



Warm Up  
Date: Feb. 14



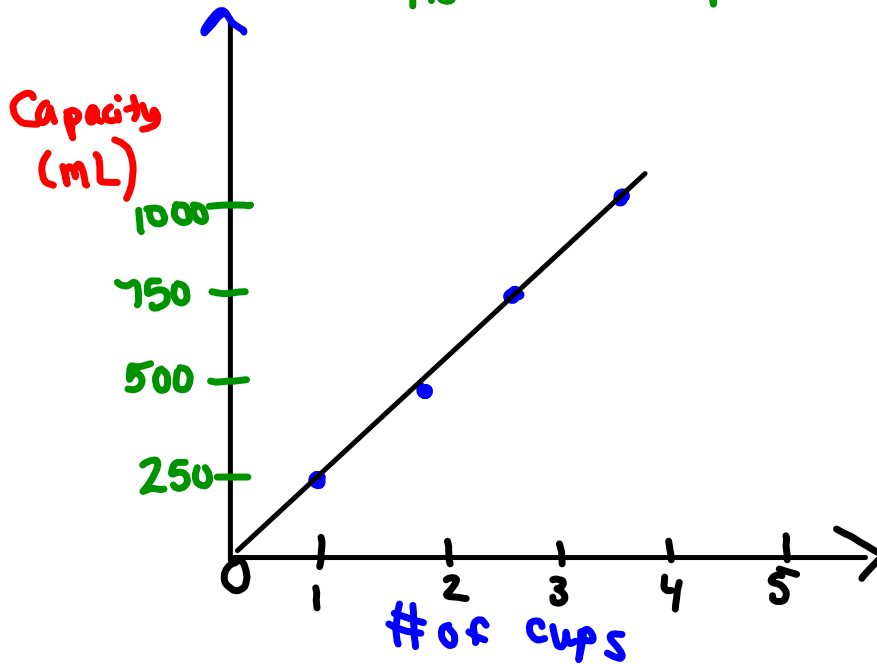
Ch. 7 Lesson 4  
day 2

Create a line graph based on the following information.

- a. appropriate scale
- b. labels
- c. Title

<i>Horizontal</i>	Number of Cups	1	2	3	4
<i>Ver</i>	Capacity (ml)	250	500	750	1000

*How much a cup holds*



*Can connect the dots since I can have half a cup.*

**Practice**

You will need grid paper.

1. Miners drill a hole in the earth's surface. They measure the temperature of the earth at intervals of 1 km. This table shows the data they collected.
  - a) Draw a graph to display these data.
  - b) Did you join the points? Explain.
  - c) Write 2 things you know from the graph.

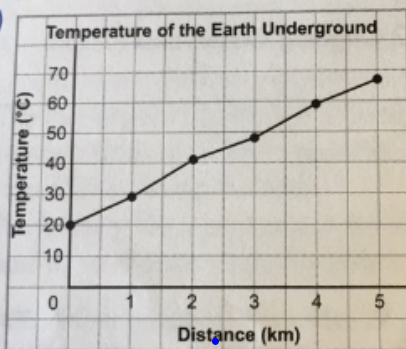
Horizontal    Vertical

Distance (km)	Temperature (°C)
0	20
1	29
2	41
3	48
4	59
5	67

+1  
+1

**Sample Solutions**

1. a)

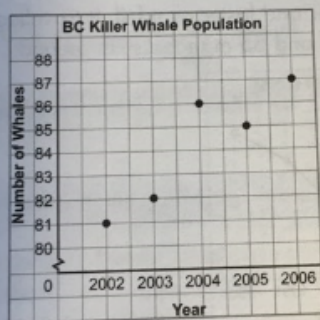


- b) Yes, both distance and temperature are continuous.
- c) As you dig deeper, the temperature of the earth rises. The temperature at the surface of the earth is 20°C.

2. The population of killer whales along the British Columbia coast is counted each year. The table shows the data for 2002 to 2006.
- Draw a graph to display these data.
  - Explain how you chose the vertical scale.
  - Did you join the points? Explain.
  - What conclusions can you make from the graph?

Year	Number of Killer Whales
2002	81
2003	82
2004	86
2005	85
2006	87

2. a)



- I used a jagged line to show that the scale starts at 80, not 0. I used 1 square to represent 1 whale. I wanted to show how the numbers varied from year to year.
- No, the numbers of whales are discrete data.
- The whale population rose by 6 between 2002 and 2006. We cannot tell how many whales were born because the numbers might include whales that died.

When drawing a line graph you need:

Title

Horizontal axis for input (Label)

Vertical axis for output (Label)

Proper scale on each axis (this is the tricky part)



} Nothing different from bar graphs yet

Instead of drawing a bar for the data, you put a dot at the height

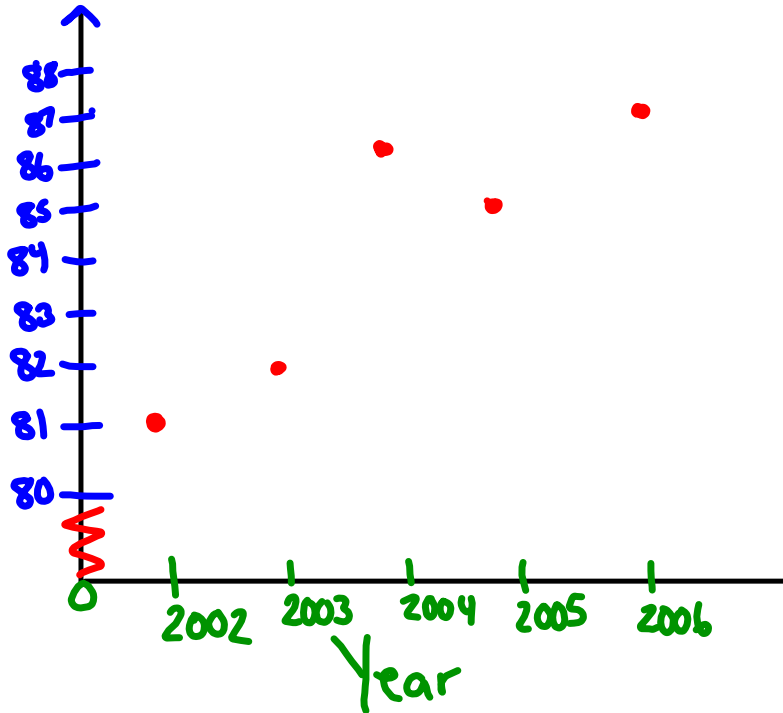
-You may need to connect the dots depending if the data is continuous or discrete

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Population of Killer whales

#2

# of killer whales



- b) Since all data for vertical axis is in the 80's we will use a broken line and then count by 1.
- c) Can't join the lines since I cannot have half a whale.
- d) The whale population increased from 2002 - 2004  
 → population Decrease from 2004 - 2005  
 → Increase population from 2005 - 2006

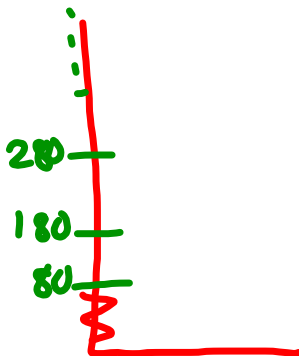
# Class/Homework

We did #2 together

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Must do a neat job on grid paper

#3,4,5,6





3. This table shows how far Rene's family travelled on a car trip to Regina.
- a) Draw a line graph to display these data.
  - b) How did you choose the scale on the vertical axis?
  - c) What was the distance travelled each hour from hours 2 to 4? From hours 6 to 8?
  - d) What do you think was happening from hour 4 to hour 5 on the trip? Explain.
  - e) What other conclusions can you make from the graph?

Time Passed (h)	Distance Travelled (km)
1	80
2	180
3	280
4	380
5	380
6	480
7	530
8	580

4. Rajiv measures the length of his cucumber vine at 9:00 A.M. each day.

Day	1	2	3	4	5	6	7	8	9	10
Length of Vine (mm)	0	1	7	15	27	35	41	48	53	57

- Draw a graph to display these data.
- Did you join the points? Explain.
- Write 2 things you know from the graph.



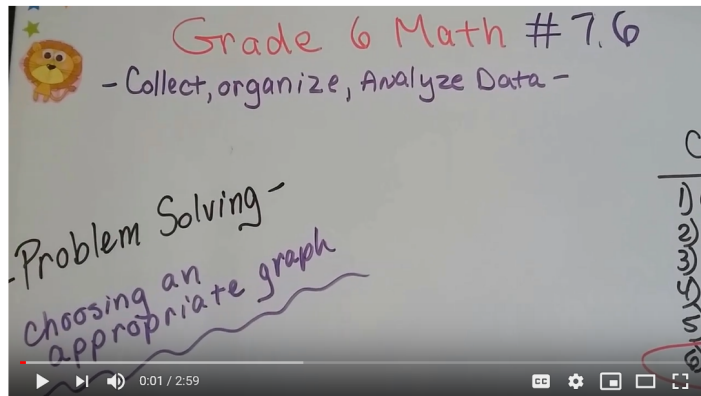
5. A ball is dropped from the top of a cliff.  
This table shows the distance travelled by the ball in the first 6 s.
- a) Draw a graph to display these data.
  - b) Did you join the points? Explain.
  - c) Write 2 things you know from the graph.


Time (s)	Distance (m)
0	0
1	5
2	20
3	45
4	80
5	125
6	180

6. This table shows the Aboriginal population in Canada from 1971 to 2001.

Year	1971	1981	1991	2001
Population (in thousands)	313	491	1003	1320

- a) Draw a graph to display these data.
- b) Explain how you chose the scale on each axis.
- c) Did you join the points? Explain.
- d) What do you know from looking at the graph?



 Grade 6 Math #7.6, Problem Solving - Choosing the right Graph