Name _____

Penny Drop

While cleaning my room, I found two pitchers of water. One was labeled A and the other B. Are they the same? Can I combine them? Let's experiment to find if there is a difference in the number of drops of Solution A and the number of drops of Solution B that can be placed on a penny?

Directions:

1. Place a paper towel on a level surface. Place two pennies heads-up on the towel.
2. You or your partner should label one cup "A" and the other "B." Pour some of Solution A into Cup A and some of Solution B into Cup B.
3. Fill the dropper with solution from Cup A.
4. Hold the dropper straight up over the center of one of the pennies.
5. Keep the end of the dropper one penny diameter from the surface of the penny.
6. Drop the solution onto the penny, one drop at a time. Count the drops needed to cause the solution to run over the edge of the penny. The drop that makes the solution run off the penny should be counted.
7. Record the number.
8. Rinse and clear the dropper. Run a second trial with solution from Cup B. Record the number.

Solution A trial: Number of drops _____

Solution B trial: Number of drops _____

Let's make a box-and-whisker plot with the data from Solution A together.

Solution A	In Order		Solution B	In Order

Solution A

Median = _____

Low Extreme (Minimum) = _____

High Extreme (Maximum = _____

Lower Quartile = _____

Upper Quartile = _____

Solution B

Median = _____

Low Extreme (Minimum) = _____

High Extreme (Maximum = _____

Lower Quartile = _____

Upper Quartile = _____

Make box-and-whisker plot here:

Are the solutions alike? Why or why not?