First Trimester AP Physics Project

Haunted Physics Lab

Introduction:
This trimester students will design, build and present a Haunted Physics Lab for the Thornapple Kellogg Community on Thursday, October 29, 2009 from 8am to 5pm. The Haunted Physics Lab is a hands-on event in which kids are invited to our school to play with our physics demonstrations and laboratory equipment. Each demonstration is livened-up with some slant toward Halloween.

Demonstrations:
Each student is responsible for 2 demonstrations to be used in the Haunted Physics Lab. Each demo has to come from two different physics topics. One of the demonstrations can be one that Mr. Miller already has in his collection and one has to be one that you build. Each demo has to be robust so as not to break and be consistent in demonstrating its principle. In addition to the demo itself, students will be responsible for the explanation card that goes along with the demonstration.

Committees:
To ensure that the Haunted Physics Lab runs smoothly, each student will be part of a committee in which they will be responsible for part of the planning of the Haunted Physics Lab. A maximum of 6 students per committee.

Publicity Committee
Responsible for advertising the Haunted Physics Lab in the TK School District.
Liaison to Lee Elementary to bring 3rd graders to the Haunted Physics Lab.
Contacting Media Markets to get covered in the TV, Radio, and Newspaper

Graphic Arts
Designing Advertising Poster and a graphic for Demo Cards for Haunted Physics Lab
Ordering T-Shirts for students for Haunted Lab
Designing guide to the Haunted Lab to be handed out to participants
Decorating the Haunted Physics Lab

DOW (Dark Room, Optics, Waves) Setup Team
Design and setup the space for the Dark Room, Optics, and Wave Demos in the library.

FEM (Fluids, Electricity, Mechanics) Setup Team
Design and setup the space for the Fluids, Electricity, and Mechanics Demos in the library.

Grading:
Student’s demos and participation in committees will count as a double lab towards the student’s grade.

Deadlines:
All demos and explanation sheets should be built and ready to present to the class on Monday October 19th. Each committee will have its own individual deadlines.