

AP Physics 1 Month 10 Requirement – 1 Invention + 1 Helpful Hack (Zero Dollars, Just Ideas)

Invention Guidelines – Due May 23, 2019 in Class

Goal: Think of some physical tool or object people currently use and think of some way in which it perhaps could be designed better. Or think of a future tool that has possibly never been thought of. *[As is commonly stated, necessity is the mother of invention.]* Think of some physical thing that annoys you in its current design and imagine what could be better about it, or what tool or aid could be of use in the future. If it is new to you, that is good enough for this assignment.

The change can be a very small one, or a huge leap in design or purpose. Either one should get full credit for the idea. It is 10% of the Semester 2 Grade.

The write up should fit on one page with a title of this invention at the top and an explanation of the benefit or benefits of this change of design or future use beneath that on the top of the page. You do not need to know all the details of how it should work perfectly, just a hope that it could be done.

Some sketch or drawing by you is needed on the bottom of the page and should help us better understand how it might work out.

Please make some copies for us to look over and enjoy thinking about the pros and cons of the idea with you. Or bring it in to me a few minutes early so I can run them off for you. Or just put one copy up on the overhead for us to think about as you go over it with us.

Just some of an endless list of possible ideas:

A safer car.

A better shopping cart.

A possible way to safely interact with potentially dangerous aliens from outer space. (Hey, it could happen.)

A fail proof slippery soap picker upper

A better student “chair”

Ways to reduce wasteful practices of energy or material usage

Safety in sports

Rules in Class

- 1. Respectfully consider the ideas presented.**
- 2. It is OK to politely mention pros or cons of the ideas in a spirit of exploring the ramifications of those ideas.**
- 3. Have fun with the ideas. Good ideas of course come before good inventions.**

[The Helpful Hack assignment description is on the next page.]

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Helpful Hacks Guidelines – Due May 23, 2019 in Class

With your parent's permission, look up helpful or useful hacks and pick the best one you see that would be proper for a class presentation of them for people to learn about.

Show the idea on a piece of paper with the top part of the page being the Title of the idea and a picture or sketch of the idea with parts labeled if needed. The bottom of the paper should contain information as to why this idea is low cost, and should work well, and be useful to know.

Consider using Screen shot for the picture if it is large enough. For a Mac product, it is Command-shift-control-3 (all 4 keys held down at once). My Mac makes a camera click sound when I do that.

Have fun searching and finding useful ideas.

If you thought of the idea, be sure to let us know.

One example I saw shows a new can of paint opened with a large rubber band around the entire can at the center of the opening. It seems that it should help keep the excess paint from the brush from clogging up the rim so the lid can go back on tightly with less clean up needed when you are finishing painting for the day. Good idea for people who paint perhaps.

