

# ***Banquet Room***

Names \_\_\_\_\_ Date \_\_\_\_\_

Now it is time to work on room arrangement. Keep in mind that your group will need to show how you got each answer.

## **ROOM ARRANGEMENT**

1. Tables: The school has square tables that seat 4 people, one on each side. The sides of each table are 36 inches. Experiment with combining tables to form different table arrangements to seat 120 fifth graders. What arrangement uses the smallest number of tables? What is the arrangement that uses the most tables? Why?
2. Select the arrangement you like best. Tell the number of tables needed for your plan and be ready to explain why you like it best.
3. Next determine how much space should be left between tables so that people can sit comfortably and there is walking space. Be prepared to share your process for determining this with the class. Before proceeding, we will discuss this as a class and agree on a standard for everyone to use in the parts that follow.
4. Revisit your favorite room arrangement. Will it fit into a room that is 100 feet long and 90 feet wide? How do you know? If not, revise your plan for table arrangement.
5. Finally, make a model of the room, which is 100' by 90'. The scale should be 1" = 3 feet. Using this scale, what size squares will you need for each table? Remember to allow space between tables as we decided. Be prepared to share your model with the class.

6. As it happens, the room where the luncheon is to take place is going to get new tile. The room is 100 feet long, 90 feet wide, and the ceiling height is 12 feet. The tile being used costs \$ 4.98 per square yard. How much will the school system pay for the new tile?
  
7. As the tile was being replaced, the trim molding around the wall was damaged and now needs to be replaced. How much molding will be needed?
  
8. The molding is sold in 8-foot sections and costs \$36.72 per section. How many sections are needed? How much will that cost?
  
9. OOPS! The walls got scratched and now need painting. One quart of paint covers 90 square feet. How many gallons of paint are needed for the 4 walls?
  
10. The paint costs \$29.12 per gallon. How much will it cost to paint the walls?
  
11. How much will the school spend on tile, molding, and paint?