4/18/18 CCM6+7+

Understand a statistical question.

Make and analyze dot plots.

HW: 2-sided page on dot plots

A statistical question...

~has a variety of answers

~has multiple answers

Is it statistical...**yes** or **no**?

What did James get on his test? ✗

Who scored better--Amy or James? ✗

What were the grades in 2nd period math? ✓

What is Bob's favorite color? ✗

What are the favorite colors of people in this class? ✓

How tall is Elmo? ✗

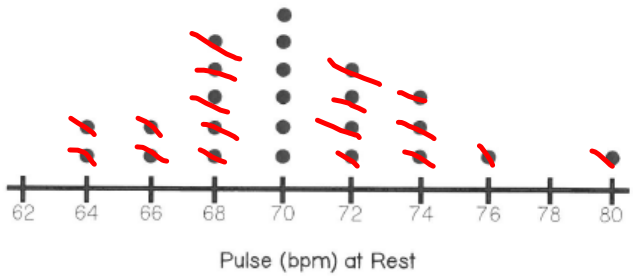
What are the heights of students in this class? ✓

Unit: Statistics
Student Handout 2

Name _____
Date 4/18 Pd _____

HOW IS DATA DISTRIBUTED?

Data can be displayed in various graphs including lineplots dot plots, histograms, and box plots. Graphs are useful for showing center and spread.



Make three observations about the dot plot above. Then, answer the questions.\

1. more in the middle than sides
fewer people have 76 or 80
no people with bpm of 62 or 78

2. What is the lowest pulse? What is the highest pulse?
64 80

3. How would you describe the general spread of the data?
range: 80-64 = 16 apart

4. What was the most common heart rate?
70

5. What pulse describes the center of the data?
70

6. How many people had a pulse over 76? 1
>

7. How many people were surveyed? 24

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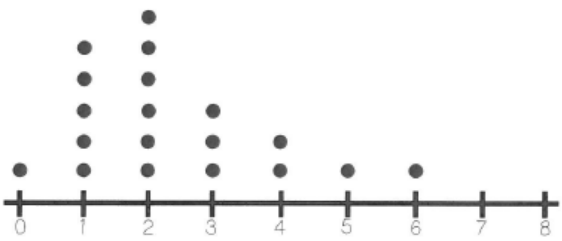
5

be different

Data can vary by its shape and spread on the dot plot.

SHAPE	• The shape of the data describes how the data looks when graphed. • It is often used to describe if the data is symmetrical or skewed.
SPREAD	• The spread describes how far apart the data is. It is also know as range. → biggest − smallest

Compare the two dot plots using the table below.



DOT PLOT A

DOT PLOT B

	PLOT A	PLOT B
Where is most of the data located?	1-3	17-24
How spread out is the data?	6 − 0 = 6 apart	24 − 10 = 14 apart
Is the data grouped around the left, middle, or right?	left	mid / right
What could this data represent?	# pets	# people in a class

Summarize today's lesson:

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6

Unit: Statistics
Student Handout 3

Name _____
Date _____ Pd _____

HOW CAN DATA BE DISPLAYED?

We can display data in a frequency table which shows how many times a # of data occurs.

Quickly survey the room with the following question. Mark the results in the table below (add space if necessary).

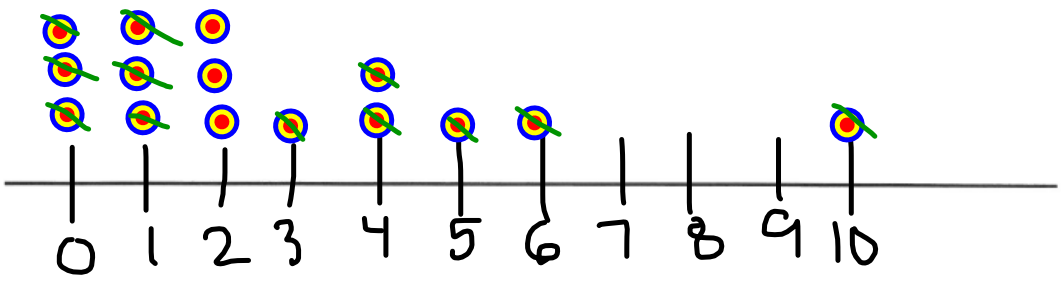
How many ~~screens (TV, iPad, phones, etc) do the students in our~~ pets class have in their homes?

NUMBER OF SCREENS	TALLY	FREQUENCY
0	III	3
1	III	3
2	III	3
3	I	1
4	II	2
5	I	1
6	I	1
7		0
8		0
9		0
10	I	1

1. What is the least number of ~~screens?~~ pets
   0
2. What is the greatest number of ~~screens?~~ pets
   10
3. What number of ~~screens describes~~ pets the center?
   2
4. How does your specific response compare to the survey?

Dot plots display data on a # line where each data point is represented by a dot.

Use the data you collected above to create a dot plot. Be sure to include each number, even if it has a frequency of zero.



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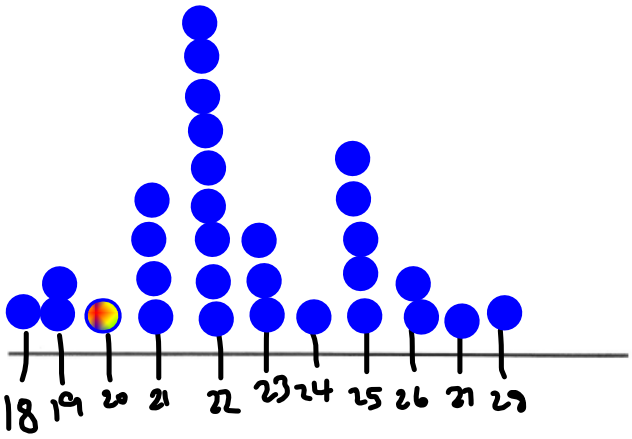
Practice creating a dot plot and frequency table by using the information given below.

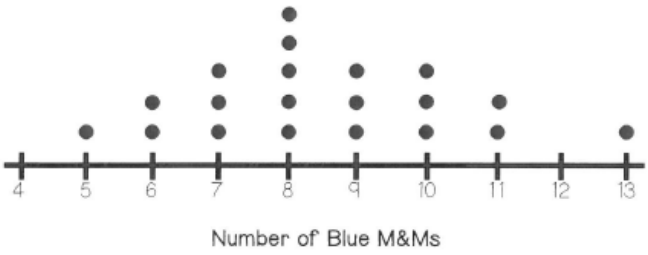
The data below is the average number of free throws attempted each season by the NBA teams.

23, 25, 23, 23, 21, 19, 20, 23, 21, 26, 22, 22, 22, 21, 23, 23, 23, 25, 18, 21, 26, 21, 21, 21, 21, 23, 25, 19, 23

FREE THROW ATTEMPTS	TALLY	FREQUENCY
18	I	1
19	II	2
20	I	1
21	IIII	4
22	~~IIII~~ IIII	9
23	III	3
24	I	1
25	~~IIII~~	5
26	II	2
27	I	1
28	I	1



The dot plot below shows the number of blue M&Ms in a sample of 15 packages. Complete a frequency table to display the information.



BLUE M&MS	TALLY	FREQUENCY
4		0
5	I	1
6	II	2
7	III	3
8	~~IIII~~	5
9	III	3
10	III	3
11	II	2
12		0
13	I	1

Summarize today's lesson:

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Hw

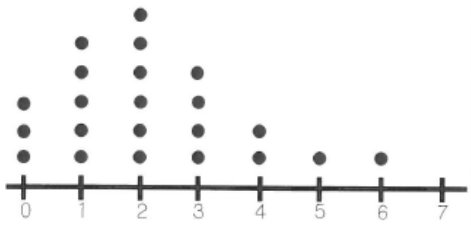
Unit: Statistics
Homework 2

Name _____
Date _____ Pd _____

HOW IS DATA DISTRIBUTED?

Answer the questions below. Be sure to show your thinking.

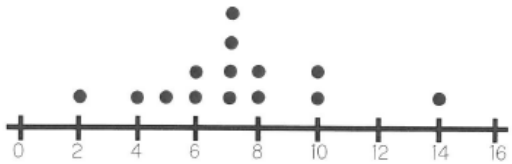
1. How many residents were surveyed?
2. What was the least number of pets owned?
3. What was the greatest number of pets owned?
4. What was the most common number of pets owned?
5. How many people own four pets?



Number of Pets Owned by Residents in Green Oaks Neighborhood

6. A new resident moved into the neighborhood, and they own six pets. How does this resident compare to the rest of the neighborhood?

7. What could this dot plot represent?



8. Describe what a dot plot could look like for the following question:

What is the height in inches of the students in our 6th grade math class?

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7

HW

Unit: Statistics
Homework 3

Name _____
Date _____ Pd _____

HOW CAN DATA BE DISPLAYED?

Answer the questions below. Be sure to show your thinking.

The number of hours of TV watched each week by 15 sixth grade students is shown below.

12, 7, 9, 3, 3, 8, 7, 9, 10, 9, 9, 6, 10, 5, 8

1. Create a frequency table.

2. What is the least number of hours of TV watched?

3. What is the greatest number of hours of TV watched?

4. How many hours of TV watched describes the center of the data?

5. Another student agrees that they watch 9 hours of TV each week. Would this change the data? Why or why not?

The number of students in 10 kindergarten classes is shown below.

20, 18, 21, 18, 22, 24, 18, 20, 23, 20

6. Create a dot plot.

7. What is the least number of students?

8. What is the greatest number of students?

9. What number of students describes the center of the data?

10. Another classroom of 15 was included. Would this change the data? Why or why not?

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10