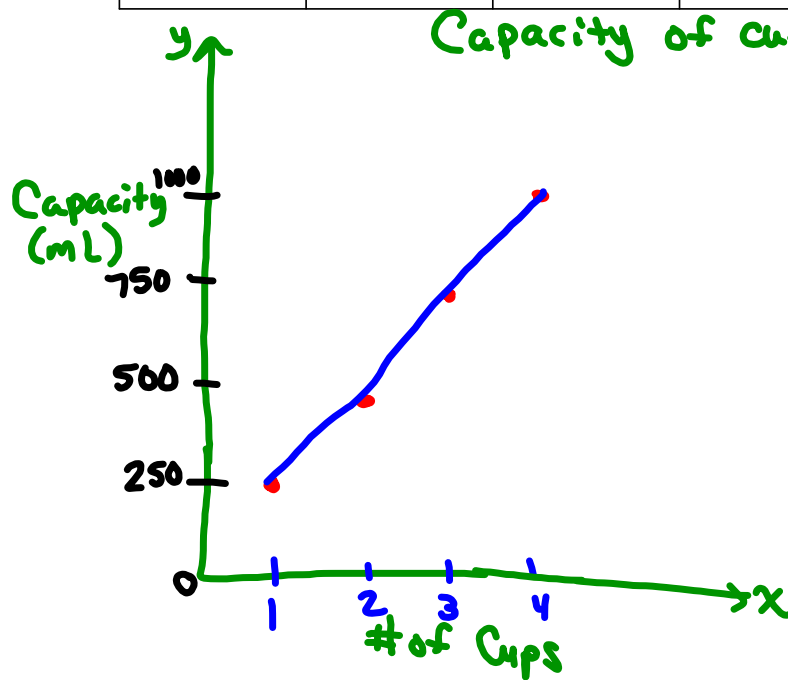# Warm Up
Date:_____

Ch. 7 Lesson 4

day 2

Thursday
Test March 14

Create a line graph based on the following information.

a. appropriate scale
b. labels
c. Title

Number of Cups	1	2	3	4
Capacity (ml)	250	500	750	1000

x (Number of Cups row)
y (Capacity row)

Capacity of cups

Capacity (mL): 1000, 750, 500, 250

0

# of Cups: 1, 2, 3, 4

y

x

Quiz Outline
→ What makes a good question
   → biased
   → what word not to use so everyone understands the question? "a lot"
   → options ____ other

→ Know definition of discrete / continuous apply to situations.

→ Reading graphs (similar to one done in class)

→ Know graph labels X-axis ⟷ horizontal
                      Y-axis ↕ vertical
   Titles

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.

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

**Sample Solutions**

1. a)

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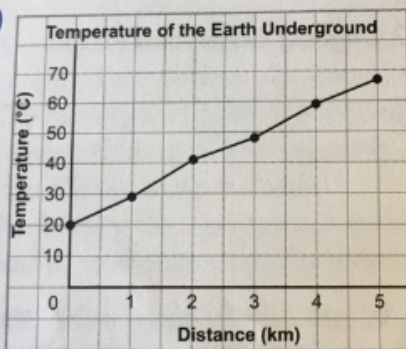
b) Yes, both distance and temperature are continuous.
c) As you dig deeper, the temperature of the earth rises.
   The temperature at the surface of the earth is 20°C.

2. The population of killer whales along the British Columbia coast is counted each year. The table shows the data for 2002 to 2006.
   a) Draw a graph to display these data.
   b) Explain how you chose the vertical scale.
   c) Did you join the points? Explain.
   d) 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)

BC Killer Whale Population
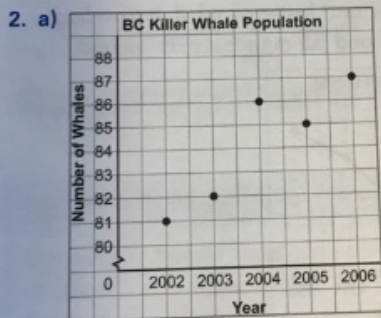
b) I used a jagged line to show that the scale starts at 80, not 0. I used 1 square to represent 1 whale. I wanted to show how the numbers varied from year to year.

c) No, the numbers of whales are discrete data.

d) 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)
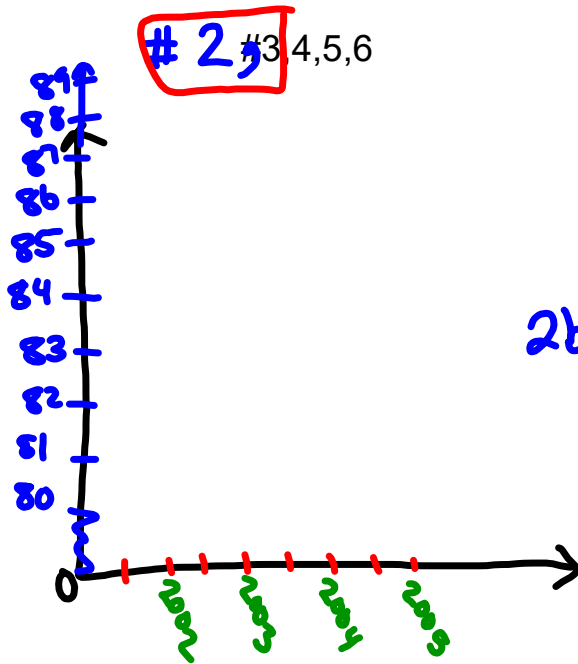
Nothing different from bar graphs yet

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

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

Class/Homework

Page 265-266

Must do a neat job
on grid paper

2, #3,4,5,6

Thursday
Test March 14

2b) Because all my data
is in the 81 to 87
range I used a broken
Scale on vertical and counted
by 1.

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

a) Draw a graph to display these data.
b) Did you join the points? Explain.
c) 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?
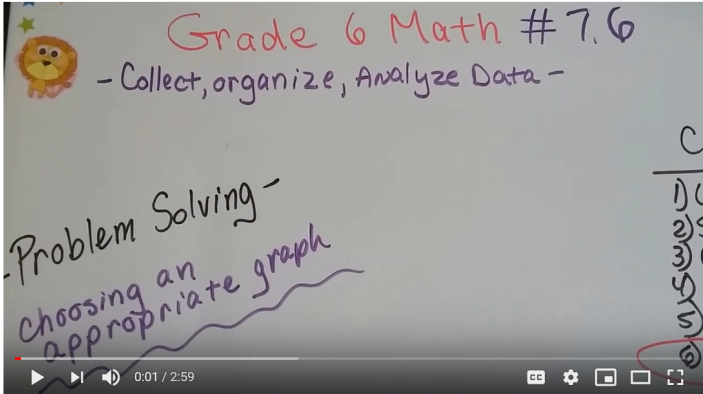
Grade 6 Math #7.6, Problem Solving - Choosing the right Graph