

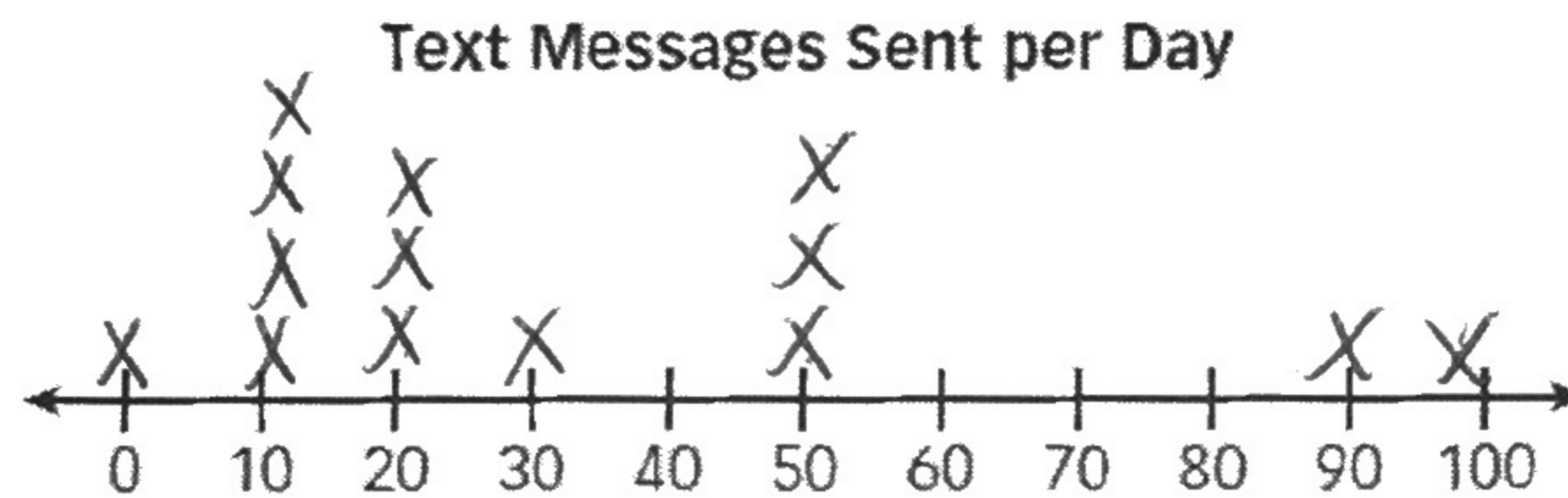
Part 1: Dot Plots

- A dot plot is a graphical display of data using dots! Put a dot for each data point above the number.

Example 1: A random sample of teenagers ages 13 and 14 were asked: On average, how many text messages do you send per day? Here are the results.

0, 10, 10, 10, 10, 20, 20, 20, 30, 50, 50, 50, 90, 100

Display the data in a dot plot.



- a) How many teenagers were surveyed? How do you know?

14; there are 14 dots

- b) Describe the shape of the graph.

fairly symmetric with potential outliers at 90 & 100

- c) Count the number of dots at 0 and at 10. What do those numbers mean?

5 kids sent ~~bet~~ 0 and 10 texts per day.

1 sent 0 and 4 sent 10.

(or skewed right)

- d) What is one conclusion you can draw from this dot plot?

Most teenagers 13-14 yrs old send around 10 texts on average per day.

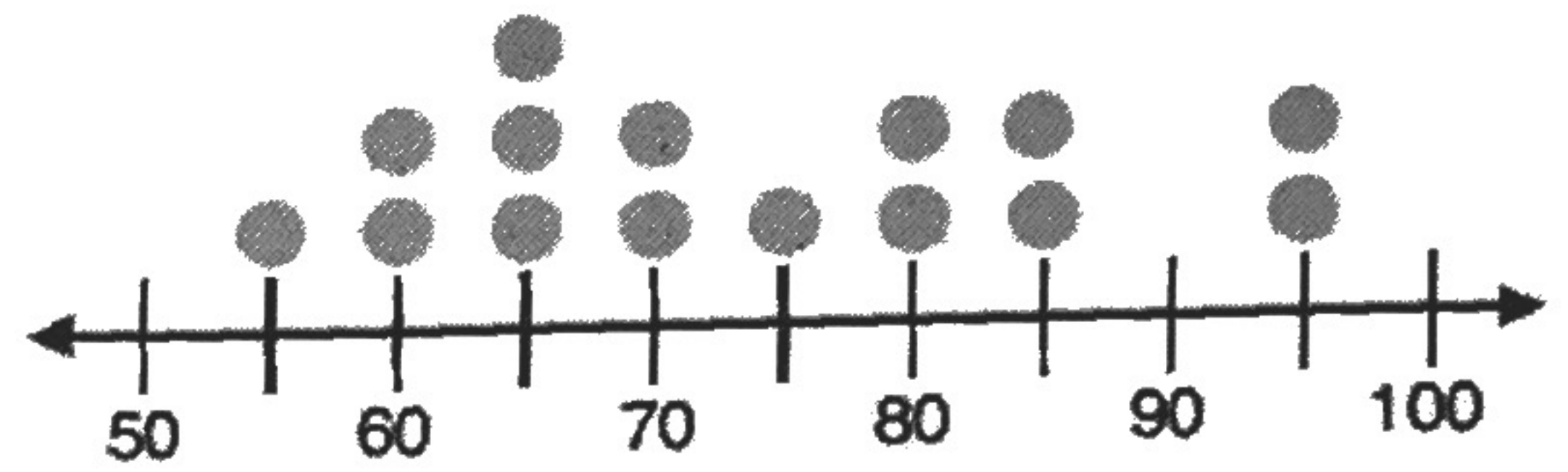
➤ Dot plots are best for SMALL data sets. Each dot represents one piece of data in the set.

Practice Problems:

1. Ms. Makita made a dot plot to show the scores her students got on a test. At the right is Ms. Makita's dot plot.

a) What does each "circle" represent?

a student



b) How many students scored at least a 60 but less than an 80?

9 students

c) How many students scored over an 85? score? 2

d) What is the mode, or the most occurring score? 65

4. The following dot plot represents scores on a math project in Mr. Jone's Geometry class.



a) How many students turned in math projects? 15

b) Determine the mean and the median of the data set.

mean = 44.067 med = 45

c) Determine the mode of the data.

mode = 50

Name _____

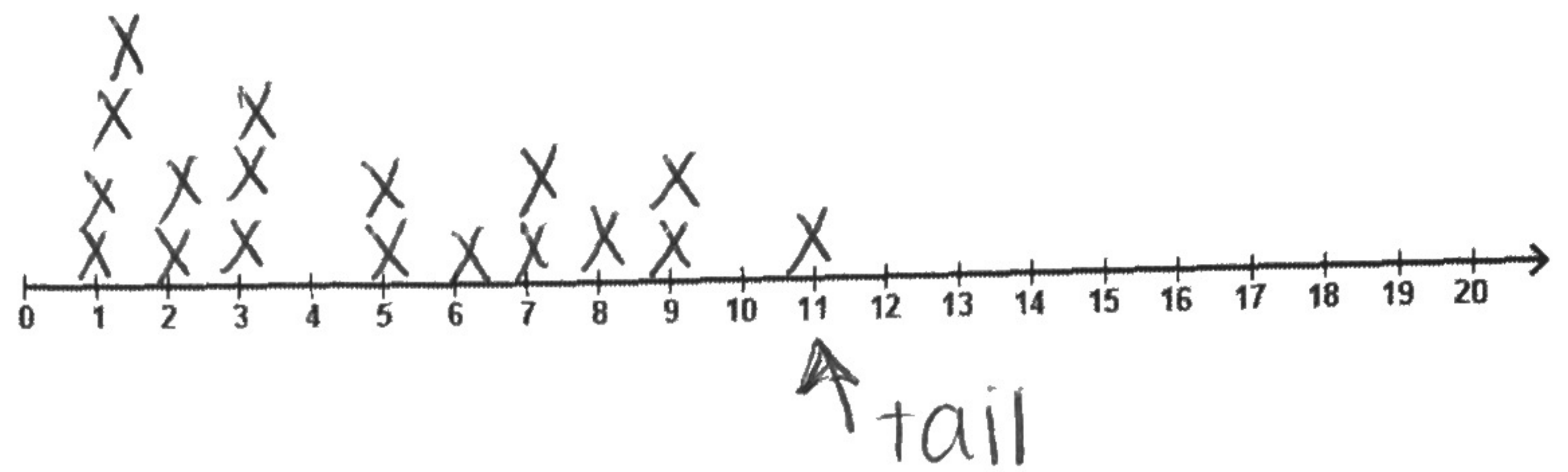
Date _____

Period _____

3. The following data shows the number of medals won per country during the 2006 Winter Olympics.

2006 Winter Olympic Gold Medals	
Country	Medals
Australia	1
Austria	9
Canada	7
China	2
Croatia	1
Czech Republic	1
Estonia	3
France	3
Germany	11
Italy	5
Japan	1
Netherlands	3
Norway	2
Russia	8
South Korea	6
Sweden	7
Switzerland	5
United States of America	9

- a) Make a dot plot for the data



- b) Describe the shape of the graph

skewed right
(tail is on the right)

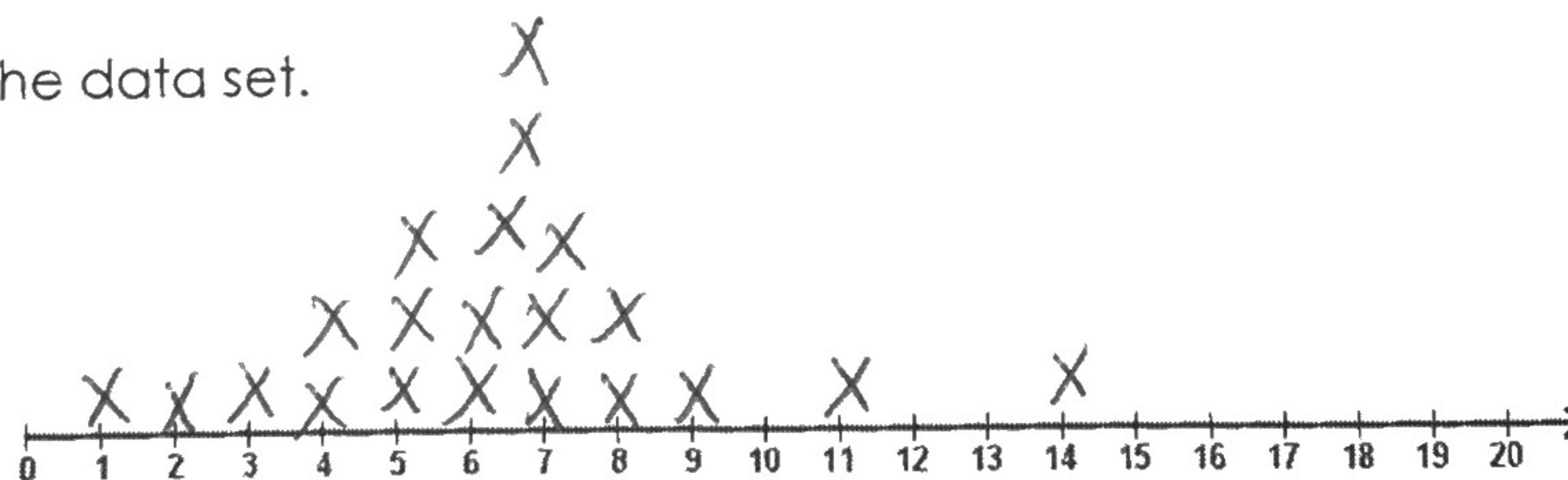
What can you conclude from the dot plot?

most countries won around 1-3 medals in the 2006 winter olympics

4. Nathan asked his classmates to estimate the number of hours they spend doing homework each week. The following data shows the results of his survey.

9, 4, 8, 2, 7, 3, 5, 6, 1, 4, 7, 6, 8, 5, 6, 5, 6, 7, 11, 14, 6

- a) Make a dot plot for the data set.



- b) Determine mean, median, mode, and range for the data.

mean = 6.190

mode = 6

med = 6

range = 14 - 1 = 13

- c) Describe the shape of the graph.
fairly symmetric

- d) Does there appear to be any gaps/outliers?

outlier at 14
gap between 9 & 11

Name _____

Date _____

Period _____

Part 2: 1-Way Frequency Tables

one-way frequency table refers to a table of the data which only examines one categorical variable at a time.

A **Frequency Table** is a table that lists items and uses tally marks to record and show the number of times they occur.

Example 1 The following frequency table shows the number of grade 2 students who chose Taco or Burger as their favorite bakery food.

Favorite Food	Tally	Frequency
Taco		7
Burger		9

Practice Problems

1. Josh made a frequency table of the scores his students got on a test.

Score	Frequency
Below 75	4
76 - 80	14
81 - 85	2
86 - 90	8
91 - 95	5
96 - 100	1

a) How many students scored more than 85%?

14

b) Do you know how many peoples scored a 94?

no, I only know 5 students scored between a 91 and 95.

2. Display each set of data in a frequency table.

a) 5 1 4 6 2 8 4 5 1 3 2 6 4 5 4 6

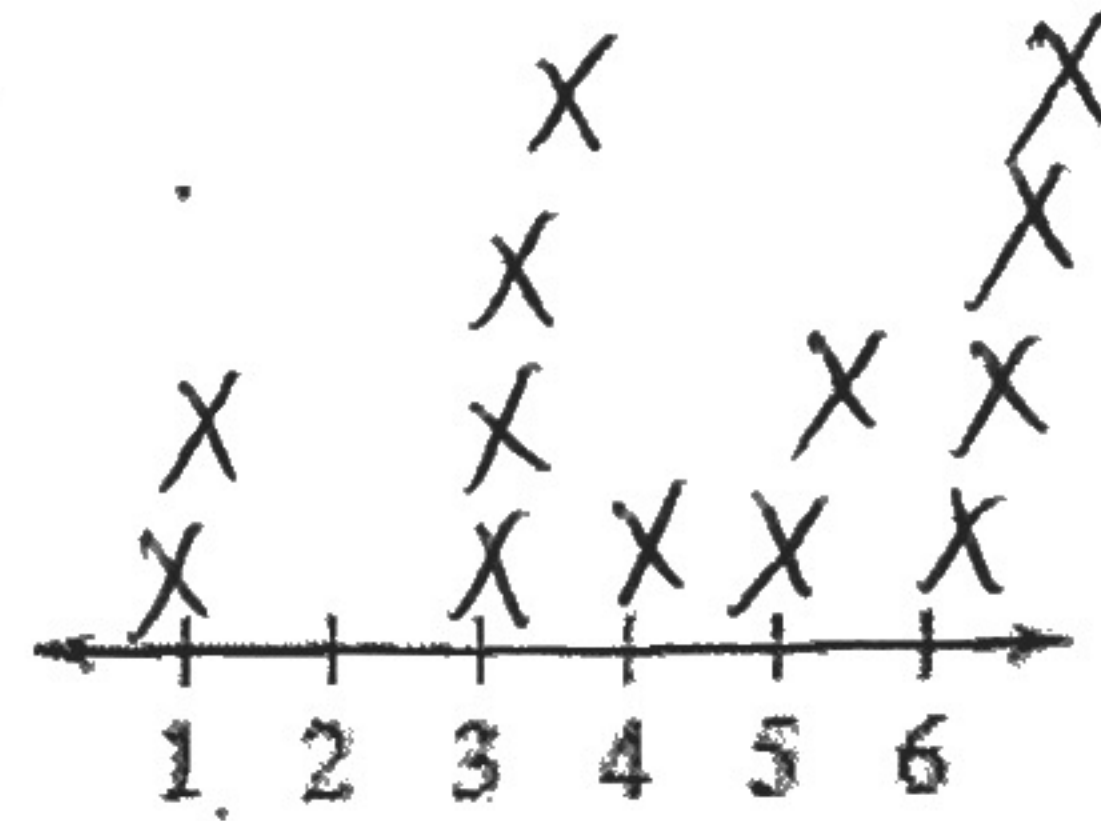
b) 4 3 1 2 1 3 3 1 3 2 1

Number	1	2	3	4	5	6
Frequency	2	2	1	4	3	4

Number	1	2	3	4
Frequency	4	2	4	1

3.) Draw a line plot from the frequency table below.

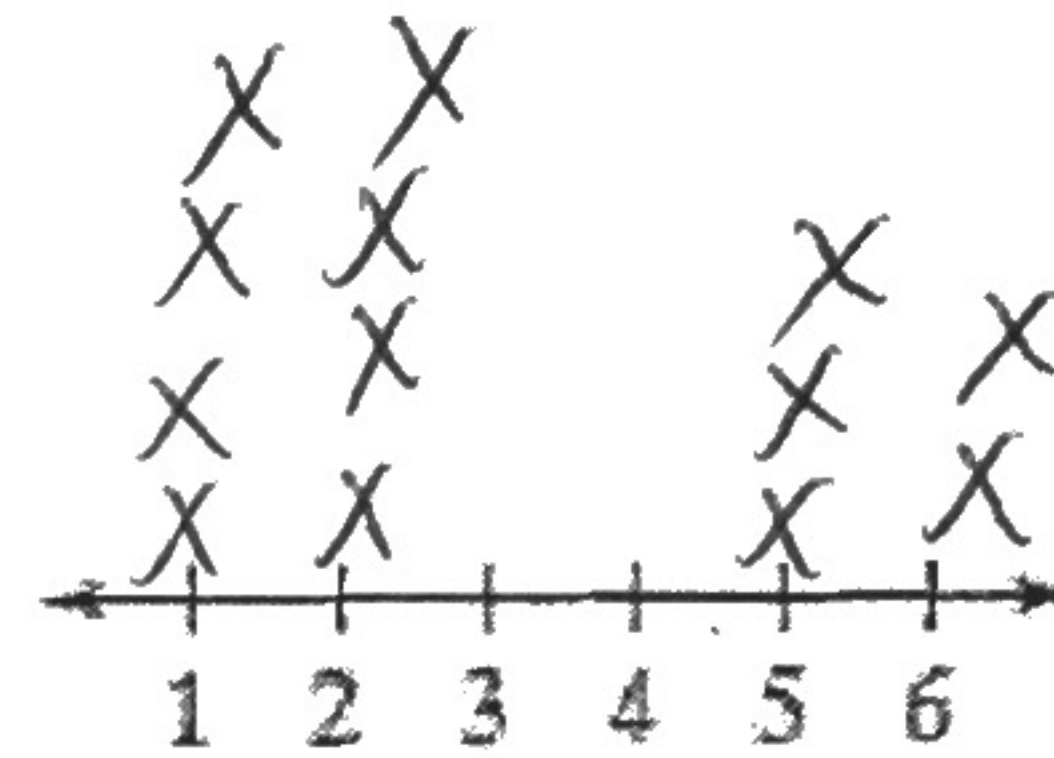
Number	1	2	3	4	5	6
Frequency	2	0	4	1	2	4



dot plot

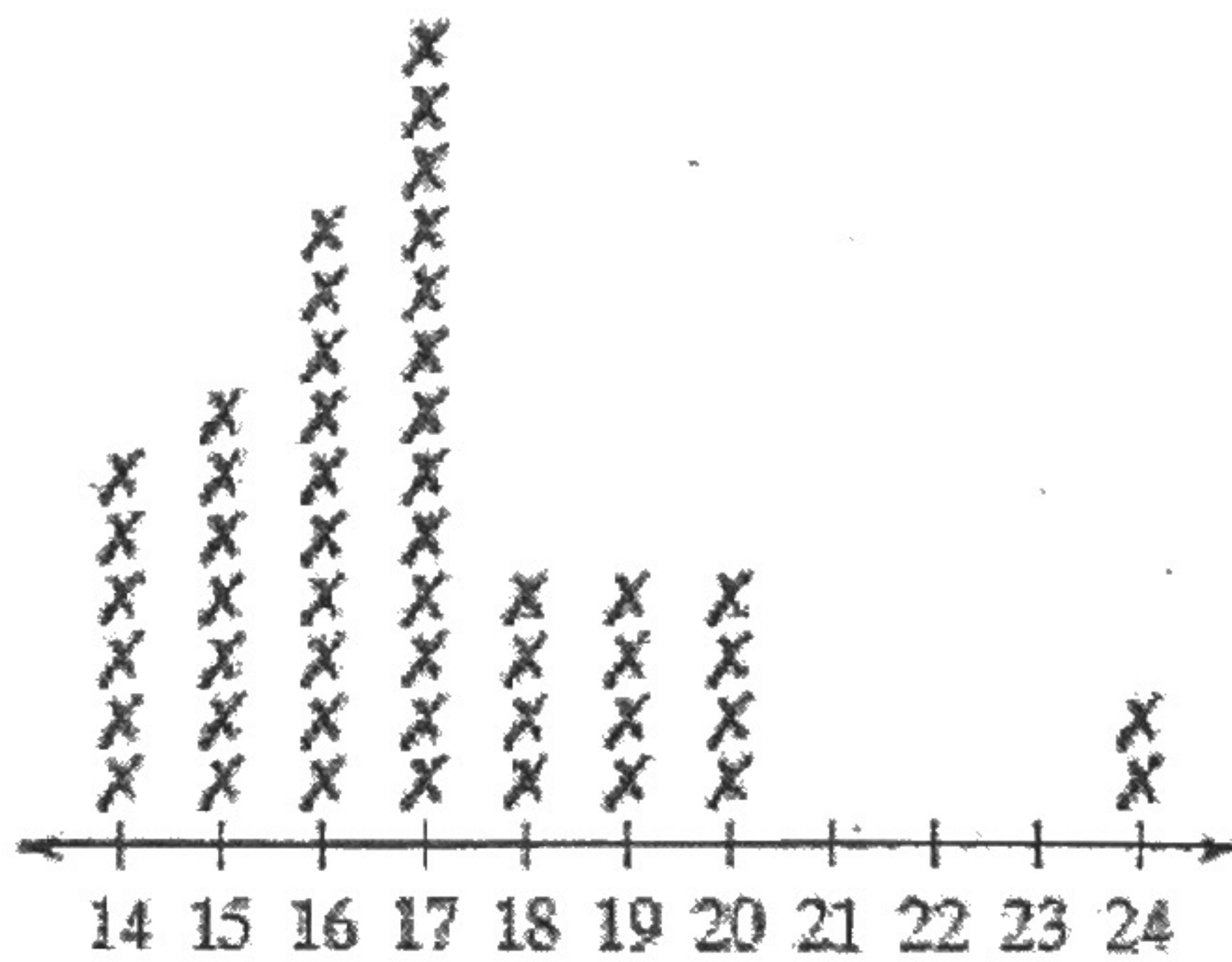
4.) Draw a ~~histogram~~ from the frequency table below.

Number	1	2	3	4	5	6
Frequency	4	4	0	0	3	2



5. Construct a frequency table from the box plot below.

State Average Students per Teacher



Students per Teacher	14	15	16	17	18	19	20	21	22	23	24
Frequency	6	7	10	13	4	4	4	0	0	0	2