

Name _____

Period _____

Using Inertia for Profit and Fun

Purpose:

To explore and understand the concept of inertia.

Required:

50 pennies

Procedure:

Start with 5 pennies. With your arm bent, and your hand touching your shoulder, palm up, place the pennies in a stack on your elbow. Now bring the same hand down quickly and try to catch the stack of pennies. Once you have been successful, increase the number of pennies until you can no longer catch them.

Analysis:

- 1.) How many coins were you able to catch? _____
- 2.) Describe the technique that you used to catch the coins (use complete sentences) _____

- 3.) Who in your group caught the most number of coins and how many did they catch?
Who? _____ How many coins? _____
- 4.) Describe what was different about their technique and yours. (Use complete sentences) _____

- 5.) What difficulties did you experience? (use complete sentences) _____

- 6.) Was it easier to catch more coins or fewer coins? Explain why this might be the case. This refers to catching them, not stacking them. (use complete sentences) _____

7.) From your answer above, which would you prefer to use for this experiment: dimes, nickels, pennies, quarters, or half dollars? Why? (use complete sentences) _____

8.) From your observations and your experience, devise a method to do this experiment that would use quantitative measurements? In other words, write a procedure for this lab that would include measurement and numbers. _____
