

Chapter Review

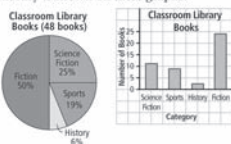
Key Words

For #1 to #5, choose the letter that best matches each description.

- best for comparing categories using percents
 - compares one set of data using horizontal or vertical bars
 - uses symbols to represent large quantities of data
 - shows changes in data over time
 - compares two sets of data across categories
- A bar graph
B double bar graph
C line graph
D interval
E circle graph
F pictograph

1.1 Advantages and Disadvantages of Different Graphs, pages 6–17

6. The number of books in a classroom library is shown on these graphs.



- Which graph helps you decide how many more sports books than history books there are? Explain. Could the other graph help you answer the question? Explain.
- Which graph would most help you decide how to spend \$1000 on new books based on what the class has? How much money should be spent on each category? Show your work.

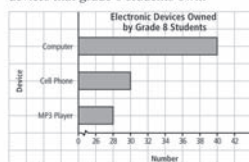
7. Michelle recorded data about how she spends time on a typical Saturday.

Activity	Time (h)
Chores	1.5
Eating	2
Homework	2.5
Sleep	9
Friends	3
Sports	4
TV	2
Total	24

- List as many different ways to display the data appropriately as you can.
 - Choose and draw one type of graph to show the data.
 - State an advantage of the graph that you chose. State a disadvantage of one type of graph that you did not choose.
8. Describe a situation in which you would use each of the following to display data:
- bar graph
 - double bar graph
 - circle graph
 - line graph

1.2 Misrepresenting Data, pages 18–27

9. The graph shows the number of electronic devices that grade 8 students own.



- The graph shows that there are more computers than MP3 players and cell phones added together. Is this true? Describe how the graph is misleading.

- Draw an accurate graph.
- What conclusions can you make from your new graph?



10. The results of a pizza taste test showed that Mega Pizza was the favourite.
- How is this graph misleading?
 - Draw a new graph to represent the data more accurately.

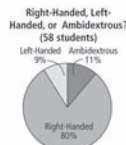
11. Greg's company makes 2500 school lockers each day. Some lockers are rejected if they do not meet standards. The table shows the number of rejected lockers.

Day	Number Rejected
Monday	45
Tuesday	40
Wednesday	25
Thursday	30
Friday	35
Total	175

- Greg wants to exaggerate the number of lockers rejected on Monday. Draw a graph to create this impression.
- Make a new graph to represent the data accurately.
- Explain how the two graphs are different.

1.3 Critiquing Data Presentation, pages 28–35

12. The graph represents data about which hand grade 8 students use to write.



- What conclusions can you make from this graph?
- Is the circle graph an appropriate way to present the data? Explain.

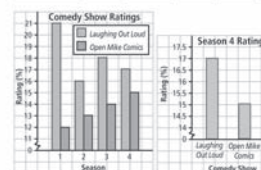
- What other way might you display the data? List an advantage of the graph you chose.

Literacy Link

Someone who is *ambidextrous* is able to use both hands equally well.

13. Two television comedy shows are competing for sponsorship from an advertiser. The ratings for four seasons are shown in the table. The ratings are a percent of the total viewing audience.

Show	% Ratings			
	Season 1	Season 2	Season 3	Season 4
Laughing Out Loud	21	16	18	17
Open Mike Comics	12	13	14	15



Graph A

Graph B

- What rating information does each graph provide?
- Suggest a catchy new title for each graph. Explain why you recommend each title.
- Which graph do you think was created by the producer of *Open Mike Comics*? Explain.
- Which graph do you think was created by the producer of *Laughing Out Loud*? Explain.

MathLinks 8, pages 36–37

Suggested Timing

40–50 minutes

Materials

- calculator (optional)
- grid paper
- ruler
- coloured pencils
- compass
- protractor
- computer with spreadsheet software (optional)

Blackline Masters

Master 8 Centimetre Grid Paper
Master 9 0.5 Centimetre Grid Paper
Master 12 Percent Circles
BLM 1–8 Section 1.1 Extra Practice
BLM 1–10 Section 1.2 Extra Practice
BLM 1–12 Section 1.3 Extra Practice

Planning Notes

Allow students to work on their own to complete the review. For #6b), students do calculations with percents. Explain how you expect them to show their work for this question and encourage using mental math strategies. Make copies of **Master 8 Centimetre Grid Paper**, **Master 9 0.5 Centimetre Grid Paper**, and **Master 12 Percent Circles** available for students to draw graphs for #7 and #9 to #11. If students encounter difficulties, provide an opportunity for them to discuss strategies with other students. Encourage them to refer to their chapter Foldable, learning logs, and previously completed questions in the related sections of the student resource.

Consider having students make a list of the questions that they found difficult and use the list to help them prepare for the practice test.

Literacy Link For #12, point out the Literacy Link on page 37 that explains the term *ambidextrous*.

Meeting Student Needs

- Allow students to complete the chapter review using a combination of oral descriptions, diagrams, and written answers.
- Encourage students to use their chapter Foldable and to add new notes if they wish.
- Some students may benefit from spreadsheet software to create their graphs.
- Students who require more practice on a particular topic may refer to **BLM 1–8 Section 1.1 Extra Practice**, **BLM 1–10 Section 1.2 Extra Practice**, and **BLM 1–12 Section 1.3 Extra Practice**.

ELL

- Encourage students to work with a partner and practise the Key Words using flash cards.

Gifted and Enrichment

- Some students may already be familiar with the skills handled in this review. To provide enrichment and extra challenge for gifted students, go to www.mathlinks8.ca and follow the links.

Common Errors

- Some students may work so quickly through the review that their graphs are inaccurate or incomplete.
- R_x** Encourage students to take time and check their graphs for accuracy and completeness.

Assessment	Supporting Learning
Assessment for Learning	
<p>Chapter 1 Review</p> <p>The Chapter 1 Review is an opportunity for students to assess themselves by completing selected questions in each section and checking their answers against the answers in the back of the student resource.</p>	<ul style="list-style-type: none"> • Consider allowing students to use spreadsheet software to create their graphs. • Have students check the contents of the What I Need to Work On section of their chapter Foldable and do at least one question related to each listed item. • Have students revisit any section that they are having difficulty with prior to working on the chapter test.