Name $\qquad$ Date

Ball Bounce Lab

## Data:

| Drop Height | Bounce Height |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trial 1 | Trial 2 | Trial 3 | Average |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Graph:


After drawing a straight best-fit line for your data, determine the equation for the best-fit line. Use two points on the line (NOT DATA POINTS!!) to calculate the slope. Then, use that slope with one point (NOT A DATA POINT!!) to determine the $y$-intercept. It is okay if your graph does not go through $(0,0)$.

## Best-Fit Equation:

$\square$

Prediction: Based on your best-fit equation, determine the drop height necessary to get a bounce height of $\qquad$ _.

Predicted Drop Height: $\qquad$
Actual Drop Height: $\qquad$
\% Error: $\qquad$

$$
\% \text { Error }=\frac{\mid \text { Measured Bounce Height }- \text { Given Bounce Height } \mid}{\text { Given Bounce Height }} \times 100
$$

