



Procedure:

1. Place your target on a flat notebook on the floor.
2. Drop your pencil from waist high onto the target 100 times.
3. Count the number of marks in each numbered area of the target.
4. Prepare a bar graph with the area on the x-axis and number of marks on the y-axis.

Data:

Area	Number of Marks
1	
2	
3	
4	
5	
outside circle	

Conclusion:

1. Before you dropped your pencil, could you predict exactly where it would strike the target?
2. If you could not predict the exact spot where the pencil would hit the target, could you predict the area within which it would hit?
3. From your graph, which target area had the highest probability of being hit by the pencil?
4. One pencil made all of the dots on the target. How many electrons does our "model" simulate when making all of the "dots" that form our electron cloud above?