

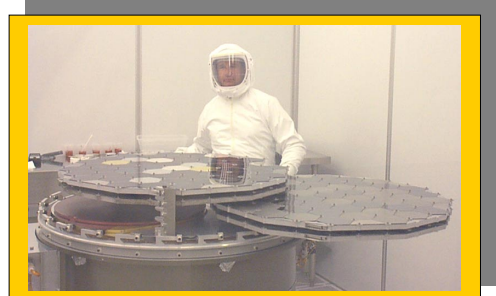
## Dynamic Design: The Cleanroom

## Mapping It Out

### STUDENT ACTIVITY

#### BACKGROUND

In this activity you will map out the actual placement of the wafers on the array by making a color key, then finding and coloring the locations on five arrays. You will then look at the finished array frames and identify patterns of wafer materials. Finally you will also discover why the wafers have slightly different thicknesses.



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#### PROCEDURE

1. Assign one of the array frames to each student in your group. Each person should have a collector layout sheet and the material charts for the array they are going to work on.
2. Using the material chart note the different materials that are used on the wafers. Notice that some of the wafers contain one material layered onto another material.
3. On your collector layout sheet, label the letter name of your array and the thickness of the wafers on your array.
4. As a group, develop a color key that your group will use to complete the map. Write these colors in the appropriate column on the material chart.
5. Color your collector layout based on the code and the labels found on your student activity sheet.

#### QUESTIONS

1. Why do you think different materials are used for collecting solar wind particles?
2. Why is silicon the material that is used most frequently?
3. Why do you think some wafers have one material on top of another material?
4. Looking at your array, describe some patterns you notice in the placement of the materials.

