

Lesson 1: Reading Data in Tables

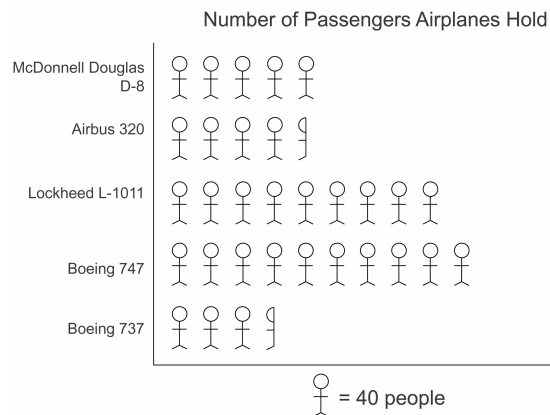
1. This table shows data about the 6 tallest towers in the world. The table only shows towers that people can visit.

Tower	Location	Height in Metres
Ostankino Tower	Moscow, Russia	537
Central Radio and TV Tower	Beijing, China	417
Menara Kuala Lumpur	Kuala Lumpur, Malaysia	421
Tianjin TV Tower	Tianjin, China	415
CN Tower	Toronto, Canada	553
Oriental Pearl Tower	Shanghai, China	468

- Which is the tallest tower in the world? Where is it?
- In which country are most of the tallest towers located?
- What other questions could you ask about this table?
- Which question could you not answer from this table?

Lesson 2: Reading Pictographs and Bar Graphs

1. This graph shows the number of passengers that some airplanes can hold.



- Which plane can hold the most passengers? The fewest passengers?
- Order the airplanes from the plane that can hold the most passengers to the plane that can hold the fewest passengers.
- Which airplanes can hold less than one-half the number of passengers that a Boeing 747 can hold?

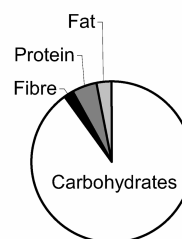
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Extra Practice 2

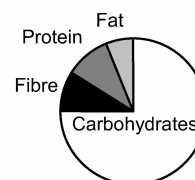
Lesson 3: Reading Circle Graphs

1. Here is a circle graph that gives the nutrients for two kinds of cereal.
 - a) Order the nutrients in Health Kick from least to greatest amount.
 - b) What fraction of Health Kick is carbohydrates?
 - c) Is Morning Cereal a good source of fibre? Explain.

Morning Cereal Nutrients per 100 g



Health Kick Nutrients per 100 g



Lesson 4: Drawing Pictographs

1. This chart shows the lengths of different types of whales.
 - a) Draw a pictograph to show these data.
 - b) What is the key of your pictograph? The title?
 - c) Which two whales have a combined length 1 m longer than that of a blue whale?
 - d) Write a question that could be answered by looking at this graph. Answer the question.

Type of whale	Length (m)
Killer	9
Sperm	18
Long-finned Pilot	7
Blue	26
Northern Right	17
Humpback	15
Bowhead	18
Fin	22

Name _____ Date _____

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Extra Practice 3

Lesson 5: Drawing Bar Graphs

1. This table shows the number of earthquakes per year, from 1994 to 1999, with a magnitude of 7.0 or greater.

- Draw a bar graph to show these data.
- What is the scale of your bar graph? The title?
- Write a question you could answer by looking at the graph. Answer the question.
- Write a question you could not answer by looking at the graph. Explain.

Year	Number of Earthquakes
1994	15
1995	25
1996	22
1997	20
1998	16
1999	23

Lesson 6: Conducting a Survey

1. Here are the results of an Internet survey about football.

Football Team	Number of People Who Think the Team Will Win the Grey Cup
B.C. Lions	10
Edmonton Eskimos	10
Calgary Stampeders	11
Saskatchewan Roughriders	8
Winnipeg Blue Bombers	8
Toronto Argonauts	17
Hamilton Tiger-Cats	10
Montreal Alouettes	23
Ottawa Renegades	3

- How many people were surveyed?
- What do you think was the survey question?
- How many possible answers were there? How many people were surveyed?
- According to this survey, which were the two most popular teams?

Name _____ Date _____

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Extra Practice 4

Lesson 2A: Finding the Mean

Name	Number of Books
Jonathan	15
Jodi	10
Carlos	12
Kelly	8
Natalie	14
Beatrix	13

1. This chart shows the number of books read in one month.
 - a) Find the mean number of books read.
 - b) Did Kelly read more than the mean? How do you know?
2. There are 4 pencil cases.

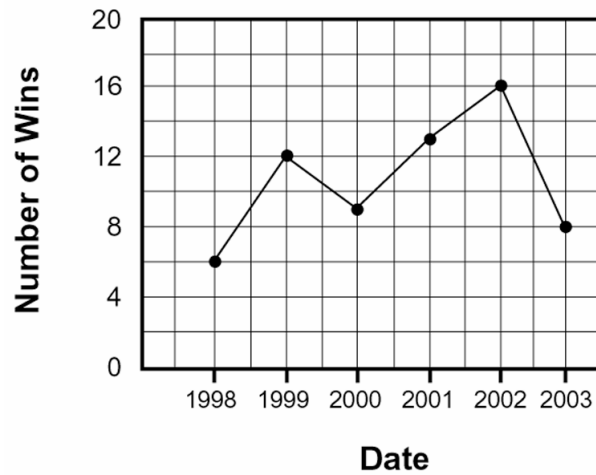
They have these pencils in them:
4, 8, 5, 3

Use counters to model the pencils.
Find the mean number of pencils in a pencil case.

Lesson 3A: Reading Line Graphs

1.

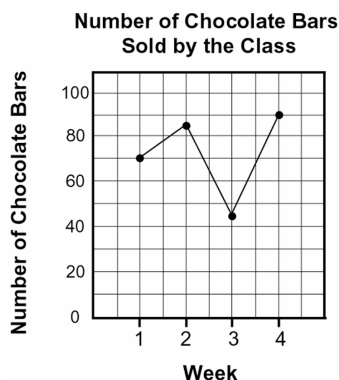
**Number of Wins by a School Soccer Team
in the Last 6 Years**



- What does this graph show?
- How many games did the team win in 2000?
- When did it win the most games? The fewest games?
- What is the range of the data?
- How many more games did the team win in 2002 than in 1999?

Extra Practice 5**Lesson 3B: Finding Information from Graphs**

1. A grade 4 class sold chocolate bars to raise money for charity.



- What does this graph show?
- How many chocolate bars did the class sell in Week 1?
- How many did it sell in Week 3?
- How many did it sell altogether?
- Each chocolate bar sold for \$2. How much money did the class collect?

Lesson 5A: Making Stem-and-Leaf Plots

1. Here is a list of prices of children's computer games, in dollars.
45, 23, 35, 38, 35, 27, 19, 22, 42, 25, 29, 25, 39, 25, 31
- Draw a stem-and-leaf plot.
 - What is the range in prices?
 - Which is the cheapest price for a game?
 - What is the most common price? How do you know?
 - How many games cost between \$30 and \$40? How do you know?
2. Alyssa trains for a cross-country race. Here are the distances, in kilometres, she ran over a 10-day period.
5, 8, 3, 10, 12, 9, 20, 13, 7, 12
- Draw a stem-and-leaf plot.
 - What distance did Alyssa run most often?
 - How many days did she run more than 10 km?

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Sample Answers

Extra Practice 1 – Master 5.26

Lesson 1

1. a) The world's tallest tower is the CN Tower in Toronto.
- b) Most of the world's tallest towers are in China.
- c) How much higher is the tallest tower than the second-tallest tower? (*16 m*)
- d) This table only shows towers that people can visit. There might be taller towers that people cannot visit. What is the tallest tower in the world?

Lesson 2

1. a) The Boeing 747 can hold the most passengers, and the Boeing 737 can hold the fewest passengers.
- b) Boeing 747, Lockheed L1011, McDonnell Douglas D-8, Airbus 320, Boeing 737
- c) The Airbus 320

Extra Practice 2 – Master 5.27

Lesson 3

1. a) Fat, fibre, protein, carbohydrates
- b) Carbohydrates are about $\frac{3}{4}$ of Health Kick's nutrients. The part of the circle that shows carbohydrates is about $\frac{3}{4}$ of the circle.
- c) Morning Cereal is not a good source of fibre. The part of the circle that shows fibre is a very small fraction of the whole circle.

Lesson 4

1. a) Student answer should show a pictograph, labelled with the title, key, and axis.
- b) Students' graphs should include a title, such as, "Lengths of Whales in Metres." The key is most likely to be one symbol = 2 m. Other keys are possible.
- c) The lengths of a sperm whale and a killer whale add to 27 m. This is 1 m more than the length of a blue whale.
- d) Which type of whale is the longest? (Answer: Blue whale)

Extra Practice 3 – Master 5.28

Lesson 5

1. a) Student answer should show a bar graph with a title and labelled axes.
- b) A reasonable scale to choose would be one square = 2 earthquakes. Other scales are possible. The title could be, "Number of Earthquakes of Magnitude 7.0 or Greater."
- c) How many more earthquakes were there in 1999 than 1998? (7). What is the range of these data? ($25 - 15 = 10$)
- d) How many earthquakes of magnitude 5 were there in 1994? You cannot answer this question from the graph because the data only give information about earthquakes of magnitude greater than 7.0.

Lesson 6

1. a) 100 people
- b) The survey question could have been, "Which team will win the Grey Cup?"
- c) There are 9 possible answers.
- d) You cannot tell which teams are the most popular. You can say that the Toronto Argonauts and the Montreal Alouettes are the two teams that most people think will win the Grey Cup.

Name _____ Date _____

Extra Practice 4 – Master 5.29

Lesson 2A

1. a) 12
b) No; Kelly read 8 books, which is less than 12.
2. 5 pencils

Lesson 3A

1. a) The number of wins by a school soccer team in the last 6 years
b) 9
c) 2002, 1998
d) 10
e) 4

Extra Practice 5 – Master 5.30

Lesson 3B

1. a) The number of chocolate bars sold by the class
b) 70
c) 45
d) 290
e) \$580

Lesson 5A

a)

Stem	Leaf
1	9,
2	2, 3, 5, 5, 5, 7, 9,
3	1, 5, 5, 8, 9,
4	2, 5,

- b) \$26
- c) \$19
- d) \$25; it appears most often.
- e) 5

2. a)

Stem	Leaf
0	3, 5, 7, 8, 9
1	0, 2, 2, 3
2	0

- b) 12 km
- c) 4 days

