**WEEK 33 – Population Pyramids**

**Unit:** Linear Relations

**Grade:** Intermediate (9)

**Curriculum Expectations**  
**MPM 1D/MFM 1P:** describe trends and relationships observed in data, make inferences from data, compare the inferences with hypotheses about the data, and explain any differences between the inferences and the hypotheses  
**CGC 1D:** analyse the major demographic characteristics of the Canadian population

**Activity  
1)** For this activity, you will be creating population pyramids and interpreting demographic shifts in Canada **2)** Population pyramids are bar graphs, flipped on their side which represent the population of males and females living in a country and sorts them by their age. You will find an example below  
**3)** You will start with the table below representing Canada’s population from 1950 and 2017. Your task is to create a population pyramid for each set of data. You will need to label your graph, and include age on the y-axis and population on the x-axis.  
**4)** You then use the questions below as the basis for engaging with an analysis of Canada’s demographic trends and what this might mean  
**5)** If you have internet access, you are then encouraged to seek out data for future projections of Canada demographics (example in year 2060 to

**Check for Understanding**   
I can create population pyramids given a data set  
I can analyze population pyramids and what they mean for a country’s demographics  
I can compare population pyramids for changes to demographics

**Materials**   
Recording sheet (attached below), pencil or pen, information sheet below or internet access, ruler

Chart, bar chart

Description automatically generatedExample Population pyramid:

|  |  |  |
| --- | --- | --- |
| **Canada Demographics 1950** | | |
| *Age* | *Male* | *Female* |
| 0-4 | 850,000 | 800,000 |
| 5-9 | 700,000 | 620,000 |
| 10-14 | 600,000 | 520,000 |
| 15-19 | 580,000 | 500,000 |
| 20-24 | 600,000 | 520,000 |
| 25-29 | 595,000 | 525,000 |
| 30-34 | 550,000 | 500,000 |
| 35-39 | 500,000 | 490,000 |
| 40-44 | 475,000 | 420,000 |
| 45-49 | 425,000 | 400,000 |
| 50-54 | 400,000 | 320,000 |
| 55-59 | 360,000 | 295,000 |
| 60-64 | 300,000 | 290,000 |
| 65-69 | 230,000 | 220,000 |
| 70-74 | 200,000 | 200,000 |
| 75-79 | 110,000 | 100,000 |
| 80+ | 80,000 | 90,000 |

|  |  |  |
| --- | --- | --- |
| **Canada Demographics 2018** | | |
| *Age* | *Male* | *Female* |
| 0-4 | 1,000,000 | 900,000 |
| 5-9 | 1,000,000 | 900,000 |
| 10-14 | 1,050,000 | 950,000 |
| 15-19 | 1,100,000 | 1,000,000 |
| 20-24 | 1,200,000 | 1,100,000 |
| 25-29 | 1,300,000 | 1,200,000 |
| 30-34 | 1,250,000 | 1,150,000 |
| 35-39 | 1,230,000 | 1,100,000 |
| 40-44 | 1,200,000 | 1,000,000 |
| 45-49 | 1,200,000 | 1,100,000 |
| 50-54 | 1,300,000 | 1,200,000 |
| 55-59 | 1,500,000 | 1,400,000 |
| 60-64 | 1,280,000 | 1,180,000 |
| 65-69 | 1,100,000 | 1,000,000 |
| 70-74 | 900,000 | 900,000 |
| 75-79 | 600,000 | 700,000 |
| 80+ | 900,000 | 1,200,000 |

Consolidation questions:

What age group is the largest in males in 1950 and 2018? What age group is the largest in females in 1950 and 2018?

What do the two population pyramids tell you about the average age of Canada’s population?

Do you think that this change in age is a positive or negative for Canada? Why?

Describe how the male and female graphs for both years are different?

What do you notice about the gender gap in both pyramids as the population ages? What does this tell you?