## **Standard**: MA19.6.23 (6<sup>th</sup> grade)

Calculate, interpret, and compare measures of center (mean, median, mode) and variability (range and interquartile range) in real-world data sets.

## **Cup Stacking Activity**

Name \_\_\_\_\_

1. Everyone gets one chance to practice stacking the cups. Then have your partner time how long it takes you to stack the 6 cups and return them to the unstacked position. Round to the nearest second. Switch roles.

**2.** On the board list your time.

## **3. Classroom Stacking Times:**

4. Find the classroom mean stacking time \_\_\_\_\_

Show work here:

5. Find the median stacking time: \_\_\_\_\_

Median: middle number in a group of numbers that have been sorted least to greatest.

Numbers sorted least to greatest:

6. Find the mode \_\_\_\_\_

Mode: the value that appears the most often.

7. Find the range \_\_\_\_\_

Range: Difference between the largest and smallest values.

Show work here:

8. Find the IQR (interquartile range: Q<sub>3</sub>-Q<sub>1</sub>) \_\_\_\_\_

IQR (Interquartile range) measures the difference between  $Q_3$  and  $Q_1$ 

 $Q_1\!\!:\!middle$  number between minimum and median

Q<sub>3</sub>: middle number between maximum and median

Show work here: