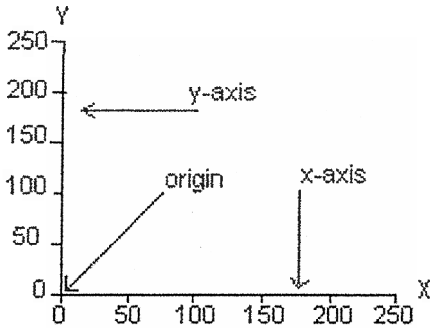# A Summary of the Types of Graphs for Grade Eight Students

Compiled by Mr. A. Caruso
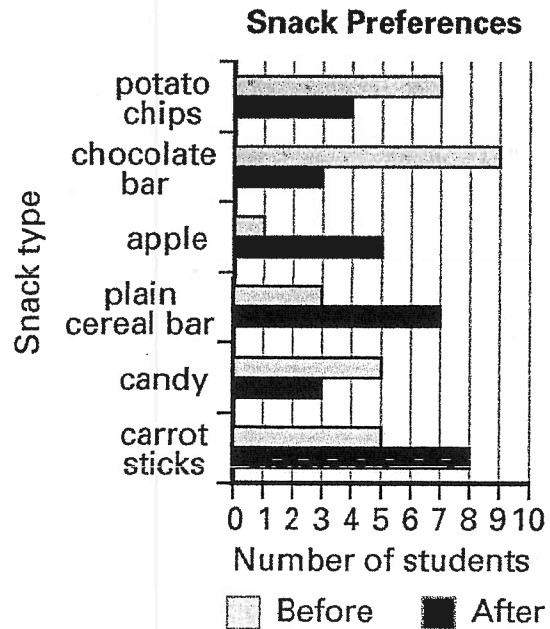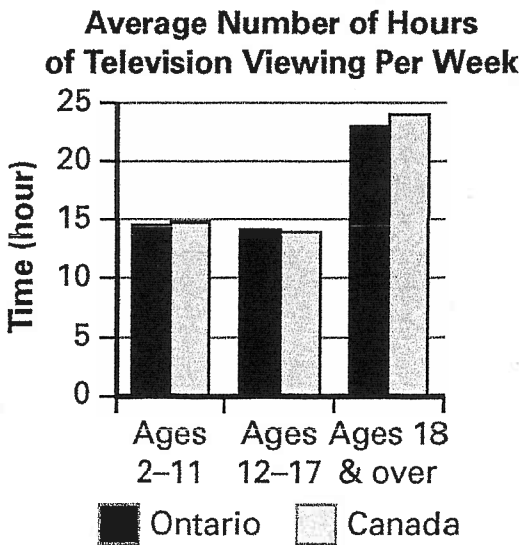
A graph is a _____ representation of a relationship between ____ variables. A graph usually has two _____ called the ___-axis (horizontal) and ___-axis (vertical). The axes are labeled with different names, for example 'Price' and 'Quantity'. The place where the two axes intersect is called the _____. The origin is also identified as the point (___ , ___).

Bar Graph

Bar graphs are used to _____ two or more _____ things. These comparisons are made with some _____.
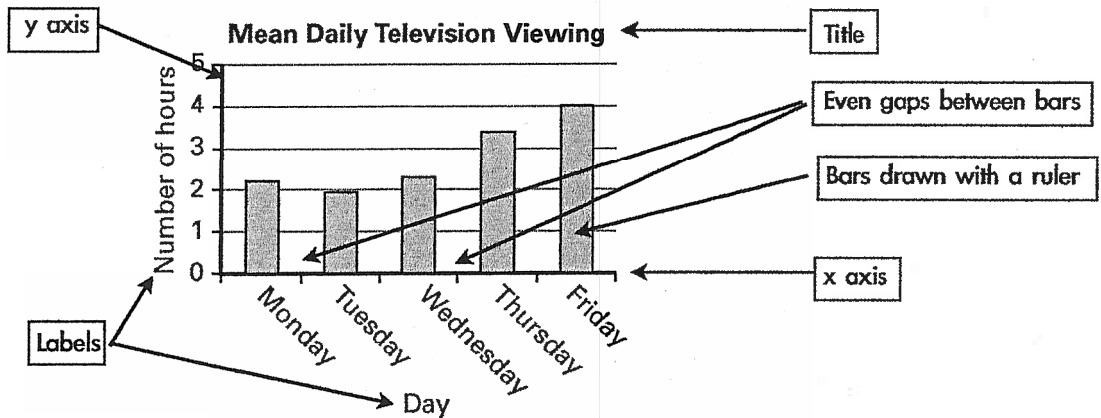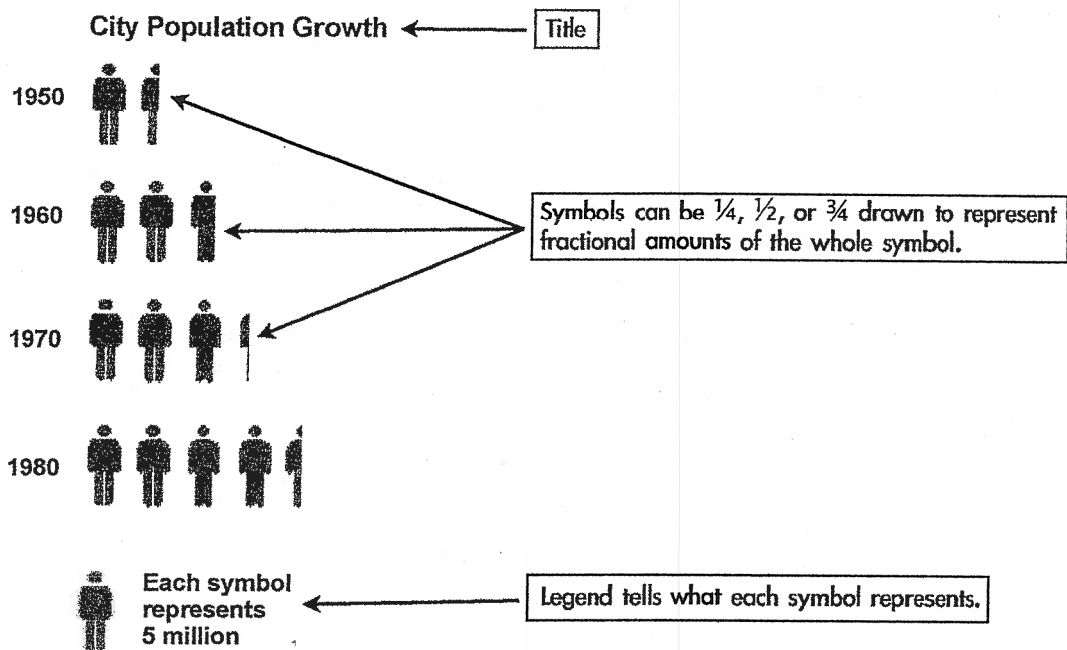

Comparative bar graphs (also known as _____ bar graphs) are used when comparing two or more things with two sets of _____. These graphs would require a _____ to distinguish the different sets of data.

Average Number of Hours of Television Viewing Per Week

■ Ontario   ▢ Canada

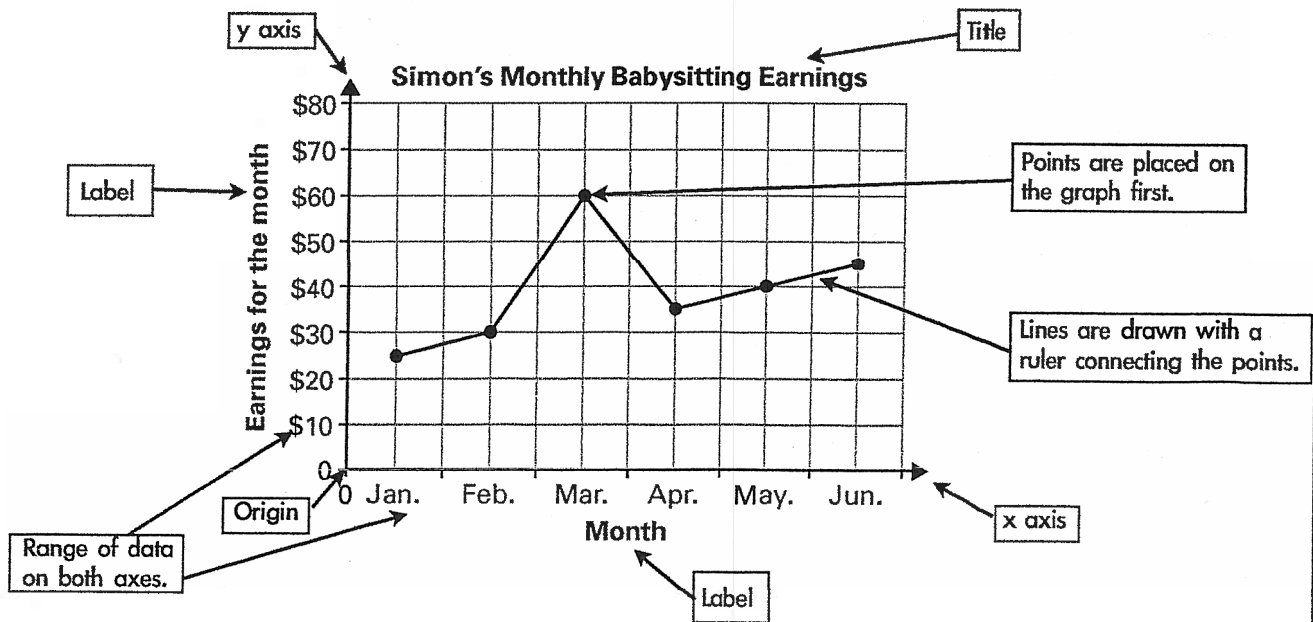**Snack Preferences**

▢ Before   ■ After

Pictograph

Pictographs are used to _____ two or more similar things using _____ or symbols. They are similar to bar graphs however the comparisons have less _____ but have more _____ effect.

City Population Growth ← [Title]

1950

1960

1970

1980

Symbols can be ¼, ½, or ¾ drawn to represent fractional amounts of the whole symbol.

Each symbol represents 5 million ← Legend tells what each symbol represents.

Broken Line Graph

A broken line graph shows how _____ thing can _____ over time. A broken line graph has a range of data on _____ axes.

[y axis]

[Title]

Simon's Monthly Babysitting Earnings

$80
$70
$60
$50
$40
$30
$20
$10
0

Earnings for the month

[Label]

Points are placed on the graph first.

Lines are drawn with a ruler connecting the points.

0 Jan. Feb. Mar. Apr. May. Jun.

[Origin]

Range of data on both axes.

Month

[Label]

[x axis]

Histogram

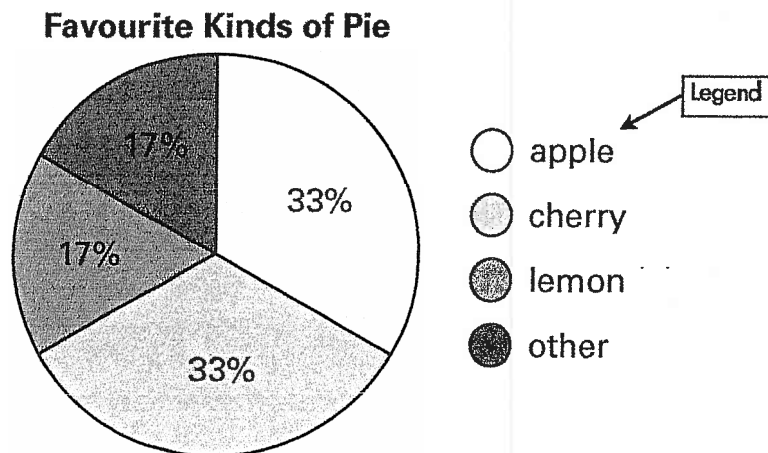A histogram shows _____ data and a _____ of data on both axes. It is a graph with bars that shows frequencies of data organized into _____. The intervals line up side by side, with no gaps, on the number line. It is similar to a bar graph because it uses _____. It is also similar to a broken line graph because it has a _____ of data on both axes.

Heights of Shoppers

Number of shoppers

Height (cm)

160–165 165–170 170–175 175–180 180–185 185–190

There are no gaps between the bars.

The data is organized into intervals.

Range of data on both axes.
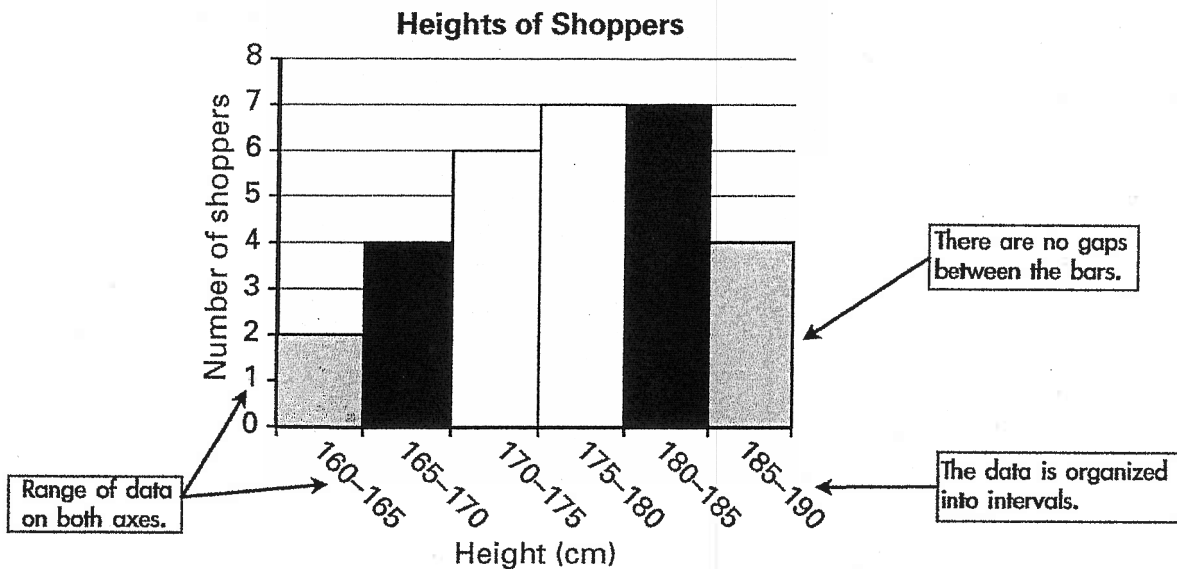
Circle Graph

A circle graph (also known as a ___ graph) shows how one thing is _____. It shows the _____ of the whole. A circle graph usually converts its data into _____. The entire circle represents ____%. There is usually a _____ explaining the different parts of the circle. Sometimes the labels are located _____ the circle graph.

Favourite Kinds of Pie

17%

17%

33%

33%

Legend

○ apple
○ cherry
○ lemon
● other

Compiled by Mr. A. Caruso

Scatter Plot

A scatter plot (also known as a scatter _____) is a graph of plotted points that show the _____ (or _____ of relationship) between two sets of data. The points are ____ connected. Once the points have been plotted, an examination of how the points _____ on the graph will determine if there is a relationship between the two sets of data.

Precipitation in January vs. Precipitation in April

Two sets of data