

Forces and Motion Unit Guidelines

Today we embark on *Forces and Motion*, a fun, interactive, and challenging unit. Working with research teams of 2-3 students, you will complete approximately 20 labs that are designed to help you **discover** the principles of forces and motions.

As you complete each lab you will write what you discovered in your notebook. Even though you are sitting with other students and you are encouraged to discuss the labs, EVERY PERSON must have their own notebook with their OWN conclusions so that he or she can STUDY NIGHTLY. You will basically be writing your own textbook. You will conference with me after each lab; do not move forward without my approval. These activities are built so that you must use your knowledge of previous activities to understand ones that follow. *Caution: You will be required to think!*

This unit requires maturity and responsibility. It also requires cooperation and patience. If any of these necessities becomes a problem for you, you will not be allowed to continue working with this curriculum. Instead you will be placed in an isolated location and will use the curriculum for force and motion provided in the textbook. ***Once you are removed, there is no coming back!***

Upon entering each day you will be expected to get to work immediately. You do not need me to tell you to “get started.” Check the white board for instructions and homework. (The standard homework assignment is to review your labs NIGHTLY.) If the white board does not indicate that I require lecture time at the beginning of the period or that we will be doing something other than labs that day, you are to begin your labs where you left off.

Beginning seating arrangements will be assigned. Within the group, it is a good idea to select a task-master (keeps everyone on task), a materials manager (gathers materials and puts them away), a reader (reads the lab manual aloud), and a group spokesperson (the person you send to ask me routine questions or to speak for the group). Some people may have to do more than one job. These roles should be rotated after approximately seven labs are completed so all group members will eventually do all jobs.

Read each activity **completely BEFORE** any materials are gathered. List the needed materials in your notebook. This will cut down on confusion and limit trips to the supply drawers and cabinets. All drawers are labeled; **read** them so that you can find what you need. At the end of the period, be sure to return everything to the condition in which you found it.

If you are absent, the students with whom you share materials will go on without you! Do not expect any student to share any work (other than lecture notes). You must get caught up quickly or work at a different table with students who are working on the same lab as you, if applicable. If you need to make up work because you were absent or you know in advance that an appointment or performance will have you out of class, come in at recess. During this unit, my room will be open for you to have access to the materials from 8:00 to 8:25 AM on Tuesdays and Thursdays (unless I post a cancellation). Please get a pass the day BEFORE you plan to work in my room; duty teachers will not let you come to my classroom without a pass. NOTE: Open times are NOT available when I am absent or when the school is having special events. A notice will be posted on the door.

Since I will have to assess ~20 lab entries from 95+ notebooks, **it is absolutely necessary that all notebooks are set up the same way**. This saves me time when I am looking over a page for specific information. A sample lab page will be shared with you. **USE it as your model every time!** When writing in your notebook, be sure you:

- always write in complete sentences,
- copy the questions, and
- if math is required, SHOW YOUR WORK.

You will be assessed in multiple ways. Each lab will be checked for correctness, but this does not mean that every lab will be recorded as a “grade.” Your work ethic and participation will be assessed constantly. Expect unannounced assessments on the vocabulary or concepts from completed labs (which, of course, you will be prepared for because you are reviewing nightly). Clusters of labs will culminate in an announced formal assessment, and there will be one large cumulative assessment at the end of the unit.

Have fun and learn something! 😊