

# Engineering Dynamics

*GDJ is ready, with a new, innovative teaching tools that will capture your student's imagination and make learning physics, engineering, and mathematics concepts both fun and challenging.*

**Physics Roller Coaster** – More than a simple child's toy, this is a working roller coaster. Built to last and designed to produce repeatable, quantitative data. The roller coaster features a 3-component accelerometer and wheel speed sensor mounted directly to the coaster car. Data is streamed in "real time" to a computer using an RF transmitter. The LabVIEW™ software package provides students an appealing and accurate representation of the various forces acting on the coaster car at any given moment. The captured data will allow students to accurately measure and investigate the force vectors, g-loads, and the acceleration of the coaster car as it travels around the track.

**The Crash Tester** features a "crash test" vehicle that is equipped with an on-board, high-g accelerometer to accurately measure the force of each impact. The vehicle's removable front end and interchangeable impact wall allows student researchers to design and test the impact absorbing characteristics of a variety of bumper materials and "fixed" guard rail systems.

GDJ's new Physics Roller Coaster & Crash Tester lets your students move beyond demonstration, to true application. Visit our web site at [www.gdjinc.com](http://www.gdjinc.com) for all the details.

## **Other Classroom Aids from GDJ, Inc.**

Flotek Wind Tunnels • Engine Dynamometers • Vehicle Dynamics Trainers

*See us at the Association for Career and Technology Education - Career Tech Expo, December 12<sup>th</sup> – 14<sup>th</sup>, Booth #1241*

Are you ready to get serious about pre-engineering?

