Name _____ Date _____

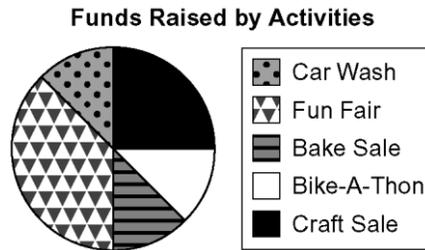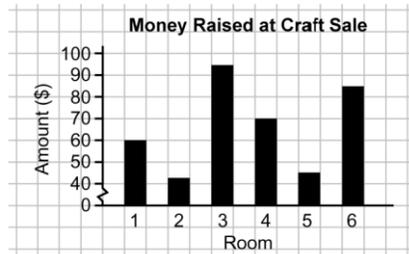**Extra Practice 1**

Lesson 1: Interpreting Data

Kayla's school raised funds for charity. She graphed some of the data.

1. Use the bar graph.
   a) Which two rooms together raised about the same amount as Room 6?
   b) Suppose all the classrooms that took part in the Craft Sale are shown on the graph. About how much money was raised in all at the Craft Sale? Show your work.

2. Use the circle graph.
   a) Which fundraiser raised the most money? Explain how you know.
   b) Which fundraisers raised about the same amount of money?
   c) Use your answer to question 1b to estimate the amount raised:
      • by the Bike-A-Thon
      • by all the fundraising activities together

Lesson 2: Finding the Median

1. Each day, Tyler empties the change from his pocket into a jar.
   Here are the amounts he put in the jar each day for the last few days:
   24¢, 35¢, 90¢, 67¢, 13¢, 45¢, 60¢, 17¢, 90¢
   a) Find the median, the mean, and the mode amounts of change.
   b) Which average do you think best represents the typical amount of change? Why?

2. The mean of the numbers in this set is 5.
   5, 5, 5, 5, 5, 5
   Write a different set of 6 numbers that also has mean 5.
   How did you choose the numbers?

Master 5.21   **Extra Practice 2**

Lesson 4: Constructing and Interpreting Graphs

1. Jackie and Vidhu recorded the average monthly temperatures in their towns for 8 months.

	May	**June**	**July**	**Aug.**	**Sept.**	**Oct.**	**Nov.**	**Dec.**
Jackie's town	13°C	18°C	23°C	20°C	15°C	9°C	2°C	0°C
Vidhu's town	18°C	21°C	23°C	23°C	18°C	14°C	9°C	5°C

    a) Display the data for each town on a line graph on the same grid. Use a different colour for each town.
    b) Is the average monthly temperature in Vidhu's town always higher than in Jackie's town? How can you tell this from the graph?
    c) Write a statement about what the graph shows for each town.
    d) Write two questions that can be answered using your graph.

Lesson 5: Graphing on a Coordinate Grid

1. a) Plot each point on a coordinate grid:
       A(1, 3); B(1, 7); C(4, 10); D(8, 10); E(11, 7); F(11, 3);
       G(8, 0); H(4, 0)
       Join the points in order. Then join H to A.
    b) What figure have you drawn?

2. On grid paper, draw a coordinate grid.
    a) Plot a point at P(5, 5).
       This is one vertex of square PQRS.
       Finish the drawing so that PQRS has area 9 square units.
    b) What are the coordinates of the other vertices?
    c) Find a different way to draw PQRS.
       Give the coordinates of the other vertices.
    d) What is the perimeter of PQRS?

Master 5.22 **Extra Practice 3**

Lesson 6: Scatter Plots

1. This table shows the heights and the
   arm lengths from elbow to fingertip for
   a group of students.
   a) Draw a scatter plot of the data.
   b) Can you tell from the scatter plot
      if the tallest student also has
      the longest elbow-to-fingertip
      measurement? Explain.
   c) Does there appear to be a
      relationship between height and
      the elbow-to-fingertip measurement?
      Explain.
   d) Suppose a person has an
      elbow-to-fingertip measurement
      of 45 cm. Predict the person's height.
      Explain your prediction.

Height (cm)	Arm length (cm)
152	38
147	36
117	29
164	43
157	38
155	39
147	37
146	35
138	34
172	43
127	32
117	30
112	28

Lesson 7: Conducting a Survey

1. The bar graph shows the results of a
   student survey:
   a) What might the survey question have been?
   b) Write two questions that can be answered
      using the graph.
      Give answers for your questions.
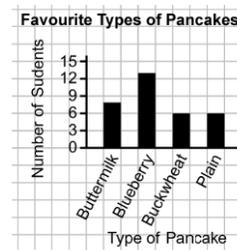
2. Each survey question (written in italics) can be improved.
   Write a better question for each.
   Explain why you think your question is better.
   a) To find out a person's favourite sport to watch on TV:
      Would you rather watch hockey on TV, or some other sport?
   b) To find out what kind of books a person prefers to read:
      Do you prefer to read fiction or non-fiction books?
   c) To find out what games a person enjoys playing:
      Would you rather play thrilling video games, or dull board games?