

Materials Needed:

Drawing paper, washers, colored markers, ruler

Instructions:

Divide into pairs.

Place the sheet of paper on the desk. Place a washer behind the line and flick the washer with your finger, trying to get it as close to the target as possible. Mark the center of the washer with a dot and then repeat until there are at least five marks on the paper.

Now, let the other partner flick the washer. Mark the centers with a different color (or perhaps an x instead of a dot).

1. Measure and record the distance in centimeters (with one decimal place) from the center of the target to the center of each mark. Record results for both partners in the x row. Then complete the tables.

a. First person's name: _____

Washer	1	2	3	4	5	6	Total
x							
$x - \bar{x}$							
$(x - \bar{x})^2$							

b. Second person's name: _____

Washer	1	2	3	4	5	6	Total
x							
$x - \bar{x}$							
$(x - \bar{x})^2$							

2. Summarize the data for each partner.

Name		
Sample size		
Mean		
Median		
Variation		
Variance		
Standard Deviation		

3. Which person was closer to the center of the target? Which statistic are you using to answer this question?

4. Which person had the more consistent throws? Which statistic are you using to answer this question?

5. For each variable, identify the type of data (qualitative or quantitative) and the level of measurement (nominal, ordinal, interval, ratio). For any quantitative variables, identify whether they are discrete or continuous and give the units.

Variable	Type of Data	Level	Discrete / Continuous	Units
Names of partners				
Distance from center				