

Name:

Date:

Period:

Mini-Lab - Accuracy and Precision

1. For reasons we will discuss in the coming units, the time it takes for a ball to drop from a given height is given by the equation

$$t = \sqrt{\frac{h}{4.9}} .$$

Measure the height from which the ball is dropped. Use the equation to calculate the time it should take for the ball to hit the ground.

2. Is the answer you got the expected or the measured value? How do you know?
3. We will now measure the time of drop several times as a class, write down their measurements below.

Timer:	Trial #1	Trial #2	Trial #3

4. Were the times accurate? Were they precise? Explain.
5. Calculate the percent error.
6. After having calculated the percent error, make a further comment about the accuracy of the measurements.