## FIRST COMPLETE THE GETTING PLAYLIST:

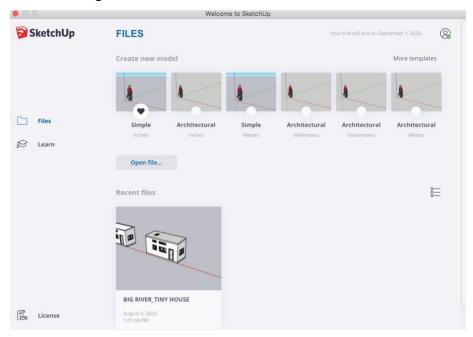
https://www.youtube.com/playlist?list=PLF001616C0ADF4245

| COMMAND TUTORIALS TABLE |   |               |
|-------------------------|---|---------------|
| COMMAND                 | LINK  | TIME STAMP    |
| Rectangle               | <ol> <li>https://www.youtube.com/watch?v=qgt2s9RzvKM</li> </ol> | 1. 3:17       |
|                         | 2. https://www.youtube.com/watch?v=I_bJPNnO3HQ                  | 2. 17:03      |
| Push/Pull               | https://www.youtube.com/watch?v=I_bJPNnO3HQ                     | 18:40 - 21:57 |
| Line and Draw           | https://www.youtube.com/watch?v=I_bJPNnO3HQ                     | 15:18         |
| Tape Measure            | https://www.youtube.com/watch?v=_7brmiHpVqI                     |               |
| 3D Warehouse            |   |               |
| Scale                   |   |               |
| Rotate                  |   |               |
| Cody                    |   |               |
| Workspace               | https://www.youtube.com/watch?v=I_bJPNnO3HQ                     | 1:40          |
|                         |   |               |

#### 1. NEW DRAWING

For this project you will need to start a new drawing that uses the Imperial measurements. On the "welcome" window, under Files Create New Model, select Simple.

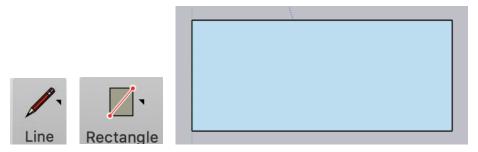
- Imperial System is used in the USA and measures things in feet, inches and pounds.
- The Metric System is used in most countries around the world and uses measuring units such as meters and grams.



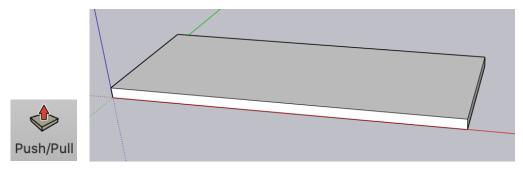
# 2. FLOOR:

The first part of the house we will model is the floor. You will need to refer to your drawing package to confirm the correct measurements

• Draw a 22'-0" x 8'-6" rectangle using the LINE or RECTANGLE tool



• PULL the rectangle up so that it is 8" thick

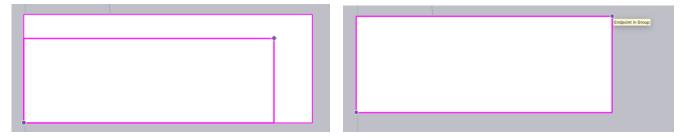


• SELECT all of the Floor you created, right click, MAKE GROUP

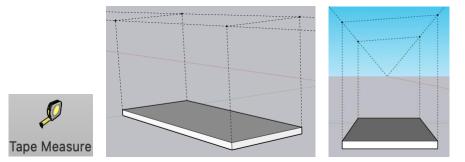
# **SAVE**

#### 3. EXTERIOR WALLS:

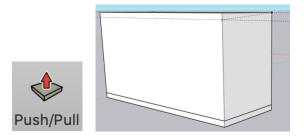
- Using the **RECTANGLE** tool, trace a rectangle overtop of the floor.
  - This will allow you to model on the surface of the floor without making unwanted changes to the group you created in 2. FLOOR.



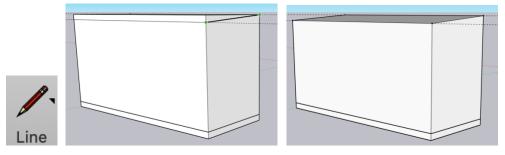
 Referring to the measurements in your drawing package, use the TAPE MEASURE to create guides that outline the exterior walls



• Using the PUSH/PULL tool, Pull the rectangle up to meet the tallest guide

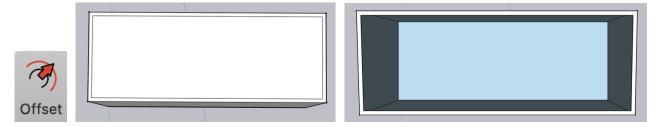


Using the LINE tool, draw over the guides to create the faces of the exterior walls.
 DELETE the unnecessary lines to create the angled walls.



NOTE: To delete guides, go to the tab EDIT, in the drop-down menu select DELETE GUIDES

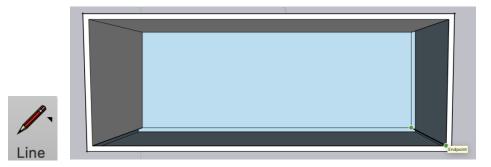
• Using the top face of the model, **OFFSET** the rectangle 5" inward. **DELETE** center face.



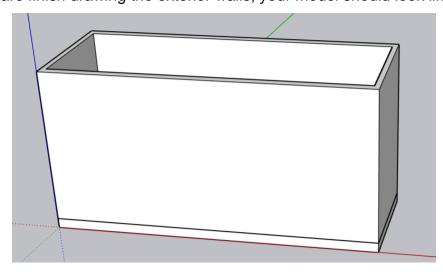
• On rectangle you drew overtop of the floor, **OFFSET** the rectangle 5" inward.



• Using the **LINE** tool, connect the inside of the walls together.



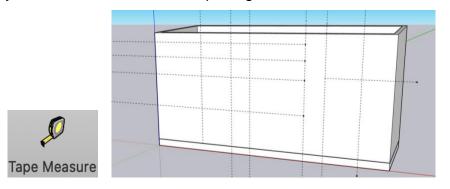
• When you are finish drawing the exterior walls, your model should look like this:



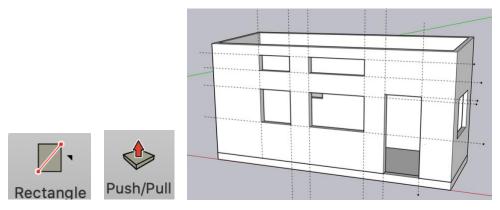
**SAVE** 

#### 4. WINDOWS + DOORS:

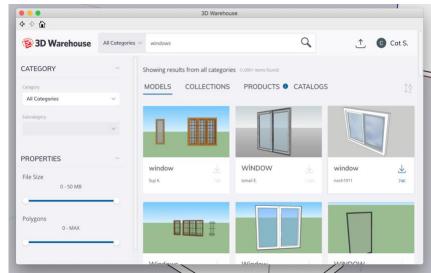
- You will now need to create the openings for the windows and doors
  - Start by using the TAPE MEASURE tool to create horizontal and vertical guides to lay out the window and door openings



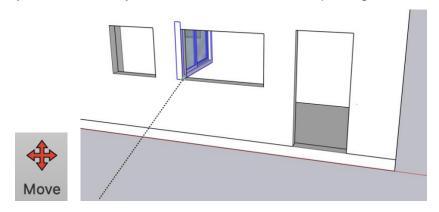
- Using the RECTANGLE tool, draw rectangles within the guides
- Using the PUSH/PULL tool, Push the rectangles through the wall to create an opening



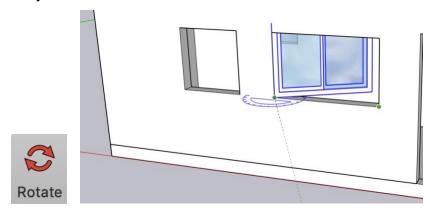
- Use **3D WAREHOUSE** to search for windows and doors to place into the openings.
  - The simpler the door and windows, the better as we will have to modify the scale.



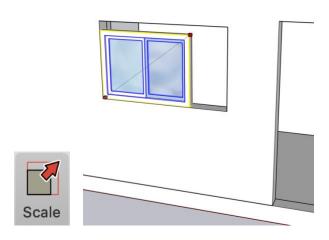
- It does not matter if the window you pick from 3D WAREHOUSE is the correct size, you
  will adjust the scale of it to fit within the openings you've created.
  - o The Components I used from the 3D Warehouse are:
    - Window by noch1911.
    - EHD White Door by next F.
  - o First you will MOVE your window/door into the opening,



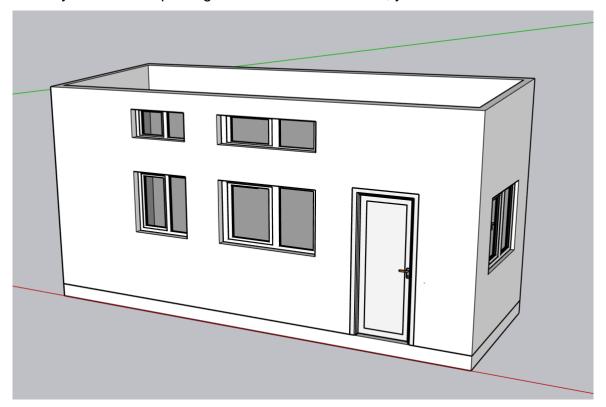
Second you will ROTATE the window/door to face the correct direction



o Lastly you will **SCALE** the window/door to fit within the opening



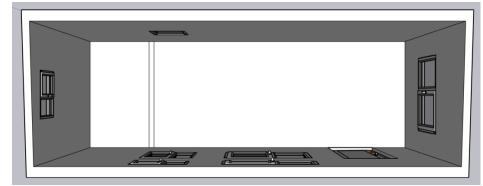
• When you are finish placing the Windows and Doors, your model should look like this:



**SAVE** 

## 5. INTERIOR PARTITIONS:

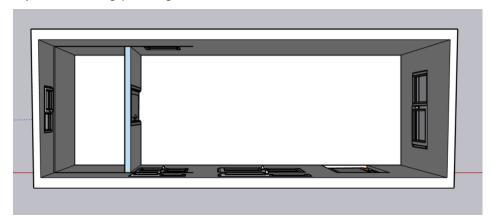
• Layout the interior walls on the floor using the Line or Rectangle tool.







- Using the Push/Pull tool, pull the wall up from the floor to the height indicated in your Drawing Package.
  - Using what you've learned in 4. WINDOWS + DOORS, create an opening and place a door within it.
  - o Refer to your drawing package for measurements

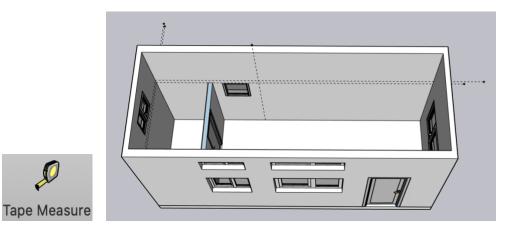




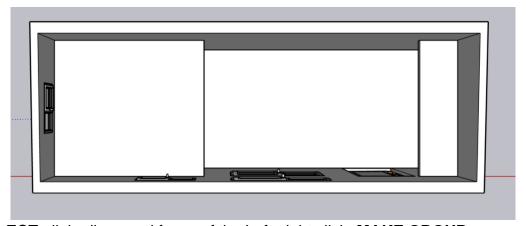
**SAVE** 

## 6. LOFT:

 Use TAPE MEASURE to create guides indicating the height of the loft and far the loft will come out to



Draw within the guides using the LINE or RECTANGLE tool to create the loft

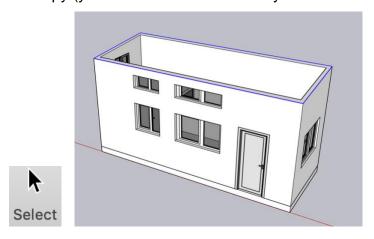


- SELECT all the lines and faces of the Loft, right click, MAKE GROUP
  - Making the loft a group will allow you to easily hide it in order to work on the room you created underneath it.

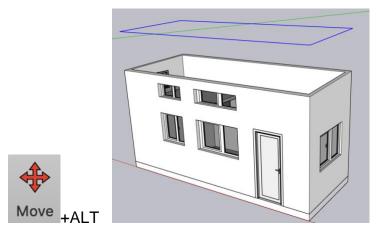
# **SAVE**

## 7. ROOF

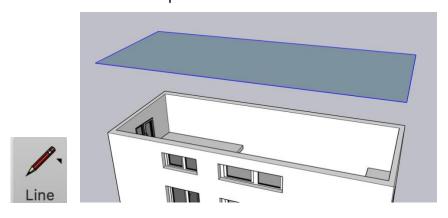
 To create the roof, use the SELECT tool, and holding down the shift key, select all of the lines you wish to copy (you can release the shift key once all lines are selected)



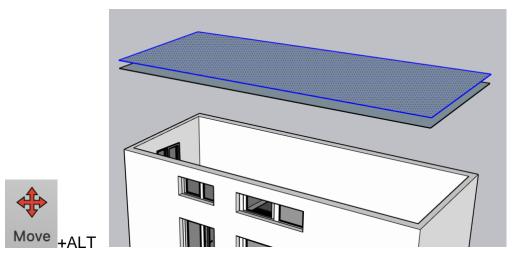
- Using the MOVE tool, click the ALT key on your keyboard to enable the MOVE/COPY feature
  - Choose an endpoint and copy the lines upwards
    - Make sure you move directly above the model on the blue axis



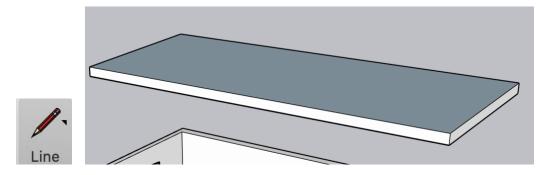
• Use the **LINE** tool to draw overtop one of the lines in order to close the face.



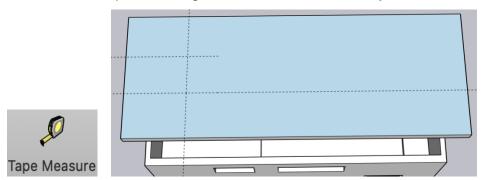
- Select all lines and the face you just created
  - Using the MOVE/COPY feature, choose and endpoint, and move/copy the lines and face upward 6 ½" to create the thickness of the roof



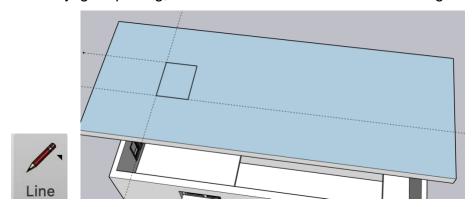
• Connect the two shapes together using the LINE tool.



To create the Skylight, use the MEASURING TAPE tool to create guides on the roof.
 The guides should snap to the angle of the roof automatically.



• To create the skylight opening, use the LINE Tool to draw within the guides

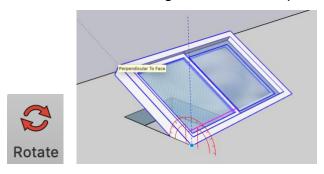


• Use the Push/Pull Tool to create the opening by pushing the rectangle down through the roof.

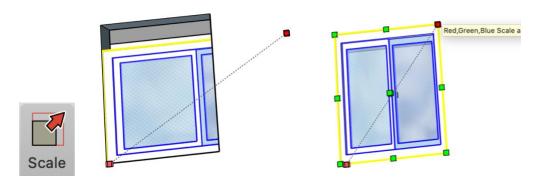




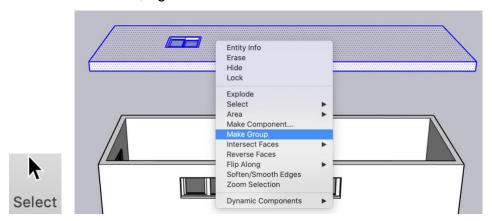
- Use a Window from the 3D Warehouse to fill the opening you have created. You will
  need to MOVE the window into the opening
- ROTATE on the red axis to match the angle of the roof slope



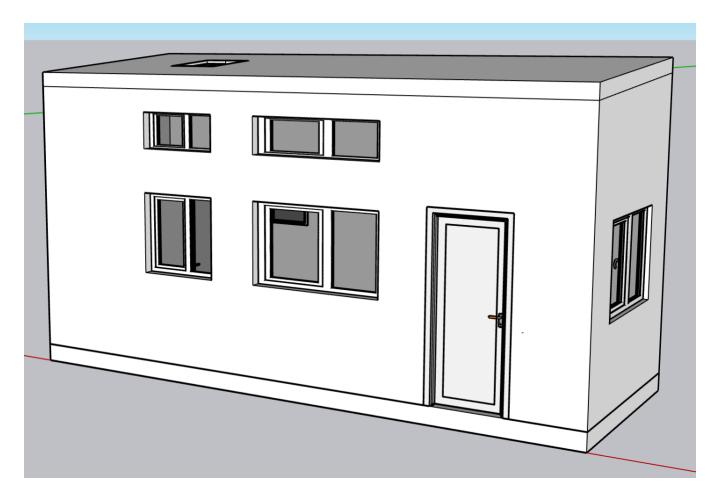
• SCALE the window to fit within the opening



• SELECT the finished roof, right click and MAKE GROUP.



• **MOVE** the roof onto the top of the exterior walls to finish the model. Your model should now look like this:



**SAVE - COMPLETED**