Build Your Dream Home

You've already purchased a piece of land in CT to build your dream home. You have a total budget of $200,000 to build it.
Your house **must** include at least 4 rooms that cover a minimum of 900 square feet. You may choose to include any other additional rooms.

1. Draw a plan of your home using Google Drawing. Record the measurements for each room. Calculate the **perimeter** and **area** of each room, as well as the **total perimeter and area** of the house.

2. Share your plan with another group for feedback on the reasonableness of your plan.

3. The building costs for your house will be $99.00 per square foot. Calculate the cost based on the measurements on your plan.

4. Each room in your house needs to have flooring. You may choose tiles, carpet, or wooden floorboards. Research prices and record the cost of flooring for each room, as well as the total cost of all flooring.

   Your finished product should include:

- A floor plan of your house (created using Google Drawing)
- The perimeter and area of each room (labeled on your Google Drawing)
- The type and cost of flooring chosen (explain how you researched these costs)
- The total cost of your house showing that you stayed within the given budget.

Be sure to show all calculations! Be prepared to present your results/finished product.

Extension: You may choose to spend any remaining money on paint, wallpaper, or furniture for your house. Research costs and include this information in your finished product.

- A standard room is usually 8 feet high. How much would it cost to paint or wallpaper each room? Total amount for painting or wallpapering all the rooms?

Source: West Hartford Public Schools, West Hartford, CT, via Edutopia.org

Due Date: _____

Problem-Solving Rubric

How Well Did You Do This?	I can solve problems without giving up and do my best to get it right. (MP1)	I can explain my thinking and talk about it with others. (MP3)	I can work carefully and check to see that my strategy and calculations are correct. (MP6)
Good start (You did a piece of it)	Your work shows that you understood some of the problem and the related math concept(s). You made an attempt to find a solution but did not persevere.	You tried to solve the problem in a way that doesn't make sense for this. You explained your thinking with limited language and vocabulary words.	You attempted precision in your work and explanation, but still had several errors that impacted the solution.
Almost There (You have almost all of the pieces)	Your work shows that you understood most of the problem and the related math concept(s). You made more than one attempt to find a solution, and only sought hints if stuck.	You solved the problem in a way that makes sense but may not be efficient. You explained your own thinking with mostly accurate language and vocabulary.	Your work and explanation are mostly precise, but you had a few minor errors OR ideas that were unclear.
Excellent (You fit all of the pieces together in a great way)	Your work shows that you completely understood the problem and the related math concept(s). You made various attempts to find a solution and learned from previous solution attempts.	You solved the problem in a way that makes sense for this AND is efficient. You justified and explained with accurate language and vocabulary, why the solution is correct.	You were precise in almost all of your computation and your choice of precise math language made your explanation clear.

Comments:

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