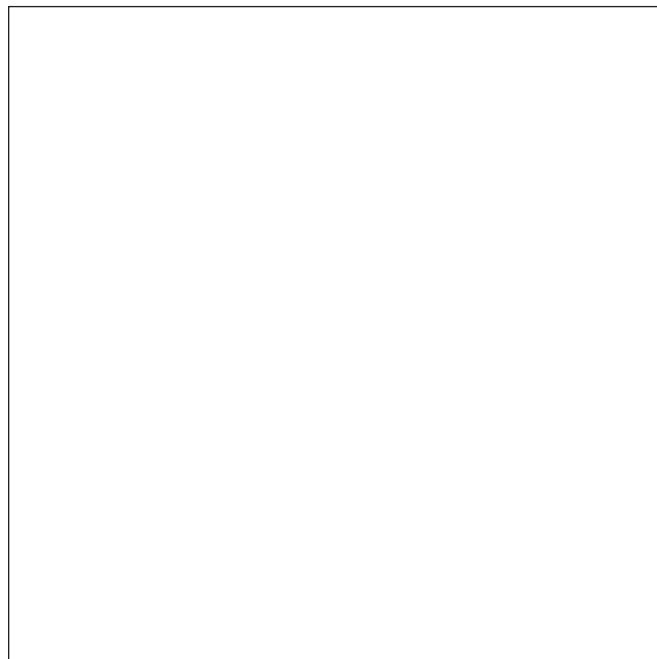


Atomic Target Practice

Post-Lab Questions

1. Draw the general size and shape of the target to approximate scale in the square below. What characteristics of the target were easiest to determine? What characteristics of the target's shape were difficult to determine? Explain.



Shape #

2. The speed of the marble rolls was an uncontrolled variable in this activity. How would the outcome of the scattering test have been different if the marble speed had been faster or slower?
3. Compare the overall size of the target with the size of the marble used to probe its structure. How would the outcome of the scattering test have been different if different size marbles had been used? Explain.
4. In what ways did this activity simulate Rutherford's efforts to determine the structure of the atom? In what ways was it different? Be specific—consider the size, speed, and charge of both the particles and the target.