

## Alternative Field Trip Assignment

*This may be better to do in stations. You decide what is best.*

Watch roller coaster video for just 10 minutes. On a sheet of paper, answer the following:

- Draw a sketch of the third roller coaster shown on the video. Label the parts of kinetic and potential energy.
- Below the sketch, write an essay about Newton's three laws of motion and where they are in action on this roller coaster. (1<sup>st</sup> law—Once in motion, always in motion, unless and outside force acts upon it. 2<sup>nd</sup> law--- mass x acceleration = force. 3<sup>rd</sup> law----For every action there is an opposite and equal reaction.)
- Draw a motion graph for this ride. It does not have to be exact of course, but make it as accurate as you think it would look like. Make it a time/speed graph. You can rerun the third roller coaster as much as need to complete this. You may use the second hand on a clock to make the time for accurate. You will have to guess on the speed.
- Go to a computer with one or two partners and complete the density worksheet.
- Go to the next computer with your partner(s) and make a Sim Theme park. When you are finished, on a sheet of paper describe what you got accomplished.
- Go to the next computer with your partner(s) and see what you can make on Roller Coaster Tycoon. When you are finished, on a sheet of paper describe what you got accomplished
- If there is ever a time you can't get on a computer and you need to wait, work on your study guide for the year-end final. Start with the chemistry concepts first. Write the concept on one side of a notecard (or pieces of paper cut to that size) and then write everything about that concept on the back side.).