

Warm Up

Date: Feb. 11

Ch. 7

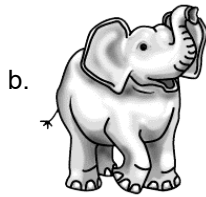
Lesson 3
Day 2

1) Would you use a line graph (continuous) or series of points (discrete) to display each set of data?



how long it takes an ice cube to melt

measure time
→ can have half of time
→ Continuous (line graph)



The weight of an elephant

→ measure weight
→ can have part of weight
→ line graph



How many pizzas a person ate

→ whole pizza
→ discrete

2. Would you use a line graph or a series of points to display each set of data? Explain your choices.

a) the volume of milk in a glass as it is filled

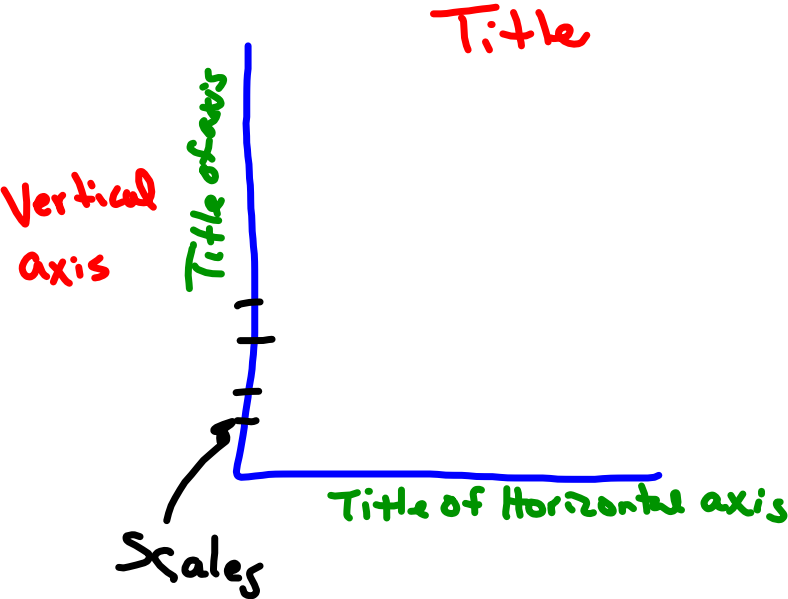
↓ how much it holds (cubic units)
→ have part of volume then line graph

b) the number of games won by the Vancouver Canucks each month in the 2007–2008 regular season

→ cannot win half a game so series of dots.

c) the distance travelled by a mail carrier as she covers her route

↓ can have half a distance^{Ex} (7.3 m) or 23.5 km
So line graph (continuous)



SP3 Graph collected data and analyze the graph to solve problems.

SP4 Demonstrate an understanding of probability by: • identifying all possible outcomes of a probability experiment • differentiating between experimental and theoretical probability • determining the theoretical probability of outcomes in a probability experiment • determining the experimental probability of outcomes in a probability experiment • comparing experimental results with the theoretical probability for an experiment.

SCO: SP3: Graph collected data and analyze the graph to solve problems. [C, CN, PS]			
[C] Communication [T] Technology	[PS] Problem Solving [V] Visualization	[CN] Connections [R] Reasoning	[ME] Mental Math and Estimation

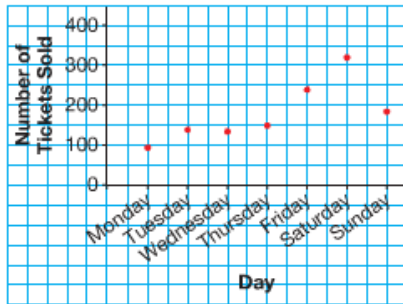
Scope and Sequence of Outcomes

Grade Five	Grade Six	Grade Seven
SP2 Construct and interpret double bar graphs to draw conclusions.	SP3 Graph collected data and analyze the graph to solve problems.	SP3 Construct, label and interpret circle graphs to solve problems.

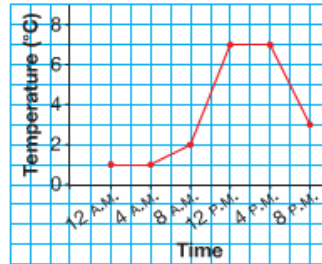
Practice

- For each graph below:
 - What is the title of the graph?
 - What does each axis show?
 - Why are the points not joined or joined?
Are the data discrete or continuous?
 - What conclusions can you make from the graph?

a) **Number of Tickets Sold at the Local Theatre Over 1 Week**



b) **Temperature in Whistler, BC, April 7, 2008**

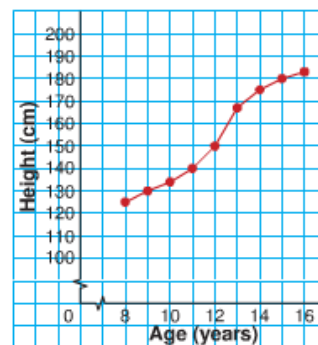


- Would you use a line graph or a series of points to display each set of data? Explain your choices.
 - the temperature of a cup of boiling water as it cools
 - the number of goals scored by Jarome Iginla over the last 10 weeks of the 2007–2008 season
 - the mass of a puppy in its first year
 - the distance travelled by a cross-country skier as she completes the course

- What does this line graph show?
 - About how tall was Nathan at each age?
 - 8 years
 - 12 years
 - 15 years
 - During which year did Nathan grow the most? The least? How does the graph show this?

We use a jagged line to indicate we are not showing all the numbers.

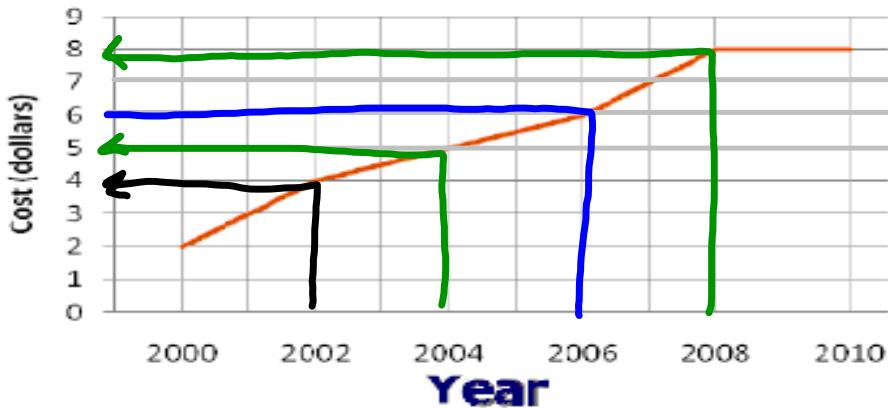
Nathan's Growth



Name _____ Date _____

Postage Stamps (reading Line Graphs)

Cost of a book of postage stamps



Directions: The graph above shows the cost of a book of postage stamps. Study the line graph and answer the following questions.

1. What was the cost of the book of stamps in 2002? $\$4$
2. In which year was the cost of book of postage stamps \$6? 2006
3. Did the book of stamps cost more in 2000 or in 2006? 2006
4. By how many dollars was the book of postage stamps costlier in 2008 than in 2004? $\$3$ more in 2008
5. What is the title of the graph? $Cost\ of\ a\ book\ of\ postage\ stamps$
6. What does the axis show? $Vertical\ axis\ is\ Cost\ (dollars)$
 $Horizontal\ axis\ is\ the\ year$
7. Are the data discrete or continuous?

Continuous
since you can have part of a year.
→ connected line

Class/Homework

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#2, #3, #4. #5

Extra Practice 1 Interpret Graphs

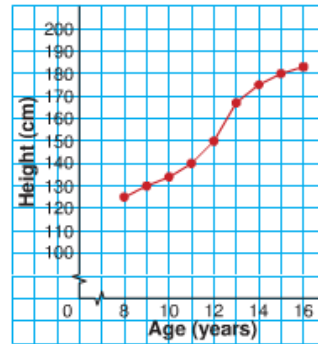


Extra Practice 3 Interpret Graphs



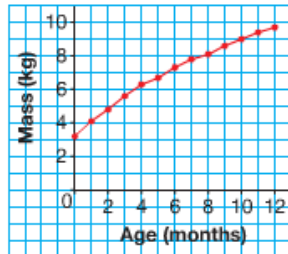
3. a) What does this line graph show?
- b) About how tall was Nathan at each age?
 - 8 years
 - 12 years
 - 15 years
- c) During which year did Nathan grow the most? The least? How does the graph show this?

We use a jagged line to indicate we are not showing all the numbers.

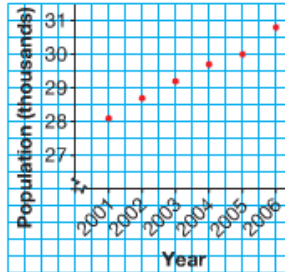


4. Look at the three graphs below.

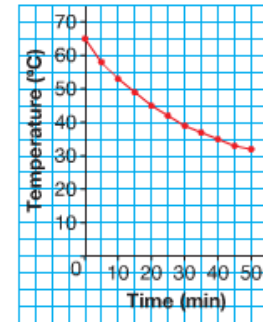
i) My Baby Sister's First Year



ii) Population of Nunavut, 2001–2006



iii) How My Hot Chocolate Cooled

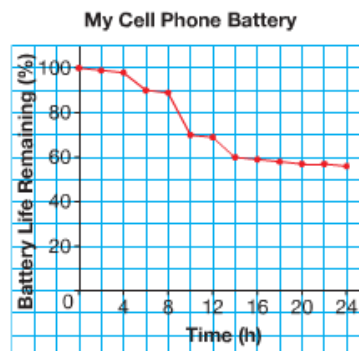


- a) How are the graphs alike? How are they different?
- b) What conclusions can you make from each graph?



5. Marina measured the life left in her cell phone battery every two hours for 24 h. She used a line graph to display the data.

- a) What happened in the first 4 h?
- b) What happened between hours 4 and 6?
- c) How many times might Marina have used her cell phone? Explain.
- d) Between which two hours did Marina use her cell phone the most? How do you know?
- e) What percent of the battery life remained after 24 h?
- f) What other conclusions can you make from the graph?



Attachments

Alphabet Experiment.docx

Blinking Experiment.docx

Spoon Experiment.docx

Interpret Graphs Extra Practice 1.doc

Interpret Graphs Extra Practice 3.doc