1.3 **Critiquing Data Presentation**

MathLinks 8, pages 28–35
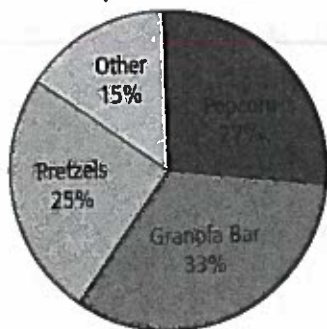
Teacher Key

Key Ideas Review

There are several important factors to consider when critiquing a graph. Write the factor from column B that best matches the analysis question in column A.

A	B
1. Consider the graph __*Type*__ when determining whether the graph is informative.	a) type
2. Consider the graph __*Format*__ when determining whether the graph is designed in a way that represents the data accurately.	b) format
3. Consider the graph __*Usefulness*__ when determining whether the graph is the best choice for the data.	c) usefulness

Practise and Apply

4. Milo is writing to ask the school board to change the snacks in the school vending machines. Before writing the letter, he completes a survey of the snack foods students prefer and displays the results in the graph below.
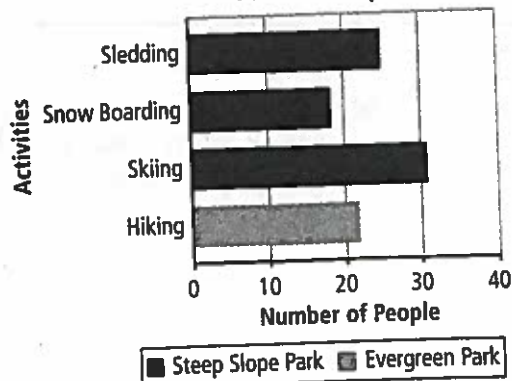
Popular Snacks

Other 15%
Popcorn 27%
Pretzels 25%
Granola Bar 33%

a) Why do you think Milo used a circle graph to display the data?

It shows the comparison of all the snacks and makes it easy to see which is more popular

b) Does this graph argue his point to change the snacks in the vending machine? *This graph does not show the other snacks so there cannot be a comparison so it does not argue his point.*

5. The following graph shows activities participated in at two different recreational parks.
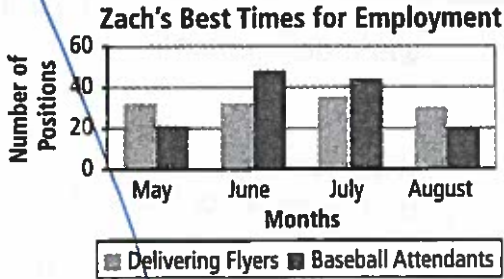
Park Participation

Activities: Sledding, Snow Boarding, Skiing, Hiking
Number of People: 0 10 20 30 40

■ Steep Slope Park ▨ Evergreen Park

a) What conclusions can you make about the graph?
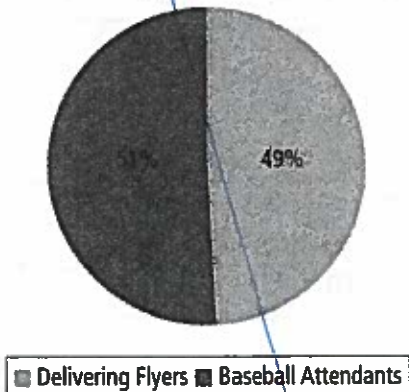
One park has three activities and the other has one.

b) Is this graph the best choice for the data? Explain.

No, using separate bars showing all the types of activities in the park would be better

c) Using the graph that you did not choose for part b), what could this graph be used to describe?

6. Zach and Jessie must pick a summer job. They have narrowed their options down to two choices. Each one makes a graph.

Zach's Best Times for Employment

Number of Positions / Months

■ Delivering Flyers ■ Baseball Attendants

Jessie's Summer Employment Available

49%

■ Delivering Flyers ■ Baseball Attendants

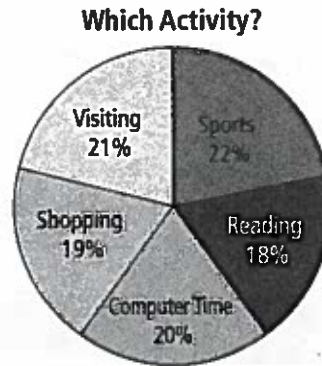**a)** What information does each graph show?

b) Which graph best displays the information Zach and Jessie need to make a decision? Explain.

7. Stephanie recorded how many times she chose to do each activity in one week to make a favourite activity list.

Which Activity?

Visiting 21% Sports 22%
Shopping 19% Reading 18%
Computer Time 20%

a) What does this graph show about Stephanie's interests?

It shows Stephanie's 5 main interests in one week. It also shows how she divided her time among the interests

b) What conclusion could be drawn from this graph?

Stephanie spends her time fairly equally this week over her 5 activities.

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