

Congratulations! You and your partner have won the contest to create your own dream house. Now you must design it. In this project you will create a two-dimensional drawing of your dream house. Your dream house can include anything and everything you desire. It must also include some of the geometric shapes you have been studying (which is, of course, something you desire!). You will be the architect and the construction manager of this project.

Part 1: Floor Plan Drawing

The first phase of your project will be to create a plan drawing of one floor of your house. It must include measurements and must also include at least two of each of these types of shapes:

- Square, Rectangle, Triangle, Circle, Trapezoid, Parallelogram, Rhombus, Kite

Your drawing must have these elements:

- Each of your rooms *must* be neatly drawn and clearly labeled with what type of room it is and what type of shape it is, along with measurements.
 - Minimum Rooms Required:
 - 2 bedrooms, 2 bathrooms, 1 kitchen, 1 garage, 1 living room
- Your drawing *must* be large and drawn on the paper provided.
- You *must* use pencil.
- Your house *must* have realistic measurements and should be something in which someone would actually live.
- Each measurement *must* be labeled on the floor plan.
- Be creative! Have fun with the design and make it very imaginative.
- *Before moving to Part Two, you will need teacher approval.*

Part 2: Area Calculations

The second half of your project is to outfit your dream house. Your dream house must have some type of flooring. In order to determine how much flooring, you will need, you must calculate the area of each room and then decide which type of flooring you will use for each room.

You will need to produce clear calculations for the area of each room. *You must have teacher approval before moving to Part Three.*

Part 3: Total Area and Cost

You must choose *at least two different types of flooring* to use in your house. You will also need to figure out the total cost for the type of flooring. Using the areas calculations from part two and the prices for flooring listed below, choose your type of flooring and calculate how much it will cost. There are no cost constraints because this is your *dream house*, but be realistic and use your money wise.

- Carpet: £5 per square meter
- Linoleum: £2.50 per square meter
- Ceramic Tile: £3.30 per square meter
- Hardwood flooring: £4 per square meter
- Cement: £1.50 per square meter