SKOYO: Solar Kit of Your Own Overview
Make 1 and Make 2

You are going to design a solar powered kit that could power devices for you in case of an emergency. We won't actually build it, because they can cost hundreds of dollars, but the design process will teach you how a solar system works (and who knows, maybe you will someday build your own.)

The process goes like this:

Over the next few weeks everyone will have a chance to build one of our blue solar suitcase kits with a partner. This will get you a feel for the parts we're talking about in our systems.

Again, over the next few weeks you will be thinking about what you might want to power with your kit and when and how you would be using these devices. For example, with a solar powered kit it makes a difference if you plan to use a device during the day when it is sunny or at night when it is not, or both during the day and at night. Also, some devices use more power than others, obviously, and we need to size the kit appropriately to power what you want to power, for the level of usage you believe you will need. I will give you some parameters so you have a clear idea of what you need to decide.

Finally, after you have put your hands on our blue solar suitcases and narrowed down your device and usage details, we will get into the nitty gritty of designing at kit to fit your specific needs. You will combine your power loads and your usage estimates to calculate battery, solar panel, and charge controller requirements, then specify parts and prices, and sketch out your system. The final product you create will be a detailed specification with a diagram and parts list.

If this sounds overwhelming, don' t worry: we'll explore each stage of this process along the way and get us all to the end together.

Overview:

- Build solar suitcase with a partner
- Explore how much power devices use, decide what you want to power and when and how you plan to use your devices
- Narrow down your list of loads and calculate overall power requirements
- Final kit write up with parts list, diagram and estimated cost