

Abstract Submitted
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Ideas for Use of an iPad in Introductory Physics Education¹ TARLOK S. AURORA, University of the Sciences — Mobile devices such as an iPad, tablet computers and smartphones offer an opportunity to collect information to facilitate physics teaching and learning. The data collected with built-in sensors, such as a video camera, may be analyzed on the mobile device itself or on a desktop computer. In this work, first, the circular motion of a steel ball rolling in a cereal bowl was analyzed to show that it consisted of two simple harmonic motions, in perpendicular directions. Secondly, motion of two balls - one dropped vertically down, and the other one launched as a projectile – was analyzed. Data was analyzed with Logger Pro software, and value of g was determined graphically. Details of the work, its limitations and additional examples will be described. The material so obtained may be used as a demonstration, in a classroom, to clarify physics concepts. In a school, where students are required to have such portable devices, one may assign such activities as homework, to enhance student engagement in learning physics.

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