

# Math Unit — Graphing

**Objectives:** Students will collect data to design and interpret various graphs from the data collected.

**Time Allocated:** This unit is designed to run for 3 weeks.

**IXL Math Support:** Section N entitled *Data and Graphs* provides extra support for work in this unit.

## **PLOs for the Report Card**

- produces graphs and charts of various types and of a type most appropriate to the data
- determines the measures of central tendency (mean, median, mode) and range

**Evaluation:** Evaluation will be based upon three components. The use of a calculator will be permitted.

1. Students will complete and submit a package of graphs for evaluation. Evaluation will be based upon completeness, design and accuracy.
2. A final exam with questions based upon the graph data collected.
3. Scores from section N in IXL Math will be incorporated.

## **Skills to be examined**

1. Data collection techniques.
2. Graph construction techniques including:
  - choosing the correct graph for data type
  - proper use of title and labels
  - proper use of scale
  - the use of colour
  - graphs will include the following types:
    - horizontal bar graphs
    - vertical bar graphs
    - pictographs
    - broken line graphs
    - double broken line graphs
    - circle graphs (pie charts)
3. Statistical interpretation of the graph data. Students will interpret their own graphs using various skills examined already this year as well as new statistical skills taught in this unit. The skills examined will be included, but are not limited to:
  - computation (+, -, x, ÷)
  - fractions, decimals and ratios — including lowest terms
  - integers
  - mean (average), median, mode, range, and extremes
  - identification of graph features