

ALL ABOUT US

Graphing Activities

High Knees Challenge

How many "High Knees" can you do in 15 seconds

Raw Data:

24	15	32	17	36	20	18	24
15	12	26	28	40	36	18	20
19	20						

Write the data in order from **least to greatest**:

12, 15, 15, 17, 18, 18

20, 21, 21, 24, 26, 28

36, 40

Make a **Stem and Leaf Plot**:

Stem	Leaves
0	
1	2 5 5 7 8 8 9
2	0 0 1 4 4 6 8
3	2 6 6
4	
5	

KEY: 1 | 4 = 14



Cover up your data above and challenge yourself to answer these questions by only looking at the stem-and-leaf plot:

1. What is the difference between the highest and lowest number of high knees?

$40 - 12 = 28$

2. How many students completed more than "high knees"?

none

3. How many total "high knees" were completed by the 5 students who completed the most "high knees" in your class?

4th
GRADE

Students collect, organize, and analyze data about their class!

Jump in 10

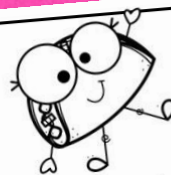
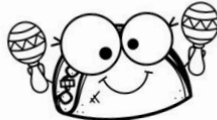
How many times can you jump in 10 seconds?

Raw Data:

Make a Stem and Leaf Plot:

Stem	Leaves
0	
1	
2	
3	
4	
5	

KEY: 1 | 4 = 14



Write the data in order from least to greatest:

Ready, Set, Go!

How many Jumping Jacks can you do in 30 seconds?

Raw Data:

Make a Stem and Leaf Plot:

Stem	Leaves
0	
1	
2	
3	
4	



Write the data in order from least to greatest:

Cover up your data above and challenge your partner to answer these questions by only looking at the stem-and-leaf plot:

1. What is the difference between the highest and lowest number of jumping jacks?
2. How many students completed more than 10 jumping jacks?

Includes activities for

- Stem-and-Leaf Plots
- Frequency Tables
- Dot Plots

We Love Our Pets

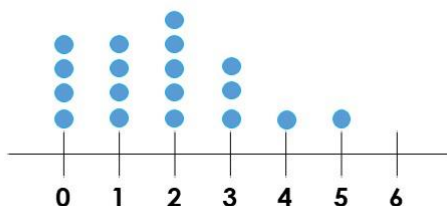
How many pets do you have?

Raw Data:

2	1	0	3	5	2	1	0
3	2	1	4	0	1	2	2
0	3						



Make a **Dot Plot**:



Make a **frequency table** with your data:

0	1	2	3	4	5	6
4	4	5	3	1	1	0

1. How many students have 4 or more pets?

2

2. What fraction of the class has 4 or more pets?

$\frac{2}{18}$

3. What fraction of the class has 2 or fewer pets?

$\frac{13}{18}$

4. What is the difference between the greatest number of pets and fewest number of pets owned by students in your class?

$5 - 0 = 5$

No-Prep Activities

Just Print and Go!

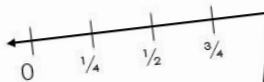
Pick a Number, Any Number

1 2 3 4 5 6 7 8

Pick a number between 1 and 8. That number will be your numerator. Your denominator will be 4. Record every student's fraction below.

Raw Data:

Make a
Dot Plot



Make a frequency table with your data:

$\frac{1}{4}$	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{4}{4}$	$\frac{5}{4}$	$\frac{6}{4}$	$\frac{7}{4}$	$\frac{8}{4}$

GRAPHS

About our CLASS

4th Grade
DOT PLOTS
STEM AND LEAF PLOTS
FREQUENCY TABLES



Meaningful Practice

Engaging Activities to Build Skills that Students will Remember

Happy About Height

Measure how tall you are to the nearest $\frac{1}{4}$ foot.
If you have 1 ft. square floor tiles, you can lay on the ground and have a classmate use the tiles to measure your height.

Raw Data:

Write the data in order

Stem	Leaves
3	
4	
5	

KEY: $1\frac{3}{4} = 1\frac{3}{4}$

*This is how you record 4 ft

Cover up your data above and challenge yourself to answer these questions using a stem-and-leaf plot:

1. What is the difference in height between the shortest and tallest student?
2. How many students have a height that is less than 5 feet?



Snap in 10

How many times can you snap in 10 seconds?

Raw Data:



Make a **Dot plot** with your data. Cover up your data to answer these questions by only looking at the dot plot.

1. What is the difference between the highest and lowest number of snaps?
2. How many students completed fewer than 25 snaps?
3. How can you tell the number of people who completed 10 or more snaps by looking at your dot plot?



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Fun Real Life Activities

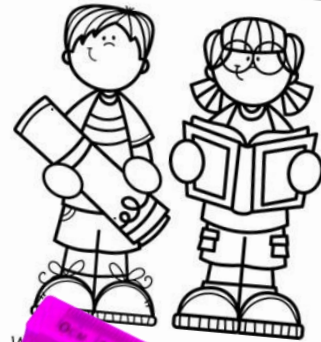
Measure Me

Measure the distance from your wrist to the tip of your longest finger to the nearest half cm.

Raw Data:

Order your Data from **least to greatest**:

Make a Dot Plot:



1. What measurement occurred the most?

How many students had a measurement of 10 cm or less?

How many students had a measurement of 16 1/2 cm or more?

Stinky Feet

Record your classmates' shoe sizes in the frequency table.

Frequency table:

Shoe Size	2	2½	3	3½	4	4½	5	5½	6	6½	7
Tallies											
Total											

Make a Dot Plot:



1. What shoe size occurred the most in your class?

2. How many students wore a shoe size of 4 or larger?

3. How many students wore a shoe size of 5½ or smaller?

4. What is the smallest shoe size worn by someone in your class?

5. What is the largest shoe size worn by someone in your class?

Marvel Math.com

About the Author

This resource was created by Melissa Johnson, who has 16 years of k-10 teaching experience and a masters degree in Mathematics Education. Her resources build conceptual understanding, make connections between math topics and engage students in the mathematics they are learning.



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