

# Data Crunchers – Student Response Sheet

School: \_\_\_\_\_ V JV1 JV2 JV3

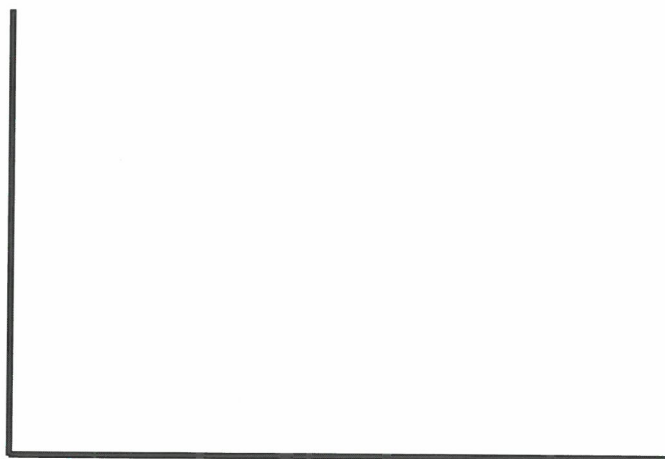
Student Names: \_\_\_\_\_

## Station 1

1.

Number on the die	Number of times rolled
1	
2	
3	
4	
5	
6	

2.



## Station 2

3. A B C D

4. \_\_\_\_\_

5. A B C D

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_



**Station 3**

9. A B C D

10. A B C D

11. \_\_\_\_\_

12.


13. \_\_\_\_\_

**Station 4**

14. A B C D

15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_



**Station 5**

- 19. \_\_\_\_\_
- 20. \_\_\_\_\_
- 21.

Color	Number of pieces
Blue	
Green	
Red	
White	
Yellow	

Number of studs	Number of pieces
4	
6	
8	
12	

- 22. \_\_\_\_\_
- 23. \_\_\_\_\_
- 24. \_\_\_\_\_
- 25. \_\_\_\_\_
- 26. \_\_\_\_\_

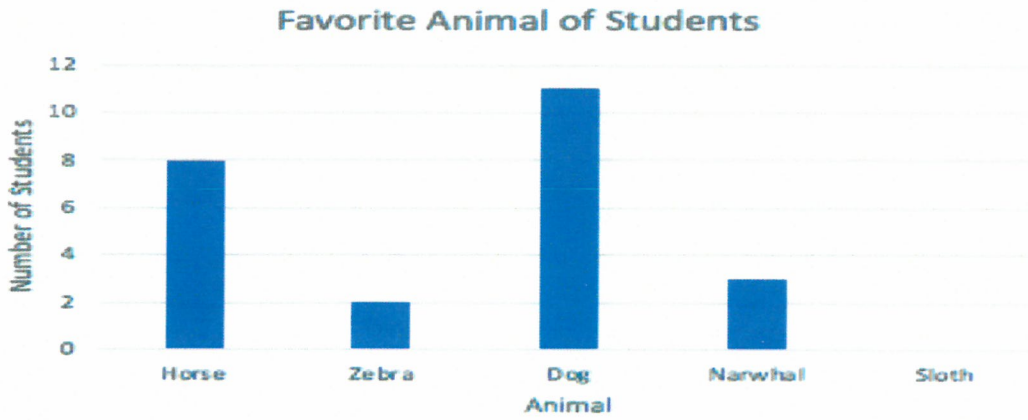
**Station 6**

- 27. A B C
- 28. A B C
- 29. A B C
- 30. A B C D
- 31. A B
- 32. A B C
- 33. A B C D
- 34. A B C



**Station 7**

35.

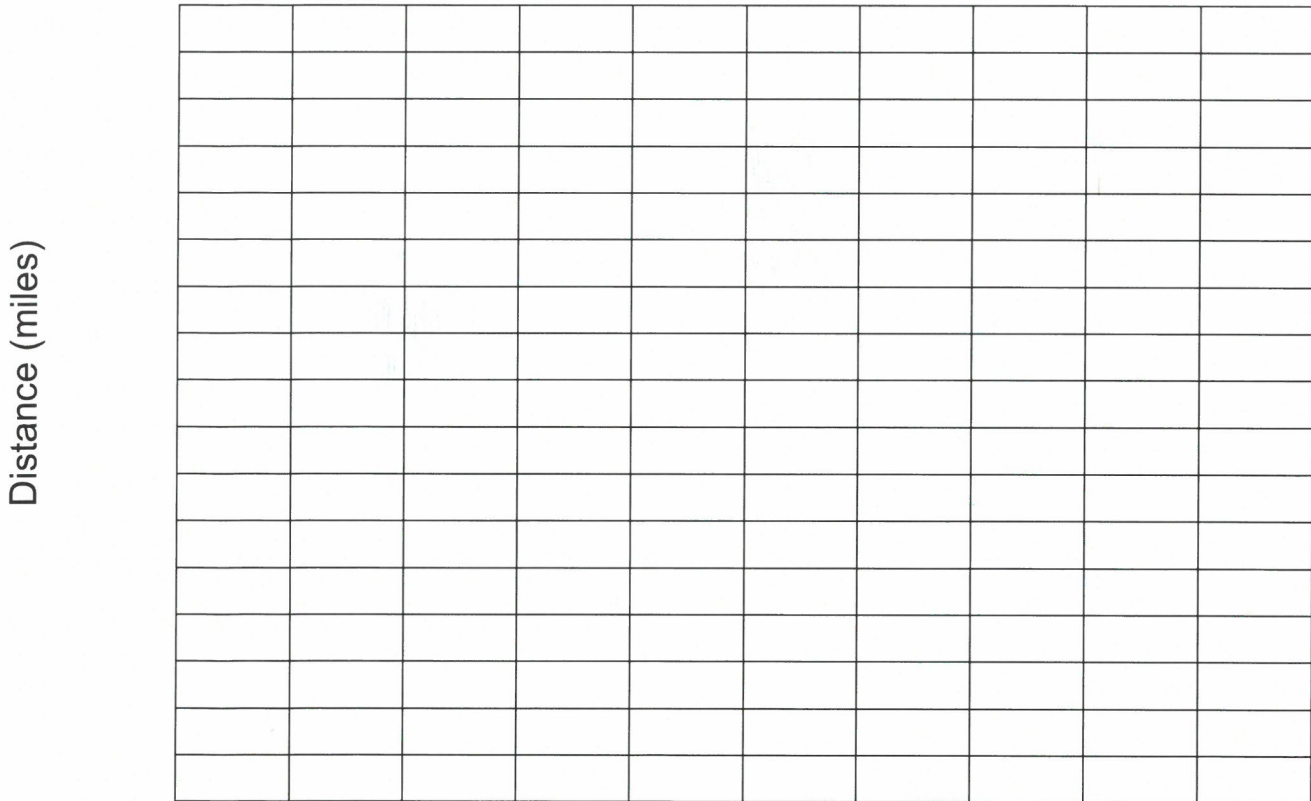


36. A B C D

37. A B C D

**Station 8**

38.



Time (minutes)

39. How long did it take Ethan to get to his friend's house?

40. How far away was his friend's house?





# Data Crunchers – Student Response Sheet

School: \_\_\_\_\_ V    JV1    JV2    JV3

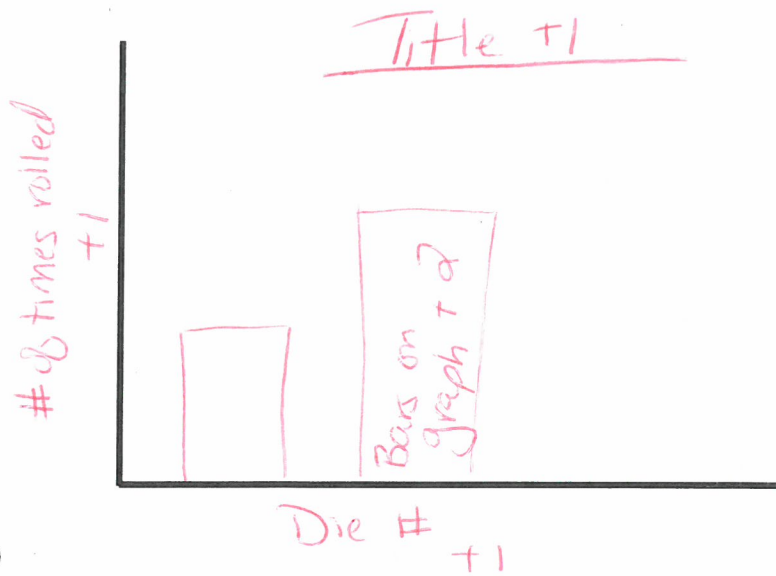
Student Names: \_\_\_\_\_ *1 pt per answer unless otherwise stated    Total = 79 pts*  
*Tie Breakers = Best At each Station, Starting w/ #8*

**Station 1**

1. *5 pts - any data adding up to 20*

Number on the die	Number of times rolled
1	
2	
3	
4	
5	
6	

2. *5 pts*



**Station 2** *11 pts*

3. A    B    C    D

4. 5+9

5. A    B    C    D

6. A, B, G    *1 pt each; -1 for wrong letters*

7. A, C, F    "

8. C, F    "

Station 3 <sup>12pts</sup>

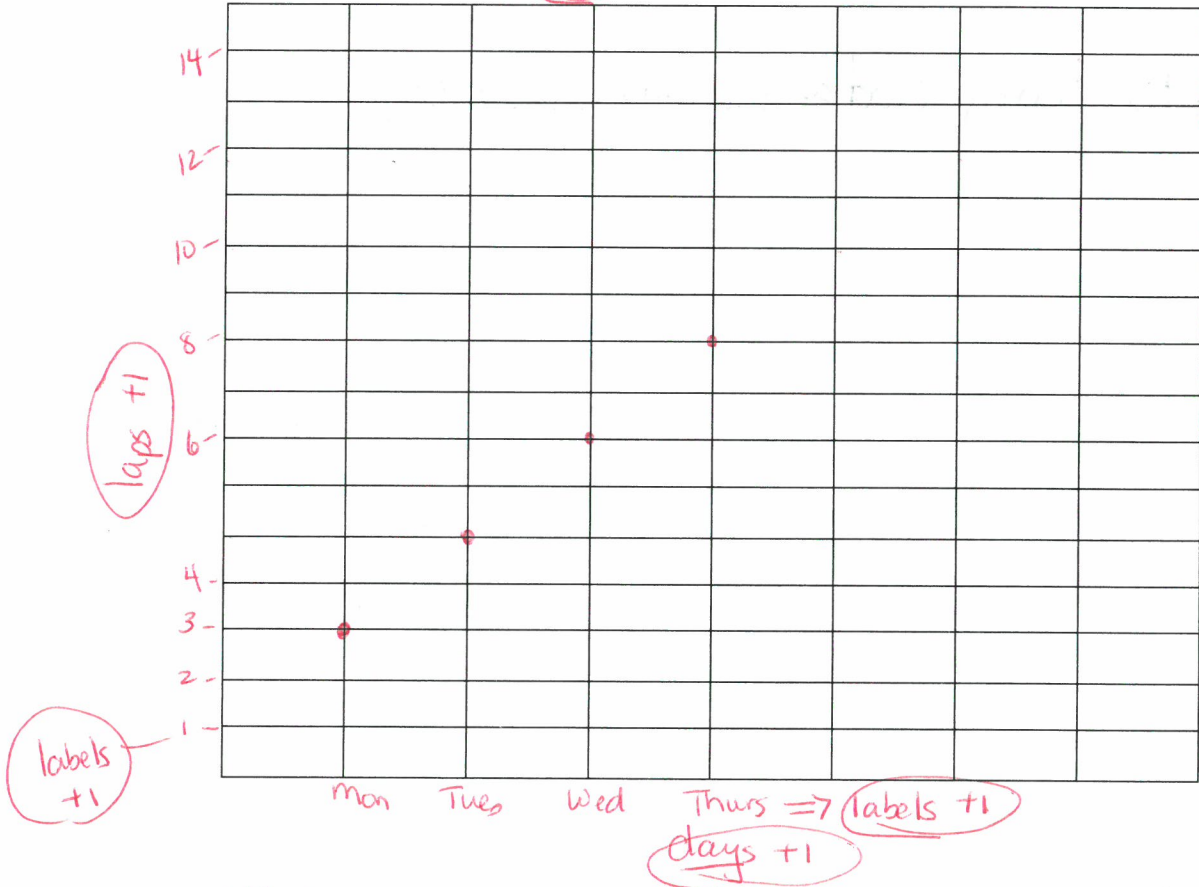
9. A B C D

10. A B C D

11. Bar or Pie Graph

12.

+4 for Mon → Thurs plot points



13. 14 laps

Station 4 <sup>6pts</sup>

14. A B C D

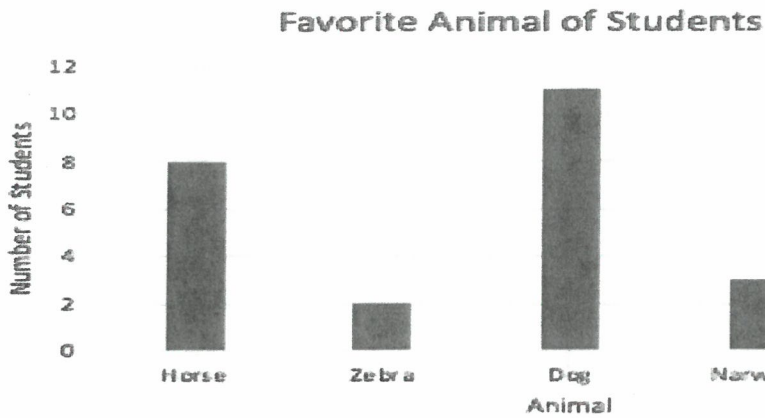
15. 20

16. 15% 2pts

17. Allie

18. 6 left

Station 7 *5pts*  
35.



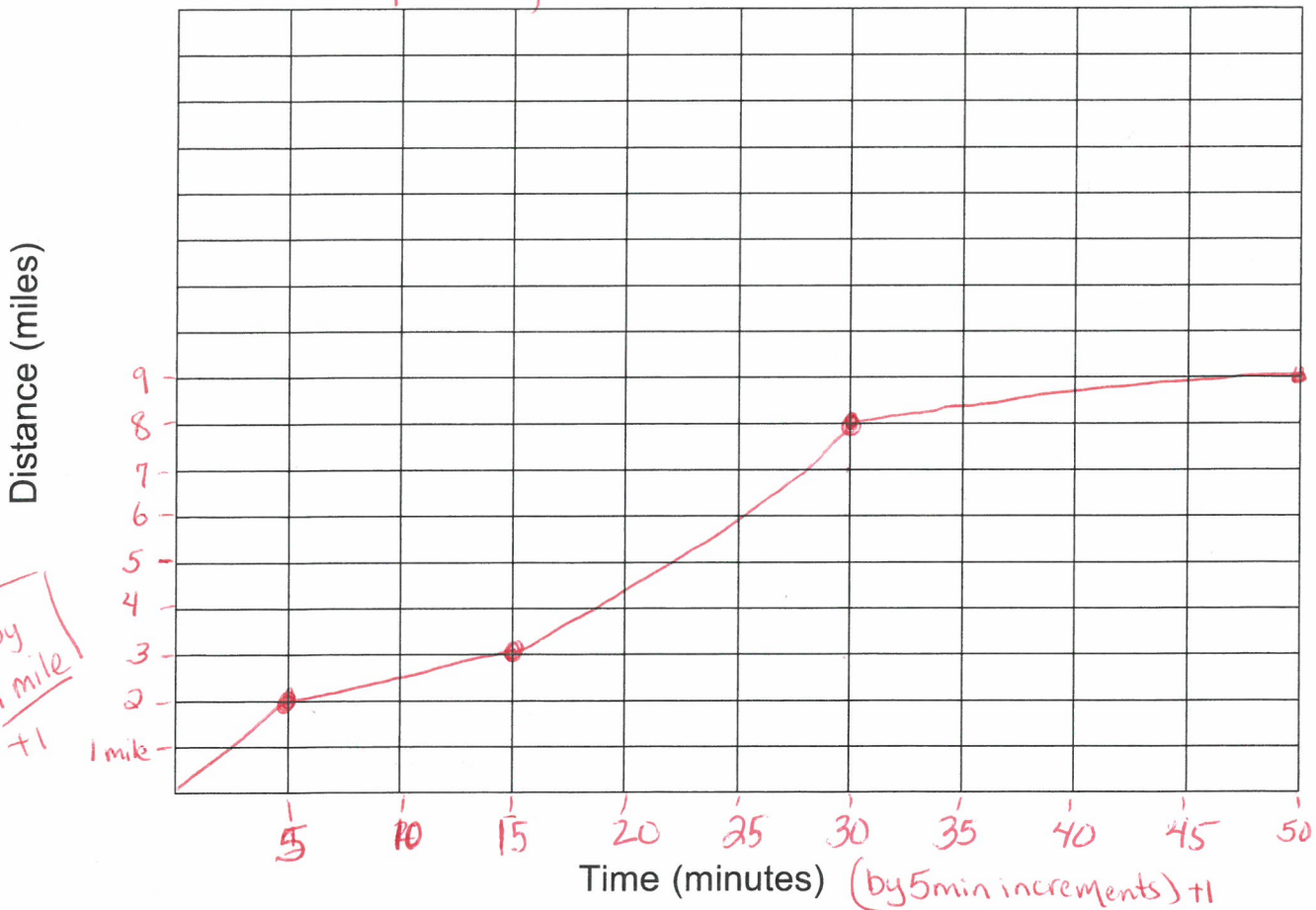
*+3pts*  
*answer is 6*

36. A  B C D  
37.  A B C D

Station 8 *9pts*

38. *+1 per dot, +1 draw line*

*Entire graph = 7pts*



*by 1 mile / +1*

39. How long did it take Ethan to get to his friend's house?

*50 min*

40. How far away was his friend's house?

*9 miles*

**Station 5**

18pts

19. 23
20. 200 grams (2pts)
21. 1 pt each

Color	Number of pieces
Blue	3
Green	1
Red	8
White	4
Yellow	2

Number of studs	Number of pieces
4	3
6	3
8	10
12	2

22. 4-12
23. 3 (must have both #'s)
24. Blue
25. green + yellow
26. 6 (2pts)

**Station 6**

8pts

27. A B C
28. A B C
29. A B C D
30. A B C D
31. A B C D
32. A B C D
33. A B C D
34. A B C

# Station 1



1. Roll the die at this station 20 times and record the result from each roll in the table on your answer sheet.
2. After you collect your data, create a bar graph to report your data. Be sure to label the axes and give the graph a title.



## Station 2

Mr. Aaron's students collected this data while watching a tree seedling grow over several days:

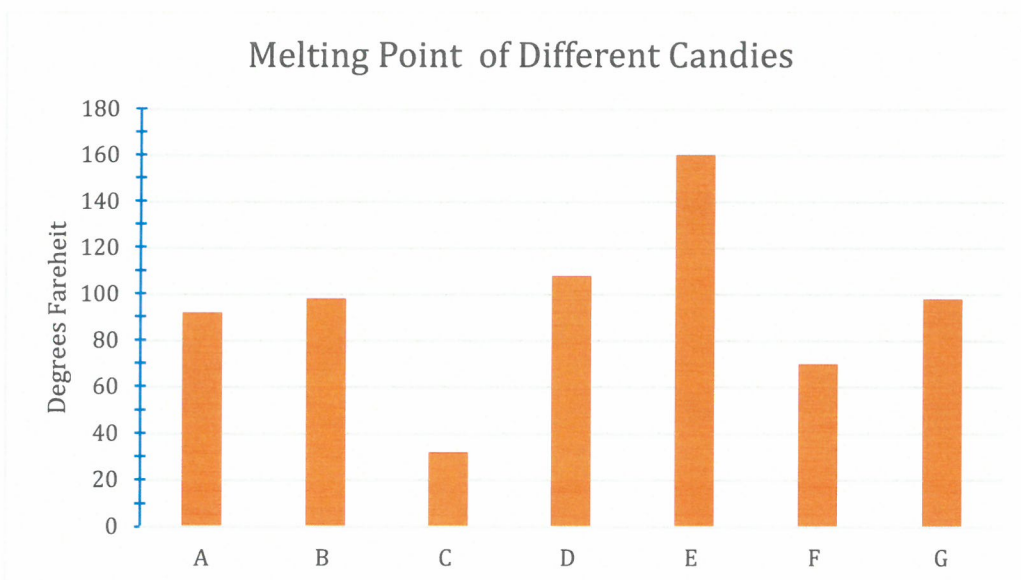
Day	Height (cm)	Temperature (degrees C)
1	1	20
2	2	20.6
3	3.5	22.8
4	3.5	26.1
5	4.5	26.1
8	7	25
9	8	21.1
10	8.5	24.4
11	8.5	22.8
12	9	21.7

- The students did not collect data over the weekend, but based on the data, what do you predict the measurement would have been on Day 6?
  - 4.0 cm
  - 4.5 cm
  - 6.0 cm
  - 7.0 cm
- Did the plant grow more between Days 1 & 4 or Days 5 & 9?
- Which of the following statements is TRUE based on the data?
  - The temperature increased every day during the experiment
  - It was 5 degrees colder on Day 8 than on Day 1
  - Day 5 was the hottest day during the experiment
  - It was hotter on Day 3 than on Day 10





## Station 2 – page 2



The Olympiad Candy Company is testing out some new recipes for their “Won’t Melt on Your Fingers” line of candy

6. Foods that melt between  $85^{\circ}$  and  $100^{\circ}$  are solids at room temperature but will melt in your mouth. Which candies fit in to this category? List all that apply.
7. Body Temperature is  $98.6^{\circ}\text{F}$ . Predict which of these substances would melt in your hand. List all that apply.
8. They plan to advertise their candy at a local science festival in May when the daytime temperature is usually about  $75^{\circ}\text{F}$ . Which of these candies would melt on the table at that temperature?



# Station 3

This table shows the number of students who participate in different activities at West Creek Elementary School.

Activity	Number of students
football	39
volleyball	34
soccer	51
gymnastics	28
music	25
baseball	21
dance	17
martial arts	20

9. Liv wants to show this information in a bar graph. Which scale is the most reasonable for her to use?
  - a. A scale from 0 to 40 with an interval of 2
  - b. A scale from 0 to 50 with an interval of 5
  - c. A scale from 0 to 60 with an interval of 10
  - d. A scale from 0 to 100 with an interval of 25
10. Which of the following statements is true based on this data?
  - a. More students like music than any other activity
  - b. Baseball is the least popular activity
  - c. More than twice as many people like soccer compared to martial arts
  - d. Half as many people like volleyball compared to dance
11. What kind of graph would be the best way to show this data set?

+++++

12. Starting on a Monday with 3 laps, each day for 4 days (including Monday) Bella runs 2 more times around the track than the day before. Plot the points and draw the line showing Bella's running pattern for the week.
13. If Bella continued on her training pattern, how many laps would she be running by Sunday?



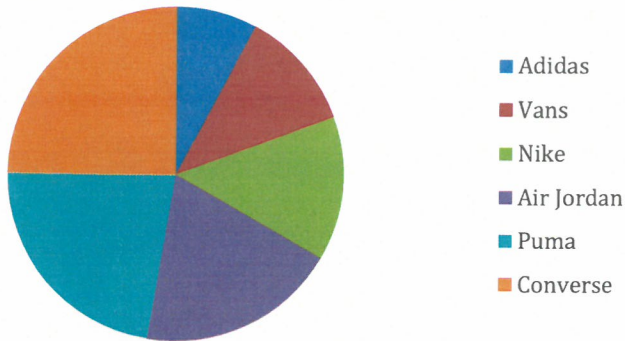
# Station 4

Soles with Soul shoe store tracked how many pairs of sneakers it sold in one week in the table below.

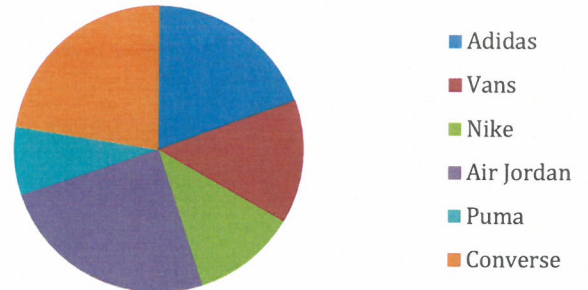
Brand	# of Pairs Sold
Adidas	25
Vans	18
Nike	32
Air Jordan	15
Puma	29
Converse	10

14. Which of the graphs below matches this data?

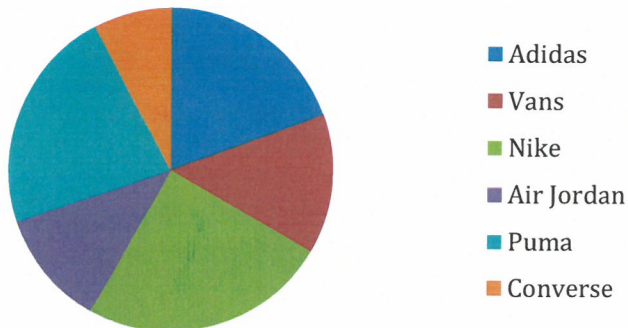
**Graph A** # of Pairs of Sneakers Sold



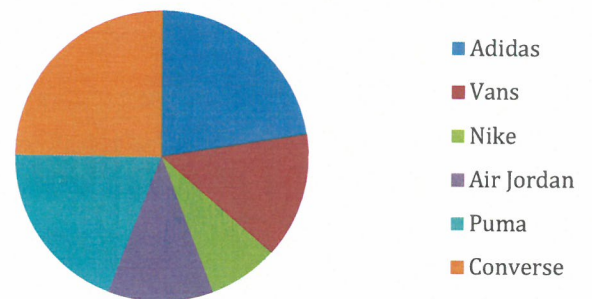
**Graph B** # of Pairs of Sneakers Sold



**Graph C** # of Pairs of Sneakers Sold



**Graph D** # of Pairs of Sneakers Sold





## Station 4 – page 2



You are a wild bean wrangler in Chili State Park. Your job is to collect data on the number of wild beans living in Stew Forest.

15. What is the total number of your sample size in this bag?
16. The white beans make up what percent of the total beans in the bag?

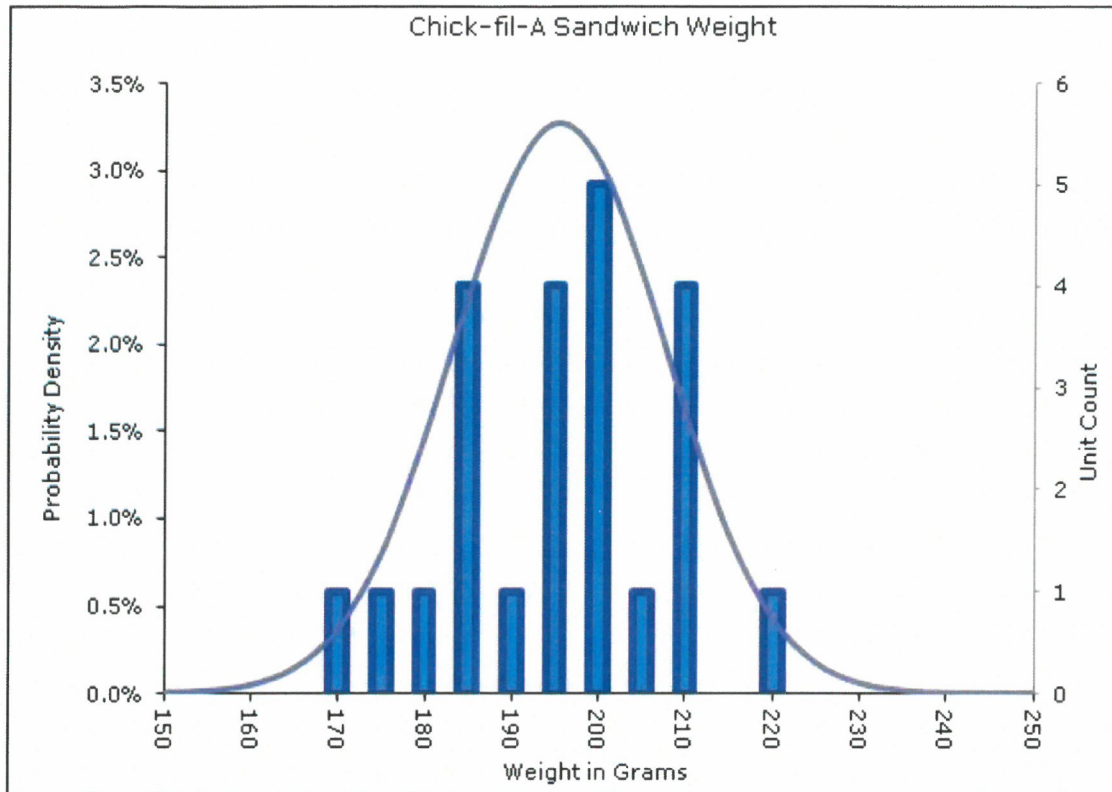


17. Allie and Sophia are super-excited, they both found watermelons that are the exact same size! Allie eats  $\frac{2}{3}$  of her watermelon, Sophia eats  $\frac{5}{8}$  of her watermelon. Who ate more?
18. Rebecca has 24 cupcakes. She has frosted  $\frac{3}{4}$  of them. How many does she have left to frost?





# Station 5



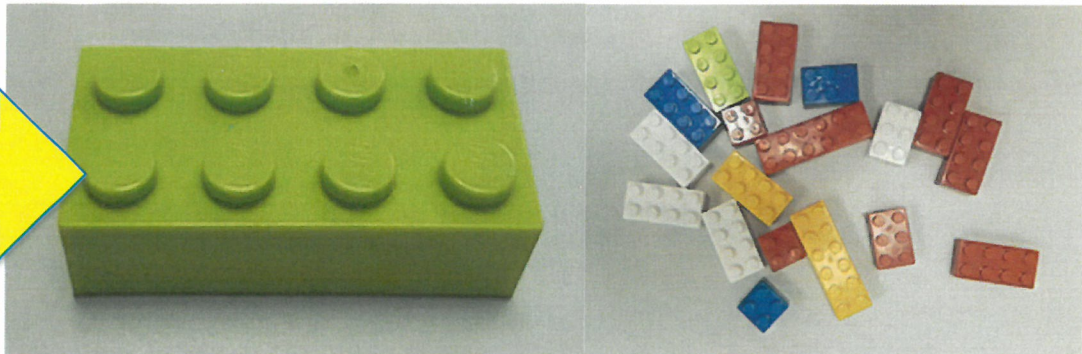
Source: [http://www.restaurantstats.com/?page\\_id=212](http://www.restaurantstats.com/?page_id=212)

Aaron weighed each of the Chick-fil-a sandwiches that he ate this year before he ate them. He graphed how much each one weighed on the graph above.

19. How many sandwiches did he eat in total?
20. What weight is the mode of this data set?



## Station 5 – page 2

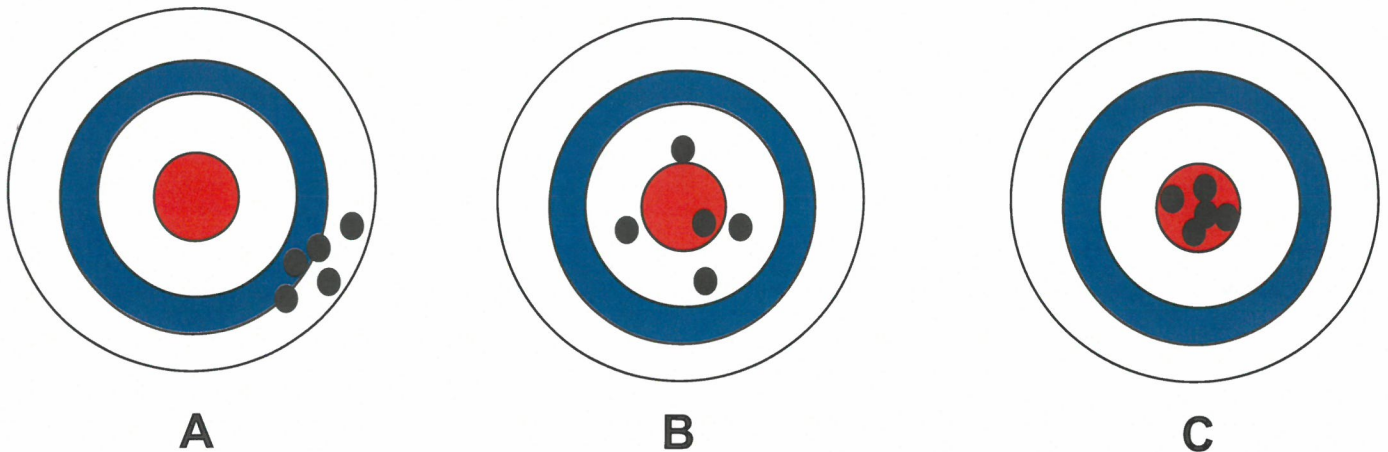


A round bump on top of a Lego is called a “stud.” We can name Lego bricks by the number of studs or by their color. The Lego pieces at your station should be exactly the same as the picture above.

21. Fill in the chart on your answer sheet about these pieces.
22. What is the median number of pieces for a color in this set of Legos?
23. What is the range for the number of studs per piece?
24. What color matches the answer above?
25. Is the total number of studs higher for white or green + yellow added together?
26. What is the mean number of studs per piece for the blue Legos? (this is not on chart)



## Station 6

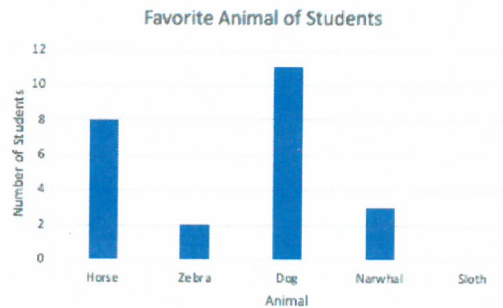


27. Which bullseye has high accuracy and low precision?
28. Which bullseye has Low accuracy & high precision?
29. Which bullseye has high accuracy & high precision?
30. Caroline is conducting an experiment. Her first test gives her a yield of 5.4 grams. Her second test gives her a yield of 1.1 grams. Her third test gives her a yield of 8.5 grams. On average, her yield is 5.0 grams, which is close to the known yield of 5.1 grams of substance. Which of the following are true?
- Her results are accurate but not precise.
  - Her results are precise but not accurate.
  - Her results are both accurate and precise.
  - Her results are neither accurate nor precise.
31. Who is more accurate when measuring a book that has a true length of 17.0 cm?
- Susan: 17.0 cm, 16.0 cm, 18.0 cm, 15.0 cm
  - Amy: 15.5 cm, 15.0 cm, 15.2 cm, 15.3 cm
32. Which set is the most precise?
- 18.2cm , 18.4cm , 18.3cm
  - 17.9cm , 18.3cm , 18.8cm
  - 16.8cm , 17.2cm , 19.4cm
33. Given this data set: -3, 5, 10, 12, 14, 18, 24, 26, 60, which of the following is true?
- The value -3 is the only outlier
  - The value 60 is the only outlier
  - No outliers exist
  - Multiple outliers exist
34. Which measure of central tendency is most affected by outliers?
- Mean
  - Median
  - Mode



# Station 7

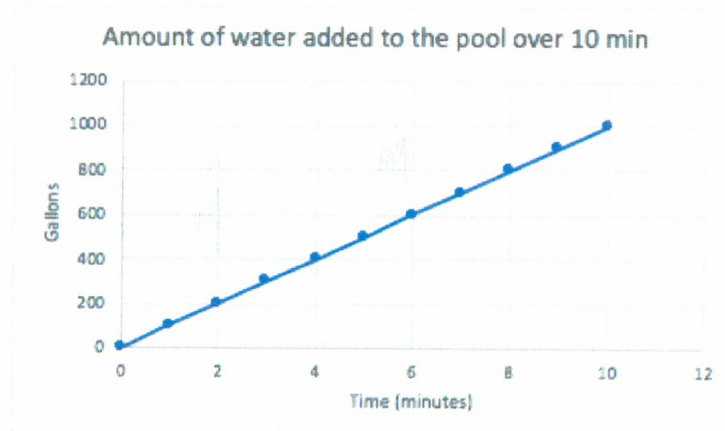
Ashwini is making a bar graph to show the favorite animal for each student in her class.



There are 30 students in Ashwini's class. All of the students chose one of the choices listed in the graph.

35. Complete the bar graph on your answer sheet to show how many students chose the Sloth as their favorite animal.

Zach collected data on how long it took to fill his pool at the beginning of the summer. He graphed it below.



36. How many gallons of water filled the pool per minute?
- 50
  - 100
  - 150
  - 200
37. He decided to change the scale on the y-axis to 100, 200, 300, 400, etc. How will this affect the line that he graphed?
- The new line will be steeper
  - The new line will curve upward
  - The new line will be less steep
  - The new line will curve downward





# Station 8

Ethan rode his bike to his friend's house. This information describes his trip:

- First the first 5 minutes he rode really fast and rode 2 miles
- Then he got tired and for the next 10 minutes, he only rode 1 more mile
- He got some energy back and in the next 15 min, he went 5 miles
- The last part was all uphill and he rode 1 mile in 20 minutes.

38. On your answer sheet, graph Ethan's trip.

39. How long did it take Ethan to get to his friend's house?

40. How far away was his friend's house?

