Fruit Loops/Cheerios Activity Name $\qquad$

Class Data

| Student <br> $\#$ | Cereal <br> $\#$ |
| :---: | :---: |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |
| 21 |  |
| 22 |  |
| 23 |  |
| 24 |  |
| 25 |  |
| 26 |  |
| 27 |  |
| 28 |  |
| 29 |  |
| 30 |  |
|  |  |
| 2 |  |
| 2 |  |

Query: How many Fruit Loops/Cheerios are there in a "handful"?

Materials: Fruit Loops or Cheerios, paper towels
Activity: 1. Each student grabs a handful of Fruit Loops/Cheerios and counts them.
2. Record the class data.


Workup: Using your class data:

1. Find the measures of central tendency.

$$
\text { Mean }=\ldots \text { Mode }=\ldots \text { Median }=
$$

$\qquad$
2. Which measure of central tendency do you feel best represents the number of pieces of cereal in a handful for this class? Explain.
3. The Principal, a former basketball player, comes into class and takes a handful. With his entry, the mean increases. What can be said about the number of cereal pieces in the Principal's handful?
4. Peggy Sue comes into class and grabs a handful. With her entry, the median does not change. What can be said about the number of cereal pieces in Peggy Sue's handful?
5. Mrs. Smith, the librarian, and her pre-school daughter, Ashley, come in and grab handfuls. When Mrs. Smith's entry is added, the median decreases. What can be said about the number of cereal pieces in Mrs. Smith's handful?
6. Little Ashley's entry is added. Ashley is a very small little girl. With her entry, what would you predict would happen to the mean?

Again, with Ashley's entry, what would you predict would happen to the median?
7. Specify the five statistical summary for your class data:

$$
\begin{aligned}
& \operatorname{minimum}= \\
& 1^{\text {st }} \text { quartile }= \\
& 3^{\text {rd }} \text { quartile }= \\
& \hline
\end{aligned}
$$

$$
\text { maximum }=
$$

$\qquad$

$$
2^{\text {nd }} \text { quartile }=
$$

$\qquad$
8. Construct a box-and-whisker plot for the class data.

