

Google SketchUp Design Exercise 1

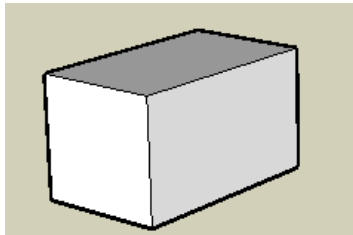
The first thing students like to do in SketchUp is make a basic house and try out different colors and materials. They also love making windows and doors, and trying out the translucent colors. This is the perfect project to get them started using SketchUp and get their creative juices flowing - by using just a few basic tools kids can quickly design a fun, colorful house. (And it won't take long for them to start designing much more complex ones!)

If you need some basic information on downloading Google SketchUp, or about its user interface and basic tools, please see our printable "Intro to SketchUp" PDF.

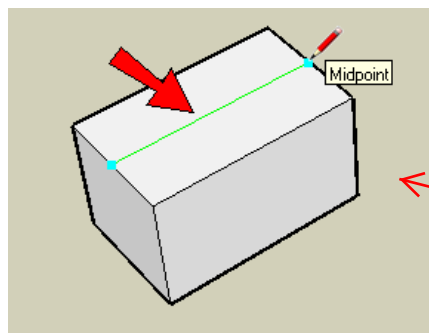
The PC version is at www.3dvinci.net/SketchUp_Intro_PC.pdf.

The Mac version is at www.3dvinci.net/SketchUp_Intro_Mac.pdf.

1. Start with a **Rectangle**, and **Push/Pull** it up to a box.



2. To make the roof, start with a line on the roof between midpoints.

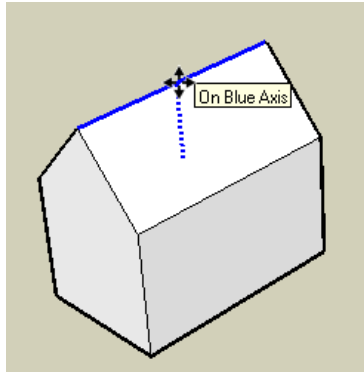


To make sure you are drawing from midpoint to midpoint, **make sure you draw your line from LIGHT BLUE DOT to LIGHT BLUE DOT**

If you don't do this, your roof will not move up in the next step.

3. Use **Move** on this line, pulling it up (in the blue direction) to make the roof.

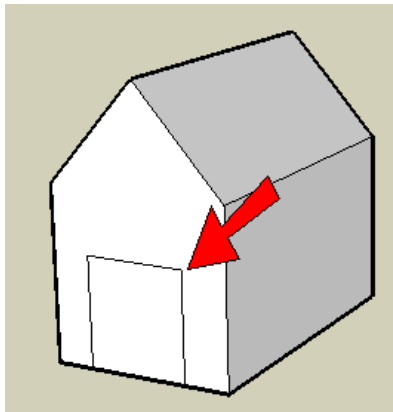
Make sure you use the MOVE tool, NOT the Push Pull tool. We are moving the line up.



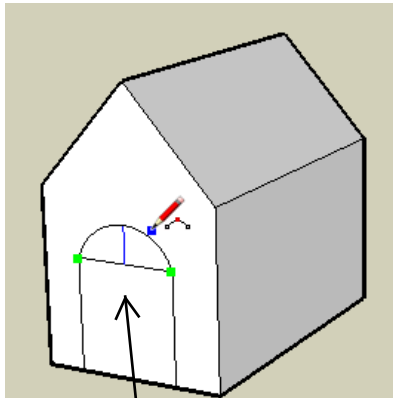
IS YOUR ROOF NOT MOVING UP AT ALL?
Go back and re-read the hint on Step 2

IS YOUR WHOLE ROOF MOVING UP - NOT JUST THE PEAK?
Go back and re-read the hint this step

4. Add a rectangle on the front face, to make a door.

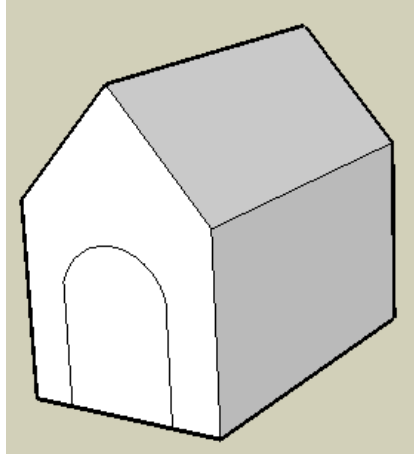


5. To make a more interesting door, add an arc at the top (use the **2 Point Arc** tool).

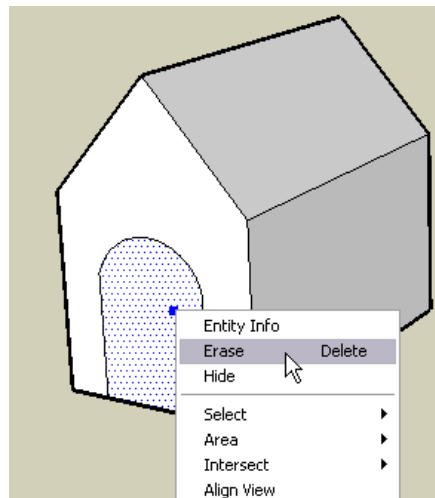


To draw the arc, use THREE clicks:
1. Click the left corner of the door.
2. Click the right corner of the door
3. Pull the arc up (slowly)

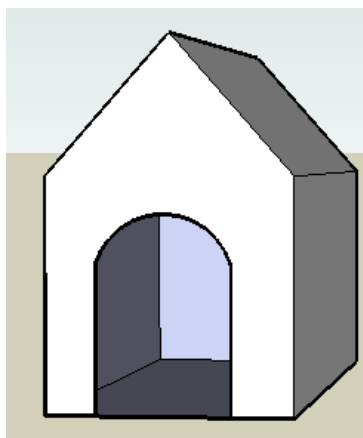
6. Use the **Eraser** tool to erase the top edge of the rectangle, so the door is one face.



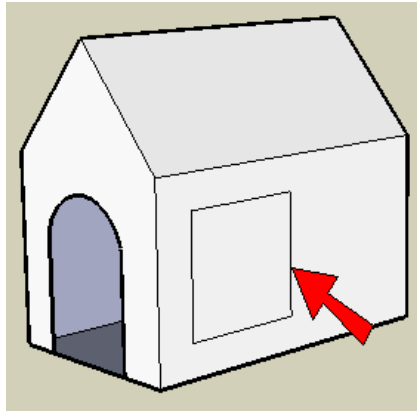
7. To remove the door face, right-click on it and choose **Erase**.



Now you can see into the house.

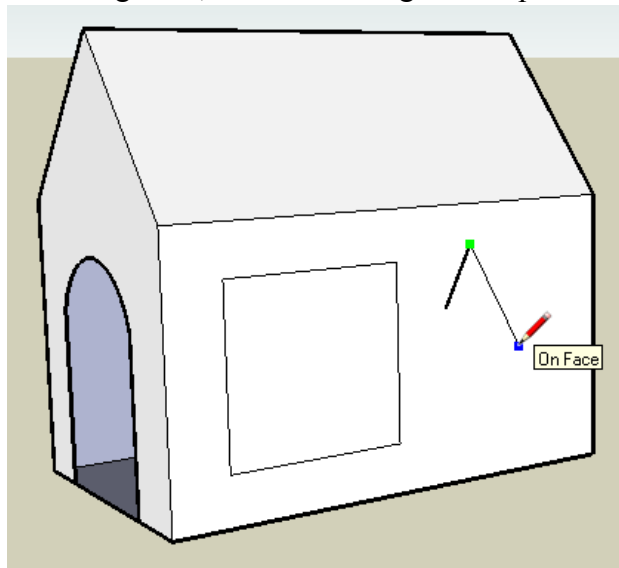


8. To make a window, add a rectangle on the side.

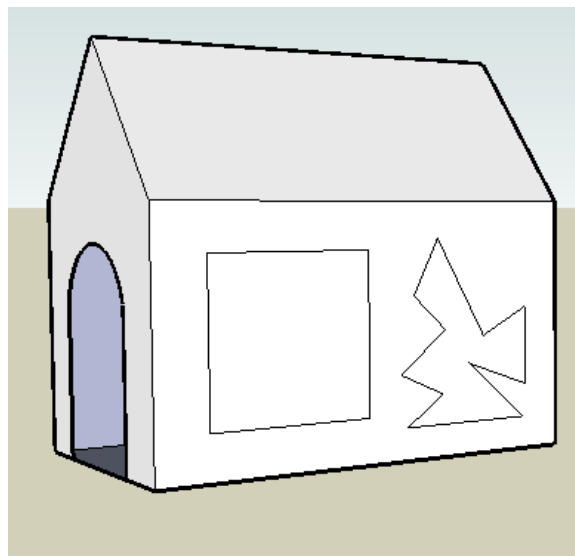


9. Of course, windows don't have to be rectangles! Use **Line** and make some strange shape for a window. Be sure that you see "On Face" while making lines, or the lines might end up sticking out of the house.

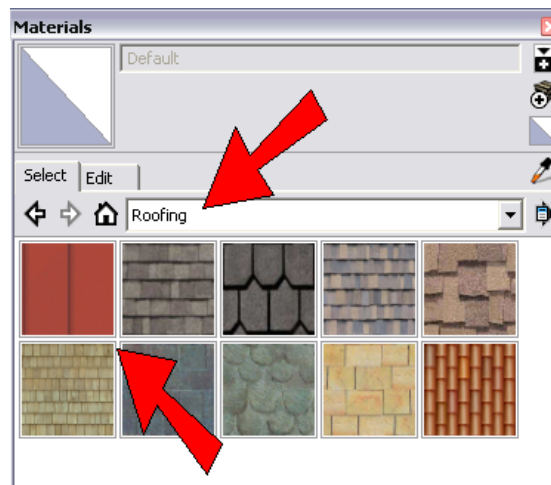
Make sure there is a
BLUE DOT.
That shows that the
dot is on the face.



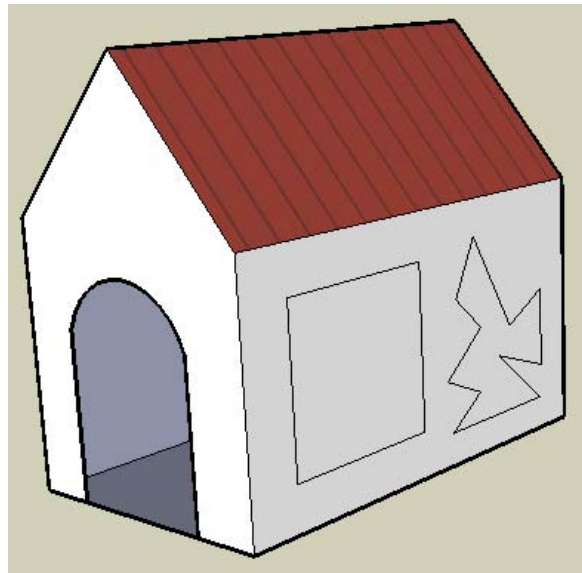
10. Be sure to end the window shape where you started. If your lines are correct, the edges around the window will be thin.



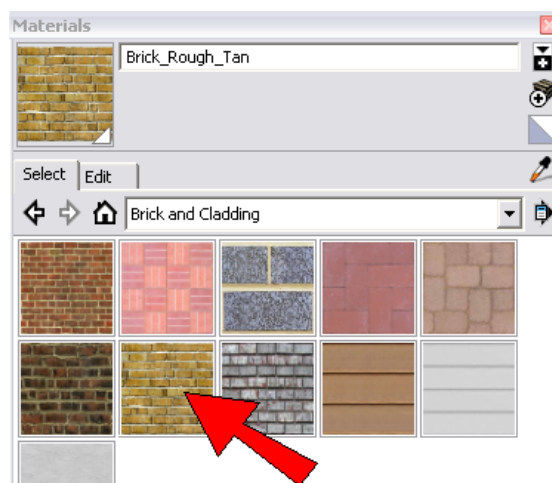
11. Now we can color our house, starting with the roof. Click the **Paint Bucket** tool to open the **Materials** window (**Colors** on the Mac). Open the “Roofing” folder and click one of the swatches (I’m using the red metal roof).



12. Then click the roof face (don't forget to paint both sides of the roof).

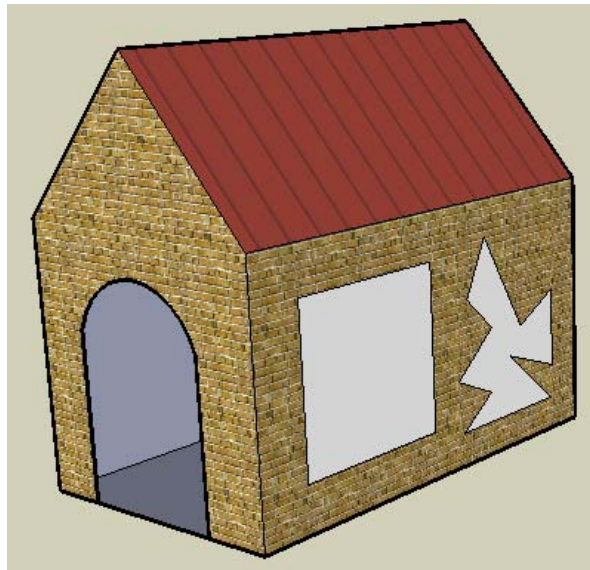


13. For the walls, I'm using tan bricks from the “Bricks, Cladding and Siding” folder.

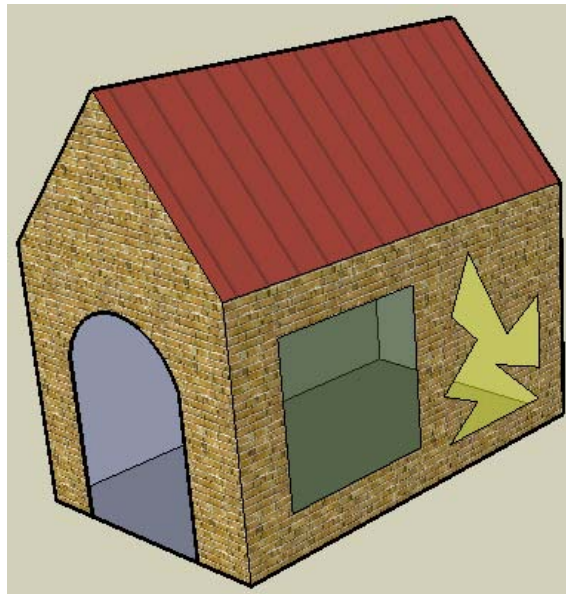


Here are the painted sides of the house:

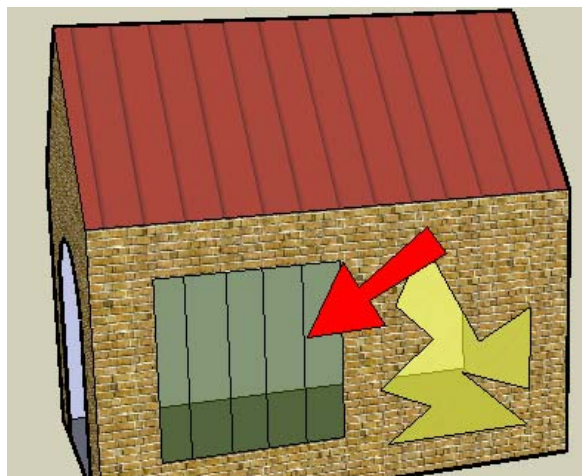
If your windows get painted too, one of the points of your window is NOT in the face of the wall. See Step 9 for more info.



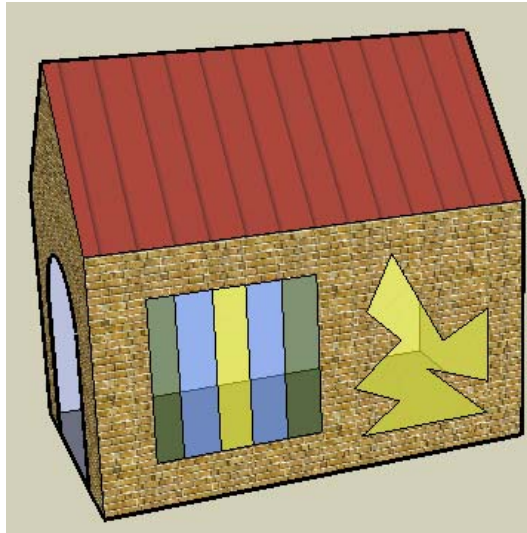
14. For the windows, you can use colors in the “Glass and Mirrors” folder.



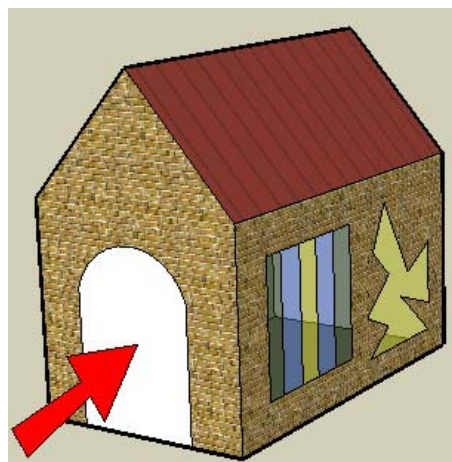
15. These windows are so plain - let's make them more interesting. Add some vertical stripes to this window:



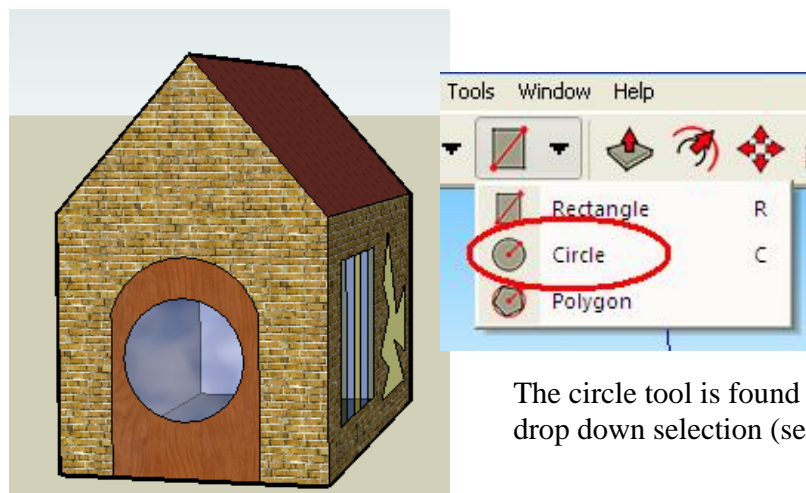
16. Then paint the stripes using different translucent colors.



17. If you don't want people to see straight into your house, you probably want to replace that door. Just use **Line** to redraw any of its edges, and the face comes back.



18. To dress up the door, you can add a circle for a window. I painted my door with cherry wood from the “Wood” folder.



The circle tool is found on the Shape drop down selection (see above)

19. To personalize the house, you can add text using the **3D Text** tool. Find the 3D Text Tool on the Tools Menu.



Can't find the 3D Text tool?
Read this step again.

3D Text requires that you enter a specific font and size, so you might have to try a few times to get the exact text you want. It also comes into the model as a component, so if you want to change it, you need to edit the component first (or explode the component).

