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Overhead Isotope Detector Worksheet

Data Table

Sphere	Impact Distance (mm)	Cord – dA	Angle <i>HdA</i>
А			
Average			
В			
Average			
С			
Average			

Post-Lab Questions and Calculations (Use a separate sheet of paper to answer the following questions.)

- 1. Calculate the deflected path radius for each of the three steel spheres.
- 2. If the mass of sphere B is assigned an arbitrary mass number of 8.00, calculate the relative masses of the other two "isotopes."
- 3. Assume that the three different size spheres represent isotopes of the same element, and that the relative abundance of each is as follows:
- Sphere 1 35% Sphere 2 – 7% Sphere 3 – 58%

Based on these abundance values and your calculations of the relative masses of the isotopes, calculate the average atomic mass of the element.

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