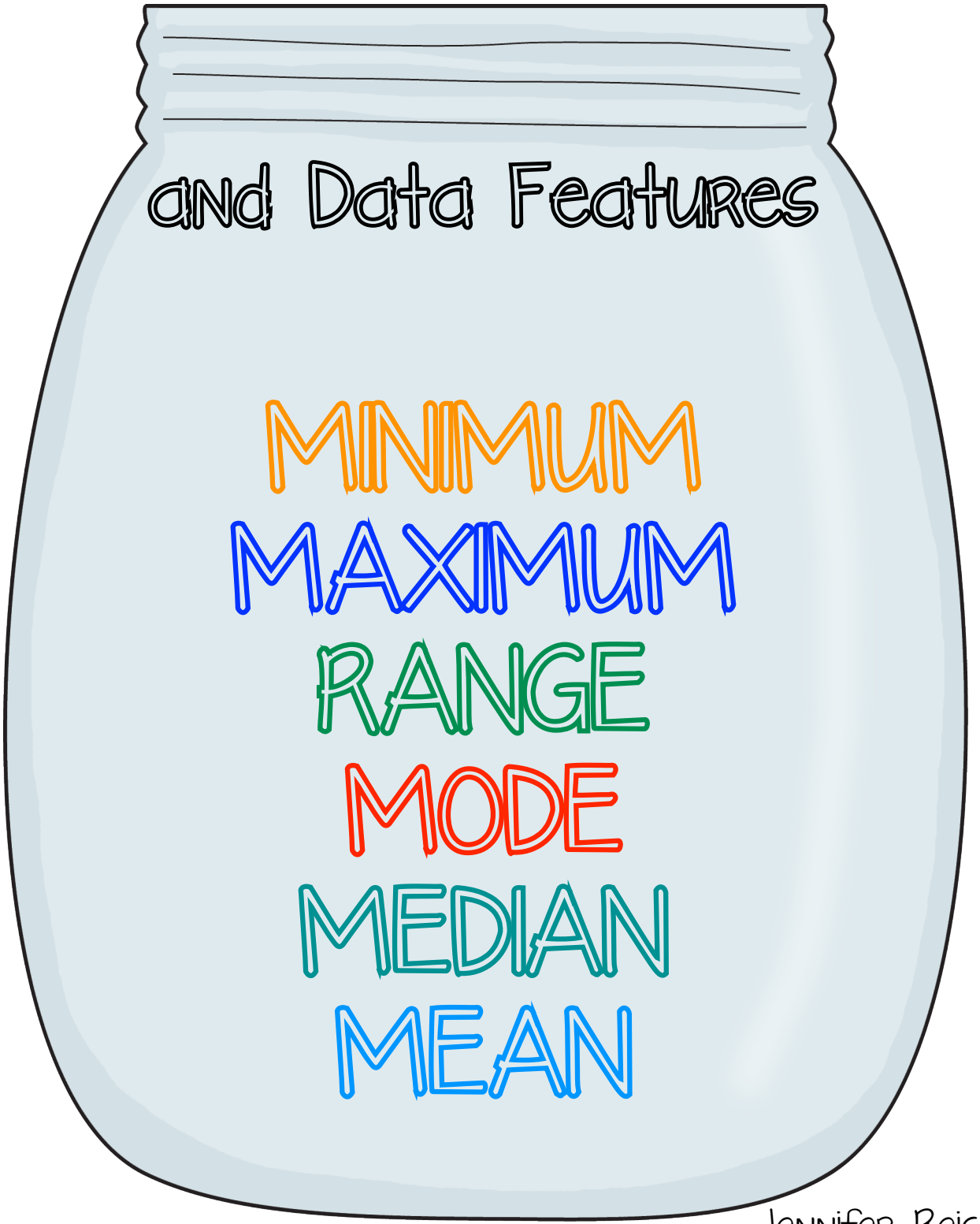
UPPER ELEMENTARY
ESTIMATION JAR



Jennifer Reis

TEACHER Tips

- Start by showing students the EMPTY jar. Tell them what you plan to put in it. Have students GUESS how many will fit in the jar.

- Once the jar is filled, show the students the jar. Let them hold it, count around the edges, count rows, etc. Ask them to ESTIMATE how many are in the jar.

- Have students write their estimates on the jar estimate sheets. (page 3)

- As a group, view everyone's estimates and list the class data. (pages 3-5)

- Tape the estimates up from least to greatest. Teach the students how to find the MEDIAN by doing the "Slash Dance." (Cross out a minimum, then a maximum, then a minimum, then a maximum....until there are only 1-2 numbers left.)

- Figure out data features for class estimates. Count the items together. As the group counts, allow students to revise their estimates. (If using this activity as a contest/game, only the first written estimate counts.)

- Sample items to fill the jar: candy corn, jelly beans, rubber bands, wrapped candy, erasers, M&Ms, small items of different sizes - this activity can be done many times. I usually make it into a contest. The student with the closest estimate (without going over) gets to give each person in our class one item from the jar and then as a prize gets to keep the rest IF his or her calculations are correct! :)

- ADDITIONAL PRACTICE – Pass out reference sheet. Have students select a question that they would like to survey. (pages 6-8)

- Have fun!

For more math activities, visit my store:

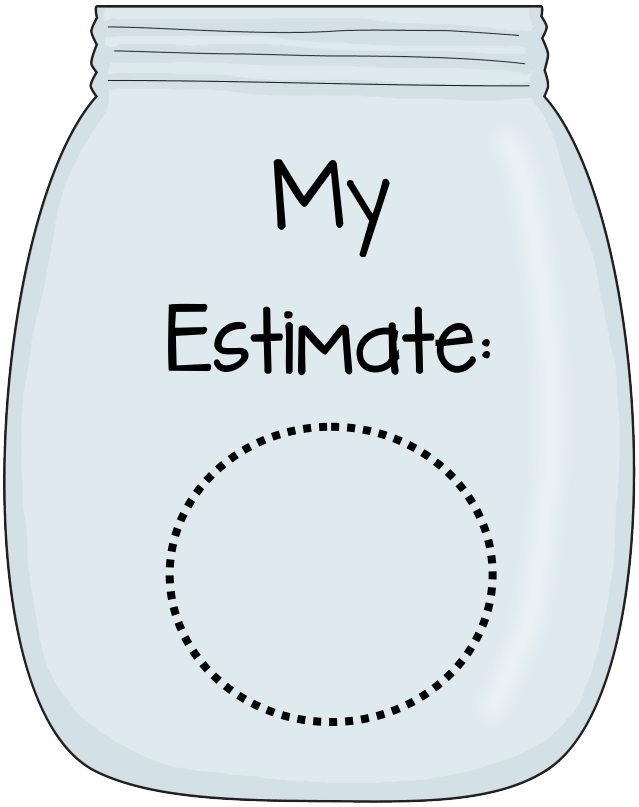
http://www.teacherspayteachers.com/Store/The-Upper-Elementary-Classroom

Be sure to FOLLOW me for more FREEBIES too!

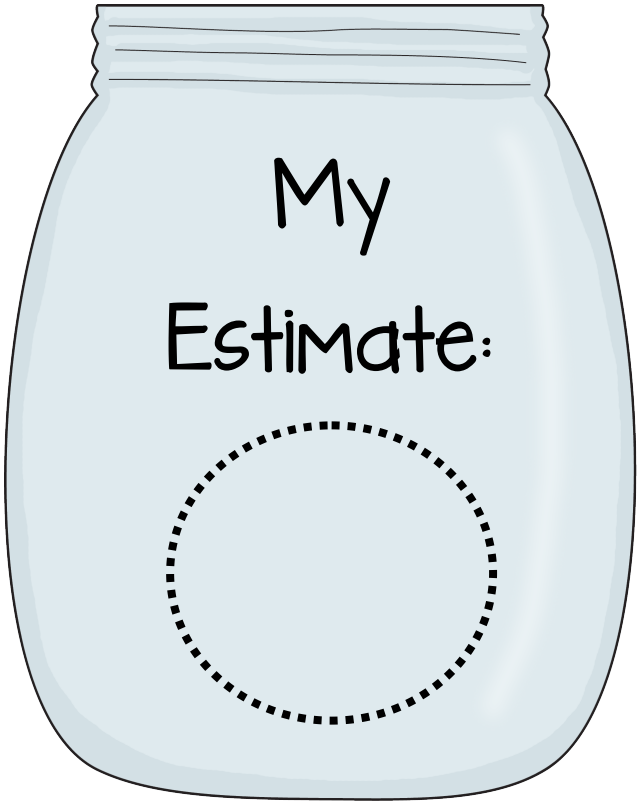
Have a great school year!

-Jen

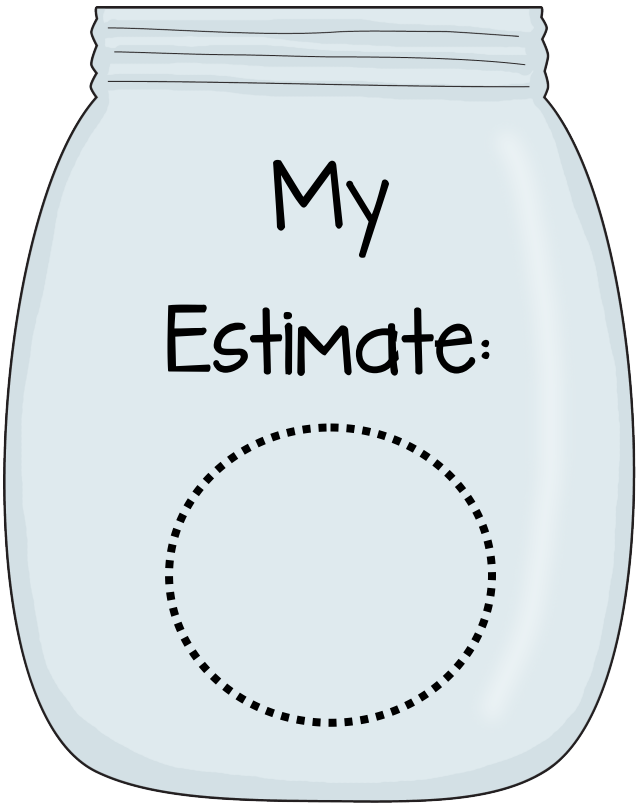
Name:



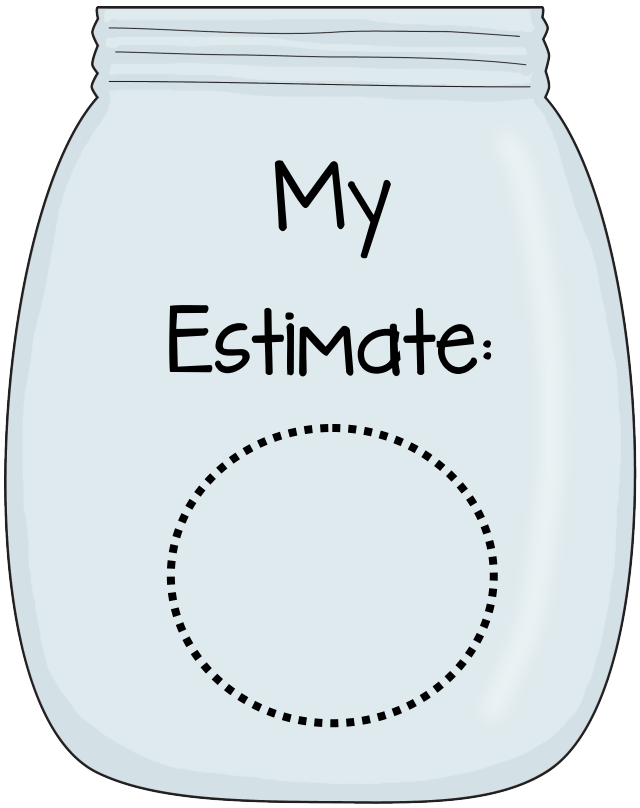
Name:



Name:



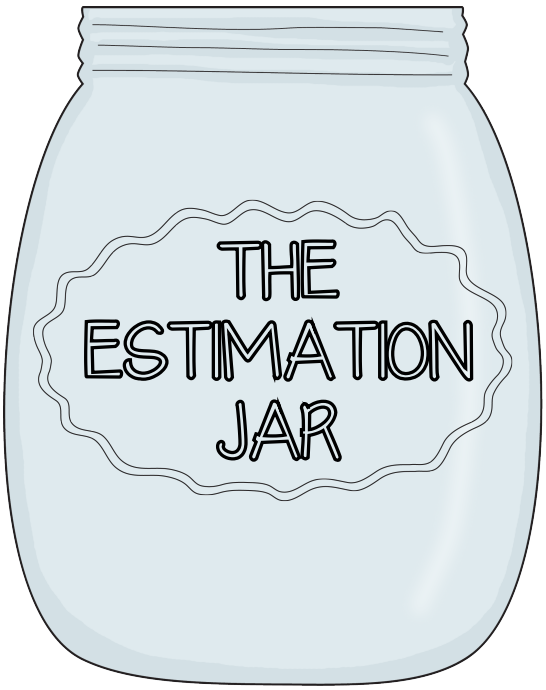
Name:



My Name:_____

★ I **guess** there are _____

_____ in the jar.



★ Now that I have more information, I **estimate** there are _____ _____ in the estimation jar because_____

_____

★What is the difference between a GUESS and an ESTIMATE?★

_____

_____

★A list of our **CLASS** estimates:

_____

_____

_____

List the class data from ★**LEAST to GREATEST**★:

_____

_____

_____

Find the following data features for everybody's estimates:

★**MINIMUM** (the least) _____

★**MAXIMUM** (the greatest) _____

★**MODE** (the most frequent estimate) _____

★**RANGE** (maximum - minimum) _____

★**MEDIAN** (the middle number) _____

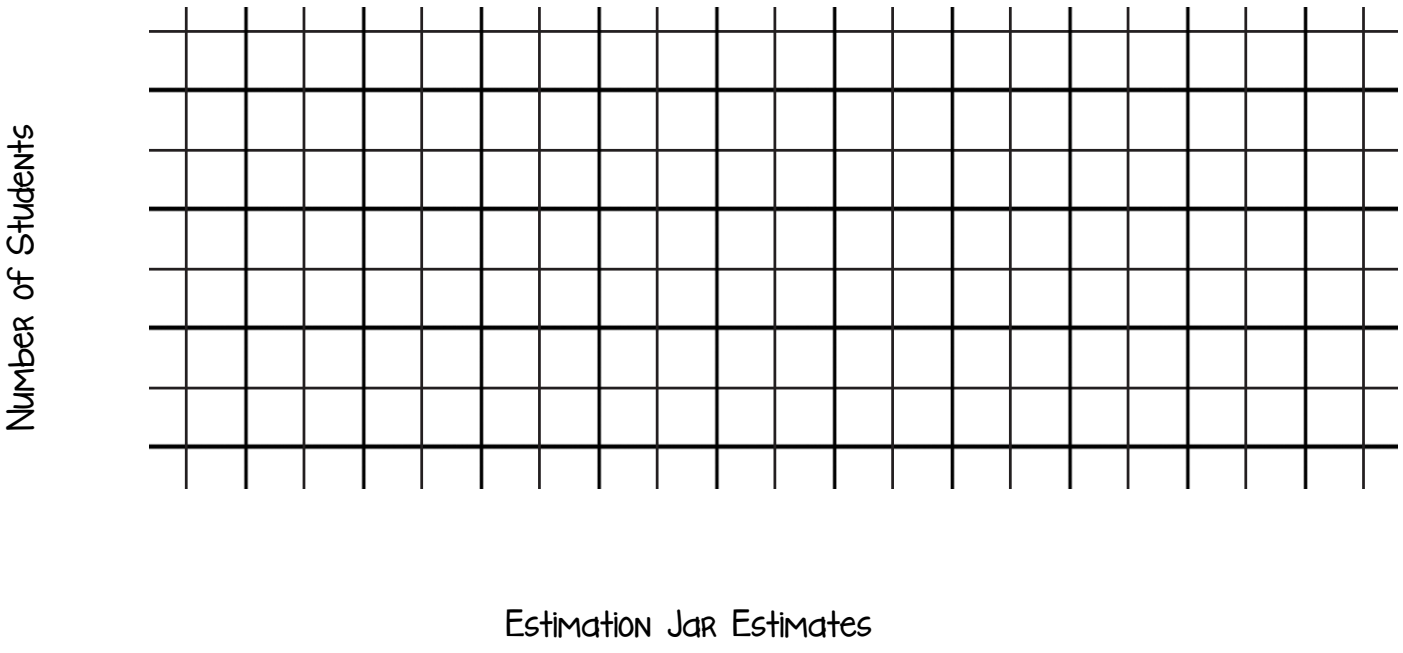
★**MEAN** (add all of the estimates together, then divide the sum by the total number of estimates.)

_____

★**GRAPH** the class data.

_____

Graph Title



REFERENCE SHEET

★**MINIMUM** - the least

★**MAXIMUM** - the greatest

★**MODE** - the most frequent number

★**RANGE** - (maximum - minimum)

★**MEDIAN** - The MIDDLE number. List numbers from least to greatest. Then, DO THE SLASH DANCE!

★**MEAN** - (Also called "average.") Add all of the numbers together. Then divide that sum by the total number of numbers.

A Survey Example:

Nine kids were asked how many books they read last month. This is what they said:

# of books	# of kids
3	II
4	I
6	I
7	III
8	I
9	I

☆ **MINIMUM** number of books read - 3 books

☆ **MAXIMUM** number of books read - 9 books

☆ **MODE** - the most frequent number of books read - 7 books

☆ **RANGE** - (maximum - minimum)

9 - 3 = 6 books

☆ **MEDIAN** - The MIDDLE number.

example: ~~3, 3, 4, 6~~, 7, ~~7, 7, 8, 9~~

☆ **MEAN** - 3+3+4+6+7+7+7+8+9 = 54

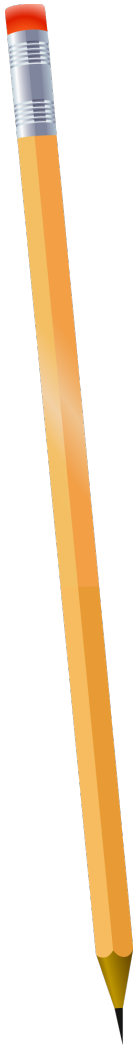
(9 numbers were added together, so divide the sum by 9.) 54 / 9 = 6 books

Name:

☆ YOUR SURVEY ☆

Think of a "How Many" question that you can ask your classmates. List the question you want to survey below:

_____



Keep track of your results here:

# of students	# of _____

☆ YOUR RESULTS ☆

List your data from least to greatest:

_____

★Using your data, find the following data features:

What is the **MINIMUM**? _____

What is the **MAXIMUM**? _____

What is the **RANGE**? _____

What is the **MODE**? _____

What is the **MEDIAN**? _____

What is the **MEAN**? _____

★Graph your data.