

Beach Ball Toss Lab

Description

This lab has students collect data on a toss of a ball. The students will collect data that is mostly quadratic. This requires technology in the form of motion detectors, calculator based laboratories, graphing calculators and a beach ball.

Prep Work

Get the following technology: motion detectors, calculator based laboratories, graphing calculators, and a beach ball for each group of 2-3 students.

Instructions

- **Pre Activity**

Set up calculator based laboratories (CBL) and motion detectors.

- **Activity**

Pass out equipment to groups.

Have students work through the lab. You can go over setting up EasyData in the calculator if you have not used it much yet.

Help students trim their data using the EasyData app and then export the data to the groups' calculators.

Help students shift the data to a starting time of zero seconds.

Students can finish the lab questions outside of class time.

- **Post Activity**

You can discuss the differences in the models they collected comparing between groups.

Time Required

50-60 minutes
