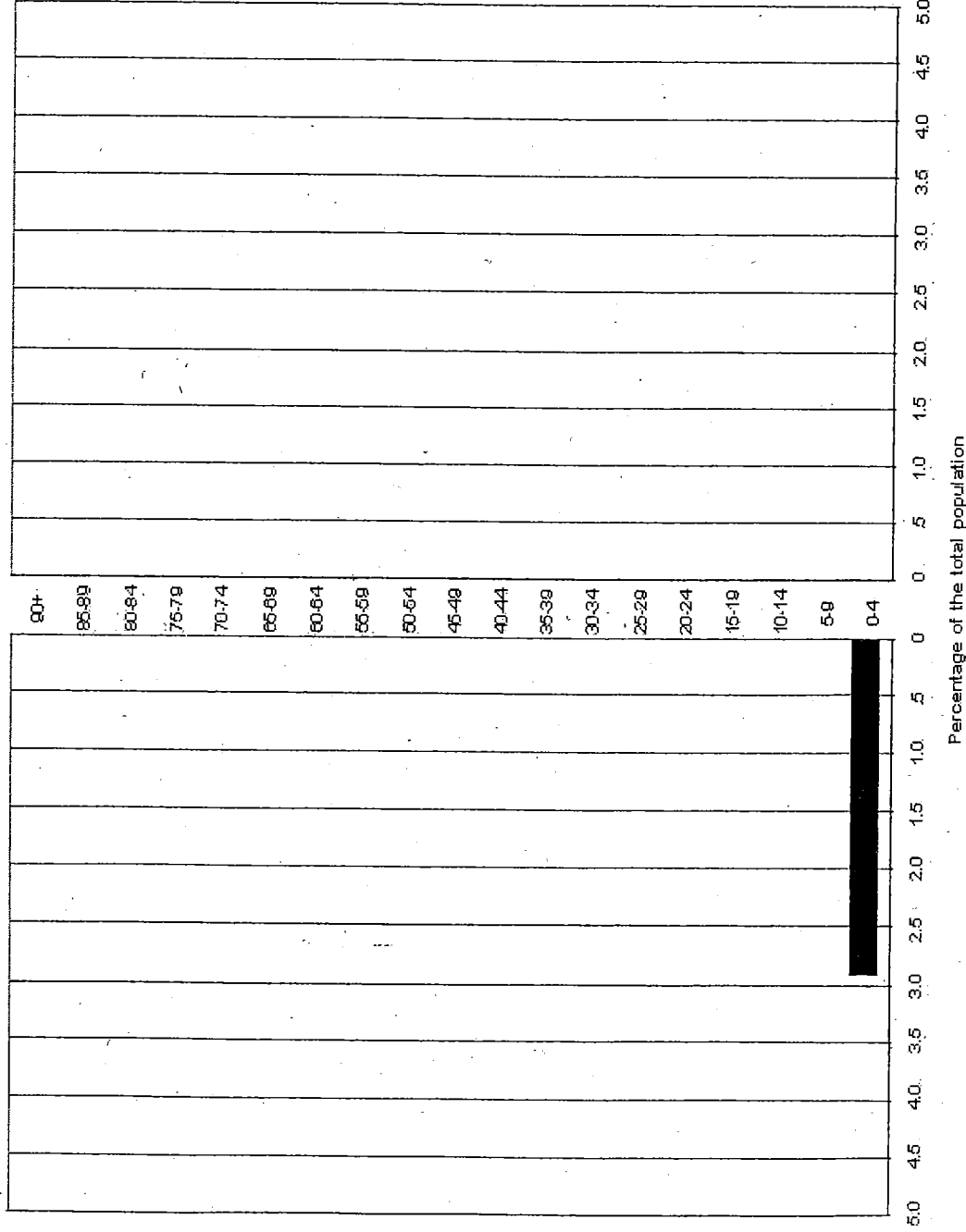
By analyzing population pyramids and identifying trends, we can learn a lot about our society. These statistics give governments and others one of the tools they need to make informed decisions that will affect our lives today and in the future.

Handout 2: 2001 Population Pyramid

Now let's turn to the 2001 Census. Below are the data from the 2001 Census of Population giving the population by five-year age groups and sex. Using these data, complete the 2001 population pyramid below.

Canada's population by age group and sex, 2001 Census of Population *		
Age group	% men	% women
0-4	2.9	2.8
5-9	3.4	3.2
10-14	3.5	3.3
15-19	3.5	3.3
20-24	3.3	3.2
25-29	3.1	3.2
30-34	3.4	3.6
35-39	4.1	4.3
40-44	4.2	4.4
45-49	3.8	3.9
50-54	3.4	3.5
55-59	2.6	2.7
60-64	2.1	2.2
65-69	1.8	2.0
70-74	1.5	1.8
75-79	1.1	1.6
80-84	0.6	1.1
85-89	0.3	0.6
90+	0.1	0.3

* Percentages have been rounded to the nearest tenth of a decimal point and do not necessarily add up to 100.

2001 Population Pyramid

Males   Females

Use the structure below to create your pyramid. To get you started, the 0-4 category for males has already been drawn in. Highlight the bar that represents your age group and sex by shading it in a particular colour. Use different colours to shade in other bars.

1.   Write the details of your age group and sex within the Canadian population.

        Age group _____   Sex _____   Percentage _____

2.   What single age group and sex represents the largest percentage of Canada's population?

        Age group _____   Sex _____   Percentage _____

3.   Circle the 10-year age group that contains the largest percentage of the population.

        0-9   10-19   20-29   30-39   40-49

4.   What percentage of Canada's population is male and what percentage is female? (Add the percentages for each sex.)

        Males_____   Females_____

5.   Write in the percentage for males and females age 65 and over.

        Males_____   Females_____

      Comments _____

      _____

6.   Explain why the 2001 population pyramid has a narrower base than that of the 1961 pyramid.

      _____

      _____

7.   a) Populations are frequently divided into two categories: people who are of working-age (15-64) and people who are not of working age (under 15; 65 and over). Using the data on page 4, give the percentage for each category in 2001:

      Working age _____
      Not of working age _____

      b) List ways the working-age population contributes to Canada's economic growth.

      _____

      _____

      c) Do you think the proportion of the population who are not of working age will change in the future? If so, which part (under 15, or 65 and over)? Explain.

      _____

      _____