Attaching Leads to Solar Cells

To solder your solar cells, you must use a low temperature solder iron (if you have a variable temperature iron, set it for 280˚ C). Use only good quality resin or rosin core SN60, 60/40 or SN63 solder and follow these steps:

1. Wear eye protection safety goggles or safety eyeglasses.
2. Set cell on a cardboard surface.
3. Carefully scrape the metal bar on top of the cell with a hobby knife or razor blade. Be very careful not to scrape too hard as you can easily break the cell. The bar should be shiny where you have scraped.
4. Now draw the tip of your iron and some solder across the bar where you have scraped it and the solder should adhere. Now, carefully attach a flexible 28 ga (small) lead to the solder contact (you'll have to reheat it).
5. Note: if the solder just balls up:
    a. Your soldering iron tip is too hot
        OR
    b. You didn't scrape the bar properly.
6. After you have made your connection to the top, let it cool and then flip the cell over.
7. You should not scrape the bottom as the solder will adhere without any special treatments. Just remember these facts:
    a. On cells that have a dark gray background you'll see squared off "silver" areas to solder to.
    b. On all silver colored cell backs, solder to the "dull" looking areas only.