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Hello, Friend:

I hope that the recent holidays brought cheer and good tidings. I would like to share two exciting announcements: First, the student-designed and student-built trebuchet had a successful “proof of concept” test run last December. We hauled it out to my property, 20 miles from town, and hurled a pineapple one meter (yes, I said ONE meter!) and a cantaloupe THREE meters. The pineapple was first to be thrown and the problem was that the counter-weight strap broke mid-swing. This caused the counter-weight to hit the ground and counter the momentum of the throwing arm. After some repair, the cantaloupe managed to escape the net at a pre-optimal angle. We have learned from this experience and have plans to test trebuchet version 1.2 this very weekend. If all goes well, and we have no reason to expect otherwise, we should have a working trebuchet in time for the event that constitutes our second exciting announcement.

The second exciting announcement: The Science and Math Advisory Board is sponsoring a **free public lecture** by one of the co-winners of the 2004 Nobel Prize in Physics, Dr. Frank Wilczek of MIT. The date for this lecture will be **Saturday, March 24 at 4:00pm in the Maybee Room in the Campus Center**. The lecture will be about why matter has mass. I suppose it is fairly obvious that matter does have mass, but the fundamental question remains: Why does (recall $E=mc^2$) energy take the specific form of mass and by what mechanism? As esoteric as that may sound, Dr. Wilczek is aware that this is a lecture for the public – no physics background required. He has been given good reviews for his lectures in the past, and I really do expect the talk to be very interesting. The lecture will be **followed by a 45 minute reception** during which the audience will have the opportunity to meet Dr. Wilczek and to discuss the lecture. We have invited the regional high schools and expect to have a significant number of students at the lecture and the reception. I hope, Friend, that you will be able to join us, but we also understand that this would be a long trip for you. If you have any questions, please feel free to contact me. There is also a webpage: <http://www.mcm.edu/nobel>.

We selected this date to coincide with the Texas section of the joint meetings of APS (American Physical Society), AAPT (American Association of Physics Teachers) and the SPS (Society of Physics Students), which is meeting across town at Abilene Christian University on Mar 22-24, 2007. The McMurry Physics Department is co-hosting that meeting and the students will be busy helping to coordinate crowd control through the morning of the lecture. However, I plan to have a contingent showing off the trebuchet on McMurry’s campus before the lecture.

As always, if you’re in the area, even if you don’t want to give a presentation, we’d love to visit if you can spare the time.

Joe Christensen - Tikhon Bykov – Wayne Keith
The McMurry Physics Department