enny Observations-A Close-Up Look



Your task is to make three different types of observations about a penny.



First, you will make observations about a penny from memory. Next, you will observe a penny for one minute and then record your observations. Finally, you will make continuous, direct observations.

Step 1

From memory, draw the front and back of a penny in the circles. Do not look at a penny. Tell about what you drew.

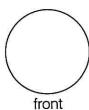


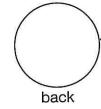


back front

Step 2

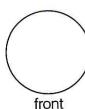
Observe a penny for one minute and then place it out of sight. Draw the front and back of the penny in the circles. Compare your drawings to those you drew in Step 1. Record any similarities or differences.





Step 3

Observe a penny for as long as you need. Use a hand lens if you wish. Draw the front and back of the penny in the circles. Tell how your drawings changed over the three steps.



back





You may have observed that your penny is tarnished. Place a small amount of vinegar in a paper cup and add a pinch of salt. Now add your penny. Remove the penny after several minutes and observe it carefully. In the space below, describe what happened. Include in your description what the penny looked like both before and after placing it in the vinegar/salt solution.



What would you like to find out about pennies? Write your questions in the space below.



Design an investigation to answer one of your questions for Part Three. Write the question, your plan, and the results in the spaces below.

Question _____

Step-By-Step Investigation Plan

Investigation Results_____