

The Jerry E. Stoneking Engineering Fundamentals Division The University of Tennessee

April, 2010

Inside engage

Storage Tips from the EF Faculty

The Engineering Fundamentals faculty would like to pass on some tips for storing items. Dr. Arel uses the board shown to store 2 Liter soft drink bottles. Prof. Schleter stores his sledge hammer using a hinged board, which conveniently folds down when not in use. Dr. Bennett has



a technique to store both his shovel and pitchfork. These are not April Fool's jokes, but rather all are used to illustrate center of mass. The center of mass of each system is at the balance point. As our disclaimer, we are not trained professionals, so please feel free to try these storage tips out for yourself at home.



EF 151 Success Enhancement Program

Students in EF 151, our first physics course, have an opportunity to earn back 40% of the points they missed on the first test by completing various activities. All students have to rework every problem they missed, identify why they missed the problem, and what they will do in the future to avoid making that mistake. Students who score below an 80 also have to work 25 extra math practice problems. Students who score below a 70 have the additional requirement of having to develop a study plan, which includes a weekly schedule indicating when they will study for each class. Finally students who score below a 60 have to meet with an instructor. As we tell students, the extra points are not as important as identifying what was the reason for not doing well on the exam, and making corrections before the other tests. It is our desire that all students be successful, and we want to give them help early in the semester. We acknowledge Dr. Raj Raman, who initially developed this program about 8 years ago.

Featured Homework Problem: Another Use for Tennis Balls

Prof. Schleter suspends a 0.43 kg trash can lid against gravity by throwing tennis balls vertically up at it. Each tennis ball has a mass of 0.070 kg and hits the trash can lid with a speed of 13 m/s. How many tennis balls per second must Prof. Schleter throw to suspend the trash can lid? Assume a perfectly elastic collision.



Engineering Fundamentals, 103 Estabrook Hall, Knoxville, TN 37996-2353, (865) 974-9810, http://ef.engr.utk.edu