

Be sure you have your

TEST (do not turn it in- I will collect it)

Math Folder

Math notebook

Tape Module 4 into your notebook

What is Statistics?

Statistics

- **The branch of mathematics dealing with the collection, organization, analysis, interpretation and presentation of data.**

What is a Statistical Question?

- Answered by collections data
- Expect variability in the data
- Can visually display using graphs

"How many minutes do 6th grade students typically spend on homework each week?" Is a statistical question

"How Much time did Conrad spend on homework last night?" Is not a statistical question

⋮

Statistical or Not?

1. Who was the first president of the United States?
no - because there is only 1 answer
2. How much time do students in my school spend on the internet each night?
yes - because lots of people
3. What is the height of the tallest waterslide at Wild Rides Water Park?
no - because only 1 slide at 1 time
4. What are the cabin rental prices for each of the state parks in Kentucky?
yes - because lot of Parks

Data

A collection of facts, such as numbers, words, measurements, observations or even just descriptions of things.

Mean, Median, Mode, Range

(Measures of Center)

<https://www.youtube.com/watch?v=OvknMsRhGvg>

Mean:

Average $15.\overline{16}$

91

1. Add up all of the numbers
2. Divide by how many number

12 > 30
18
14 > 31
17
12 > 30
18 91

12, 18, 14, 17, 12, 18

$91 \div 6$
 $15.\overline{16}$
 $6 \overline{) 91.00}$
 $\underline{-64}$
27
 $\underline{-30}$
-3
 $\underline{-18}$
9
 $\underline{-12}$
-3
 $\underline{-6}$
3
 $\underline{-6}$
0

4

Median:

Middle **15.5**

1. Order from Least to Greatest
2. Go from ^{front} to back until you get to the number in the middle
3. If two in the fiddle, find the mean

~~12, 12, 14, 17, 18, 18~~

12, 18, 14, 17, 12, 18

$$\begin{array}{r} 14 \\ + 17 \\ \hline 31 \\ 31 \div 2 = 15.5 \end{array}$$

Mode:

Most

1. Find the number that appears the most
2. Can have more than one or none

18 and 12

12, 18, 14, 17, 12, 18

Range:

Difference

1. Find the difference between the largest and the smallest number

$$18 - 12 = 6$$

12, 18, 14, 17, 12, 18