COMPILATION: advice on sequencing units

Date: Thu, 23 Jan 2003
From: John Luvera <jluvera@YAHOO.COM>

We have just completed midterm exams and we have done up to, and including, unit 6 on 2d motion.

I am considering moving on to 2nd semester topics for the 3rd marking period and coming back to units 7, 8 and 9 in the 4th marking period.

My school goes to Physics Day at Six Flags amusement park in May and I thought it would be nice to relate what we learn in class to the trip. I went last year for the first time and felt as if Physics was the last thing on their mind. It probably will be this year as well, but I at least want to hold them accountable by assessing on some trip-related activity.

I don't think the trip itself justifies rearranging the units. The last marking is full of interruptions like spring break and AP testing, so I thought finishing with mechanics would be ok since we have done it for 1/2 the year and their modeling skills should be better by that point.

Date: Sat, 25 Jan 2003
From: Bob Baker <bob.baker@WORLDNET.ATT.NET>

John Luvera wrote, "I am considering moving on to 2nd semester topics for the 3rd marking period and coming back to units 7, 8 and 9 in the 4th marking period."

In response to John, I like to do unit 7, energy, before waves so that students understand energy transfer prior to studying the energy transfer in waves, light, and sound. I also like to do unit 7 before electricity and magnetism because of the energy transfers in those areas. Students need unit 8, circular motion, before they study the interaction of charged particles passing through magnetic fields. I have tried doing electricity before finishing mechanics in regular physics. My FCI post-scores were about the same both ways, but I felt the students were not as engaged in learning at the end of the semester when we did electricity before completing mechanics.