Master 5.18   **Extra Practice 1**
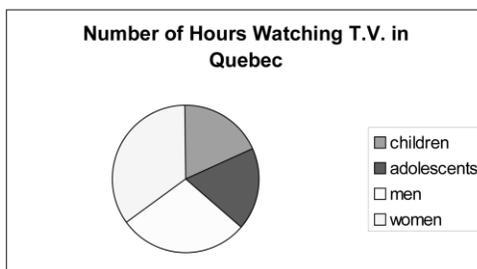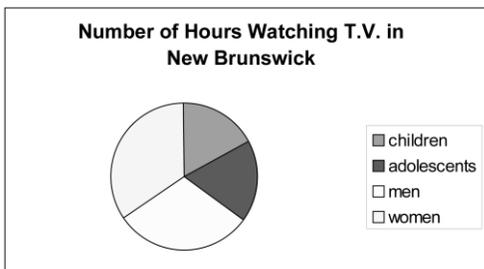

Lesson 1: Interpreting Data

1. These graphs show the average number of hours per week people watch television in New Brunswick and Quebec.

Number of Hours Watching T.V. in New Brunswick	Number of Hours Watching T.V. in Quebec
☐ children ■ adolescents ☐ men ☐ women	☐ children ■ adolescents ☐ men ☐ women

    a) Who watches the most television in New Brunswick?
    b) Who watches the least television in Quebec?
    c) What similarities do you see in both graphs?
    d) About what fraction of television viewers in Quebec are men?

2. This graph shows the bottom 10 LA Dodgers Players' Salaries.
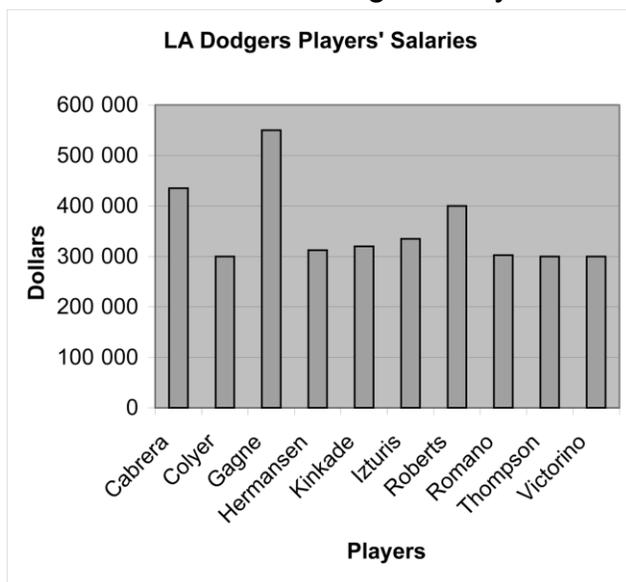
    a) Whose salary is the lowest?
    b) Which players make between $300 000 and $400 000?
    c) Mota's salary is $675 000. How would you add Mota to the graph? Explain using numbers, pictures, or words.

Lesson 2: Mean and Mode

1. Calculate the mean for the data sets below. Round to the nearest whole number.
   a) 2, 4, 7, 4, 8, 9, 12
   b) 24, 34, 44, 31
   c) 1, 2, 3, 4, 5, 6, 7, 8, 9
   d) 4, 8, 12, 16, 20, 24

2. Find the mode for the data below.
   a) 3, 4, 5, 2, 3, 2, 4, 5, 6, 3, 2, 3
   b) 45, 32, 56, 45, 65, 74, 32, 45, 73
   c) 143, 534, 486, 534, 573, 143
   d) 70, 73, 74, 72, 71, 76, 75, 77

3. This table shows the statistics for 7 players on the Bobville Baseball Buzzards.

Name	Games Played	Hits	Strikeouts
Green	104	129	90
Brown	107	129	60
White	89	71	62
Black	39	17	7
Rose	23	17	11
Silver	22	11	10
Gold	17	17	10

   a) Round to the nearest whole number.
      Calculate the mean for each of the following:
      • Games Played
      • Hits
      • Strikeouts
   b) Find the mode for each of the following:
      • Games Played
      • Hits
      • Strikeouts
   c) Who do you think is the best player by looking at the statistics? Explain.

Extra Practice 3

Lesson 3: Drawing Bar Graphs

1. The *wattage* of an appliance is how much power it uses in a second.
   Here are the wattages of some home appliances.

Appliance	Wattage
Electric barbecue	1500
Oven	3500
Hair dryer	1000
Hot plate	1250
Iron	1000
Bathtub spa	750

   a) Draw a bar graph for the data.
   b) Which appliance uses the most electricity?
      How does your graph show this?
   c) Which appliance uses half the electricity that an electric barbecue uses?
      How does your graph show this?

2. A Grade 5 class was given 15 multiplication questions. Here are the times, in
   seconds; it took each student to finish the 15 questions.

30	25	36	37	28	30	31	31	45	50
40	36	38	41	33	38	43	42	41	30
28	35	39	35	35					

   a) Round to the nearest whole number.
      Calculate the mean and the mode of the data.
   b) Arrange the data into intervals. Create a table to display the data.
   c) Draw a suitable graph to display the data.
   d) Write two things you can learn from the graph.

Extra Practice 4

Lesson 4: Line Graphs

1. This table shows the number of Canadians that booked trips with Toby's
    Travel to the Yukon, Northwest Territories, and Nunavut.

Year	Number of Canadians
1998	183
1999	88
2000	141
2001	68
2002	113

    a) Draw a line graph to display these data.
    b) What is happening to the number of Canadians who take these trips with
       Toby's Travel each year?
    c) Which year had 28 more visitors than the year 2002?

2. Below is a record of how many ice cream cones were sold in a week
    at Ice Cream Haven.

Day	Number of Cones
Sunday	240
Monday	65
Tuesday	65
Wednesday	80
Thursday	100
Friday	155
Saturday	160

    a) Draw a line graph to display the data.
    b) When does Ice Cream Haven sell the most ice cream cones?
       Why do you think this is so? Explain.
    c) Write 2 things you can learn from your graph.

Extra Practice 5

Lesson 5: Interpreting Survey Results

1. This graph shows the results of a student survey.

Favourite Book Genres in Grade 5
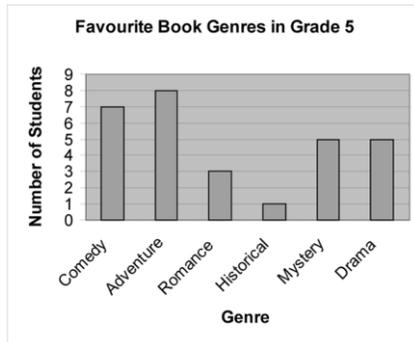
a) Write what the survey question might have been.
b) How many students do you think were surveyed? Explain.
c) Write down 2 things you can learn from this survey.

2. The Meaty Meat Grocery Store wanted to find out how many hamburger patties were sold in 2004. Here are the results:

Meaty Meat Grocery Store
2004 Hamburger Patty Sales

a) During which month do they sell the most hamburger patties?
b) Why do you think this?
c) What happens to hamburger sales from August to December?
d) About how many hamburger patties did Meaty Meat Grocery Store sell in 2004?

3. Sami does a survey on how many hours students spend playing team sports each week. He chooses a sample by asking every tenth person who walks through the door at a basketball game. Is this a good way to choose his sample? Explain.

Extra Practice 6

Lesson 6: Bias in Displaying Data

1. The Fun Toy Company displays their 3 top-selling toys on two different graphs.

Graph A   **Graph B**

   a) How are the two graphs alike? How are they different?
   **b)** Look at Graph A. Does there appear to be much difference between the numbers of each toy sold?
   **c)** Look at Graph B. Does there appear to be much difference between the numbers of each toy sold?
   d) In Graph B, the bar for the bubble-blowing ball is greater than the other two bars combined. Can you say that more bubble-blowing balls were sold than the other two toys together? Explain.
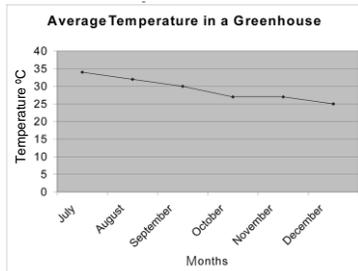   **e)** Suppose you were advertising the bubble-blowing ball. Which graph would you use? Explain.
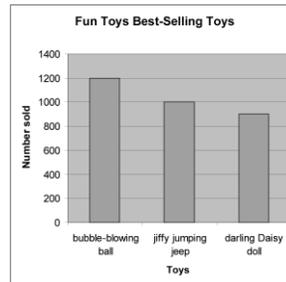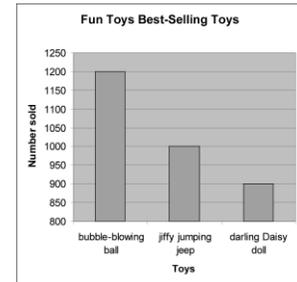
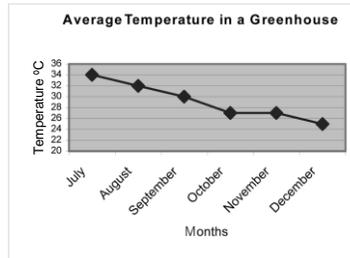**2.** These two graphs display average temperatures in a greenhouse.

   Graph A   **Graph B**

   a) Look at Graph A. What happens to the temperature from July to December?
   b) Do Graph A and Graph B show the same data? How do you know? Explain.
   c) Suppose you wanted to sell new greenhouses. Which graph would you show possible customers and what argument would you make so they would buy a new greenhouse?