

Dynamic Design: The Cleanroom

Putting It All Together

STUDENT ACTIVITY

BACKGROUND INFORMATION

In this assessment, you revisit many of the concepts addressed in this module. The ultimate goal is for your team to complete the assembly of the array frame that you began in the [“Working Together”](#) activity.

PROCEDURE

1. Working in the same team of three as in “Working Together”, use a spreadsheet to plan the work of assembling the wafers on the array. You are responsible for planning how many of the various wafers will need to be cut out using one of the maps from the “Mapping it Out” activity. These wafers should be labeled or color-coded similar to what is on your map. You are also responsible for planning how many bottom and top retainers (large stickers) and how many screws (small stickers) will be needed. Planning is needed for “washing” the retainers and screws prior to assembly. Use the rubric provided by your teacher to plan and implement your design. Once you are satisfied with your plan, present it to the teacher for approval before you begin procedure 3.
2. Think about how your group assembled the wafers in the “Working Together” activity. What should you do differently to be more effective when you complete this for the assessment?
3. Based on the feedback from your teacher, revise the plan. Then begin by cutting out the number and types of wafers you need and acquiring the retainers and screws. Once this is done demonstrate the procedure for “washing” the retainers and screws to your teacher. Use a bucket and simulate the washing process using the same procedure as you read in the Student Text, [“The Cleaning Room.”](#) Your team should wear gloves, but you should not use water as you “wash” the stickers. Once “washing” is complete, place the objects into a simulated cascade tank then into the drying oven prior to assembly. Sometime before you finish this process, ask you teacher to observe your groups’ assembly procedure.
4. Finally, you are ready to finish the assembly. Make sure all the wafers, retainers, tools and maps are placed on a table near your array frame. Use the array frame from the “Working Together” activity and the map from “Mapping it Out” to finish the assembly. Sometime before you finish this process, ask your teacher to come and observe the process of your team working together to finish the assembly. Once you have completed this, attach the map to the poster paper for your teacher to score.



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