

QUESTION AND PROBLEM SET EXPECTATIONS

There will be certain situations in your life for which strict adherence to instructions isn't required. This course is NOT one of them. In this course, adherence to instructions in lab work is required for reasons of safety and understanding. And adherence to instructions on homework completion is required to gain System Points. Employers and college admissions officers claim that many applicants cannot follow simple instructions. Lab work and homework will be opportunities to practice your instruction-following skills.

SECTION I AND SECTION III ("WORD QUESTIONS")

Section I (Do You Know?) and Section III (Mysteries of the Universe) answers stand on their own as statements of fact. This may, on occasion, require a diagram. A reader with no knowledge of the question would learn something by reading your answer. For example, if the question is

3. What factors determine the kinetic energy of an object and how do they relate to kinetic energy?

an answer of

3. *Its mass times its speed squared.*

makes no sense. **Do not EVER start written responses with any of the following words: "Because," "Yes," "No," "Its," "His," "Her," or similar terms.**

However, an answer such as

3. *The kinetic energy of an object is proportional to its mass and the square of its speed.*

is an excellent answer; it has "legs" (it stands on its own); it's "switched on," and scoring system points aplenty!

SECTION II ("NUMBER PROBLEMS")

Section II answers do not require any words. Rather, you must typically write out a formula, rearrange it, then replace the letters with numbers, then show the answer. include units wherever the numerical values of quantities are written. For example, if the question is

17. What is the acceleration of a 4 kg mass acted on by a 12 N force?

answers like

17. $12/4 = 3$ or *The acceleration of a 4 kg mass acted on by a 12 N force is 3 m/s².*

are unacceptable. The first is a meaningless exercise in division; the second looks like a copy of the question followed by a copy of the answer with no solution provided. However, an answer such as

17. $F=ma$

$$a = F/m$$

$$a = 12 \text{ N} / 4 \text{ kg}$$

$$a = 3 \text{ m/s}^2$$

is an excellent answer; it's consistent with instructions; it's happ'nin', groovin', scoring system points aplenty!