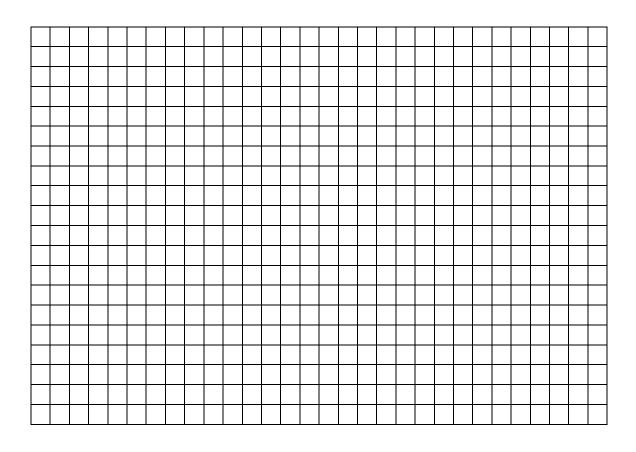
## **Ball Bounce Lab**

| 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 Eq | uation:  |
|-------------|--|
| Prediction: | Based on your best-fit equation, determine the drop height necessary to get a bounce height of |
|             | Predicted Drop Height: Actual Drop Height:   |
|             | % Error:   |
| % Err       | $ror = \frac{ Measured Bounce Height - Given Bounce Height }{Given Bounce Height } \times 100$ |

Given Bounce Height