INITIAL IDEAS – GROUP 8

1. Jason Cooper

Stainless steel mesh wire trays could be used to maximize drying on the top and bottom of the fruit. Stainless steel doesn’t rust and is durable. Dropping it wouldn’t be a problem. It is also easy to clean and strong enough to hold a lot of fruit. An example of stainless steel mesh is below. http://www.twpinc.com/images/products/detail/

2. Arnie Catrell

36”x18” tray with stainless steel mesh making a U-shape with drain below tray to ensure water is funneled out of the solar dryer. The stainless steel is durable, easy to clean, and allows the water to drip down into the funnel below. Possibly create an airfoil at the front of the tray so that the warm air travels faster underneath the tray to ensure all parts of the fruit dry out.
3. Tyler Farley

A stainless steel tray with small puncture holes in the bottom throughout the entire plate. Punctures must be small enough to keep fruit or vegetables from falling though but big enough to allow the water to drip off and in through the holes. It is very durable and easy to clean. Almost seems like a cheese grater.

4. Evan Fisher

We will utilize the material used to make window screens (aluminum mesh), as it is very cheap, food safe, and strong. The gaps in the mesh will larger enough to allow moisture to leave the bottom of the the fruit, but small enough to keep any pieces of the fruit from falling through. The window screen material is not inherently rigid, so the surrounding frame must provide tension on the screen. The simplest way to do this will be to build a top frame and a bottom frame and then fasten the two together with the screen in the middle.

5. JP Relvas

A rigid plastic design would give the tray a light weight, solid stability, and with air flow holes milled into it, the hot air can travel from tray to tray. Ordering custom plastic trays may not be the most practical solution, but it will facilitate moving the trays about because of their light weight. I would use a type of plastic that retains enough but not too much heat, so it's easier to
pick the trays up and so they can be moved to the markets at a faster rate. Also, a plastic tray will be easier to clean than a tray made out of metallic mesh.