The weight for each assignment can be determined by yourself.

PV Panel Assignments: After the first two sections of slides.

There are 12 questions that can be given to students. Individually or in groups. Make each student give a 3 minute presentation or have a 1 page assignment?

1. Describe the characteristics of the monocrystalline PV Panel.
2. Describe the characteristics of the polycrystalline PV Panel.
3. Describe the characteristics of the amorphous PV Panel.
4. Build a chart outlining the pros and cons for each type of PV panel.
5. Find from various web sources the doping elements used in PV panels and site your sources.
6. Research the percentages for each of the wavelength groups and what effects each group.
7. Find cutsheets from manufacturer of PV that shows the change in voltage with respect to temperatures. Calculate the Voc at 40 degrees C.
8. The I-V curve of a PV panel has a unique shape. Describe as it goes from Isc to Voc.
9. Describe the power curve for a PV panel.
10. Research why the encapsulant is used and what material is made from. Show data from manufacturer site.
11. From PV manufacture what is the maximum voltage of a string that the panel can be connected. Show this value and calculate how many panels can be connected to make this string not exceed this voltage.
12. Pick 2 panels one polycrystalline and one monocrystalline of the same Wattage, then using the manufactures data for size and wattage calculate the efficiencies. Which type is more efficient?

Are higher Wattage panels more or less efficient?