

Name _____

Penny Lab

Predict: How many drops of water can your penny hold? _____

Uncontrolled Trial

Your goal is to try to fit as many drops of water on a penny as possible. Use any method you wish. Each group member should perform this test with his or her own penny. Stop counting drops as soon as any water falls off the penny. Record the results from each group member in the table below. Repeat a second time.

Describe the methods your group used in this trial. On what part of the penny did you place the drops? Heads or tails? Did you use large or small drops? Did you hold the dropper straight or angled? How high did you hold the dropper from the penny?

Name	Drops Test 1	Drops Test 2	Description of Methods

How similar were your results? Identify the largest and smallest number of drops. Subtract the smallest number from the largest. The result is called the **range** of your data. Show your calculations below. Circle the **range** of your data.

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Controlled Trial

Your goal remains the same. However, in this trial each group member will use the same method for placing drops on their penny. Each group member should test this method twice. Record the results for your entire group below.

Name	Drops Test 1	Drops Test 2

Describe the method your group used. Why did you choose this method?

Calculate the **range** of your data in the controlled trial. (Largest number – Smallest number)

How did your group's results in the controlled trial differ from the results of your uncontrolled trial?

Observations and Conclusions

Describe the appearance of the water on your penny just before it spilled off.

Based on what you know about the unique properties of water, why do you think so much water was able to remain on the surface of the penny?