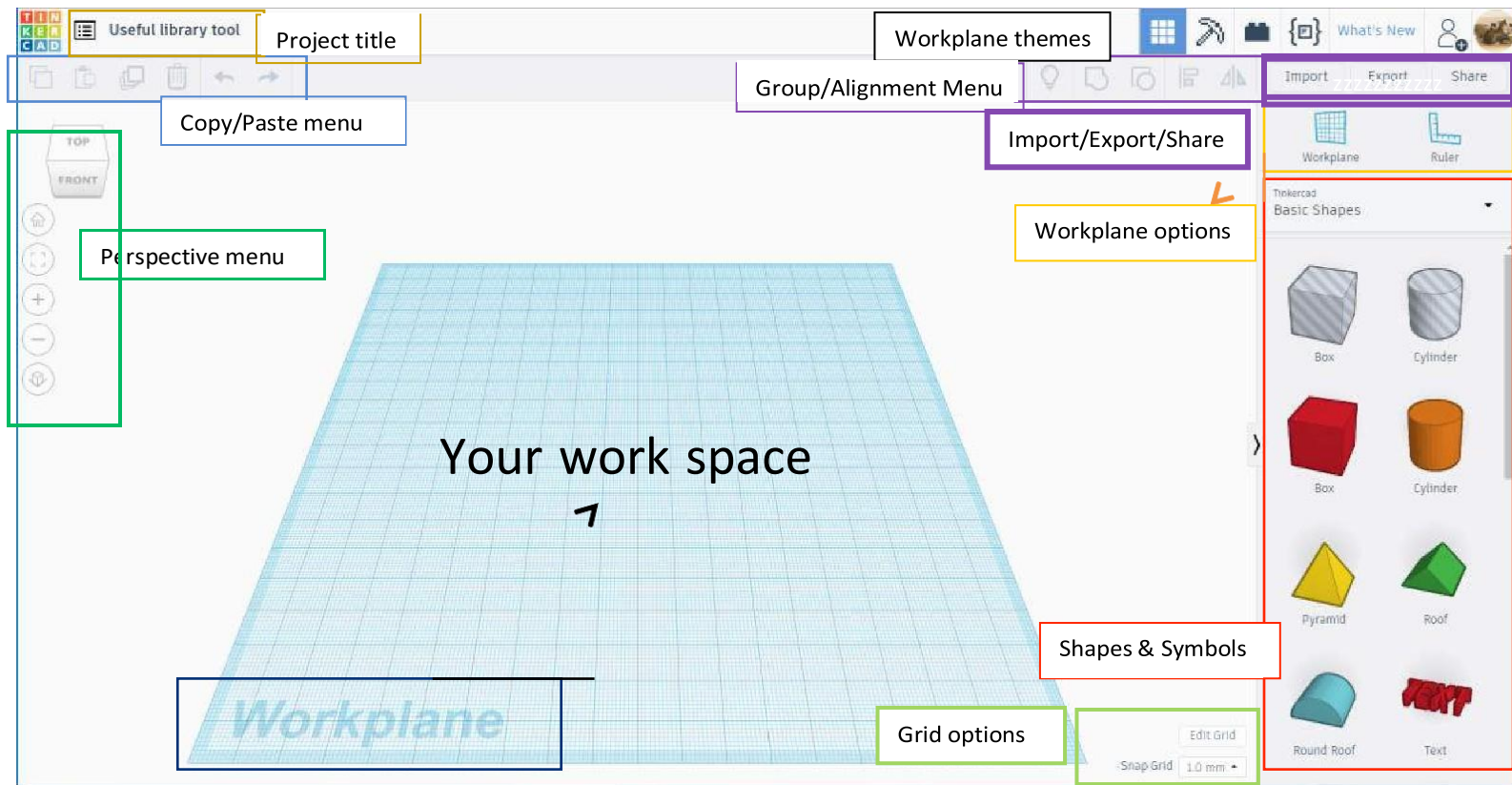


UNIT – II

DESIGN SKETCHING FOR 3D PRINTING

TINKERCAD WORKSPACE OVERVIEW

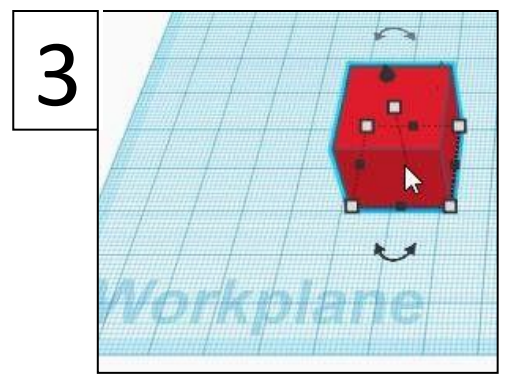
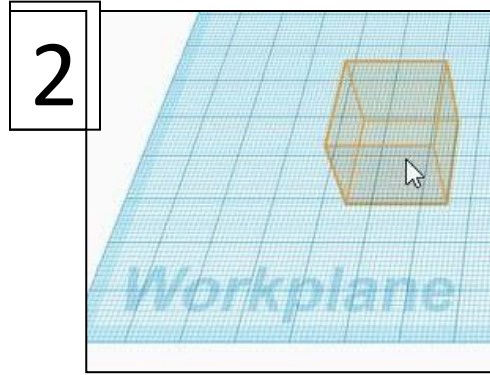
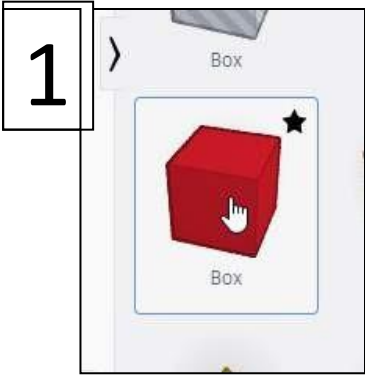


Some Basic Shape Menu HowBTos

I. Moving a shape or symbol from the basic shapes menu to your Workplane (clicking and dragging)

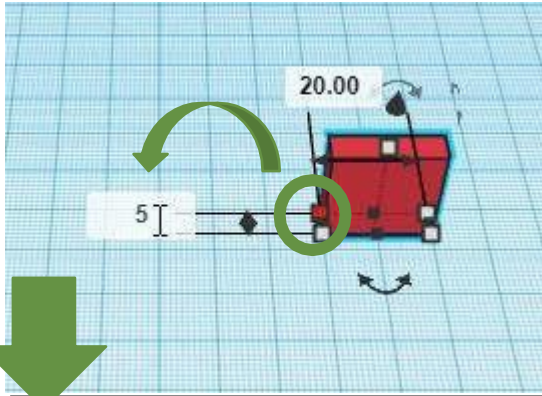
- Select which shape you would like to add to your Workplane.
- Move your mouse over the Workplane where you would like to “drop” your shape.
- Left click to “drop” shape and add it to the Workplane

*Note: Alternatively, you can left click and hold the shape you want, drag your mouse to where you want to put it on the Workplane and then let go of the left click button on the mouse to drop your shape



II. Resizing your shape.

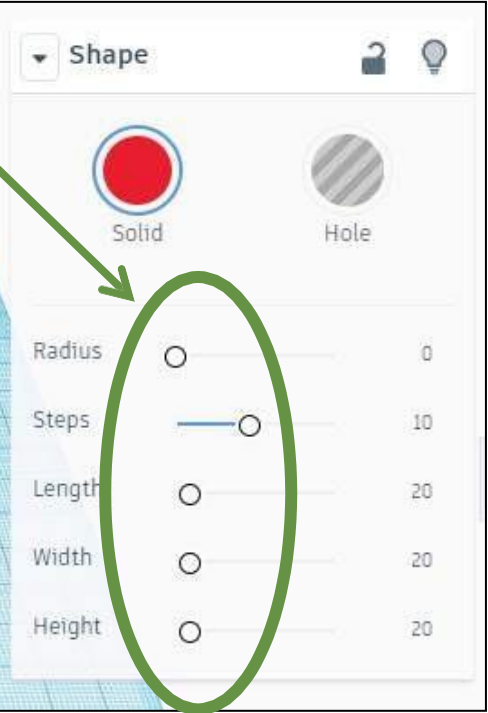
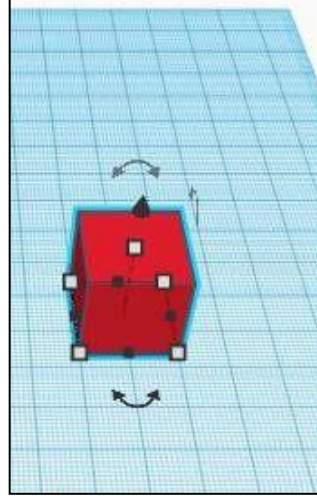
- a. There are many different ways to edit your shape once it's on the Workplane.



Once a shape is selected on the workplane, carefully click a small gray box to change a specific measurement of a shape by left clicking within the white text boxes that appear.

*Note: Selected points will change color from gray (unselected) to red (selected)

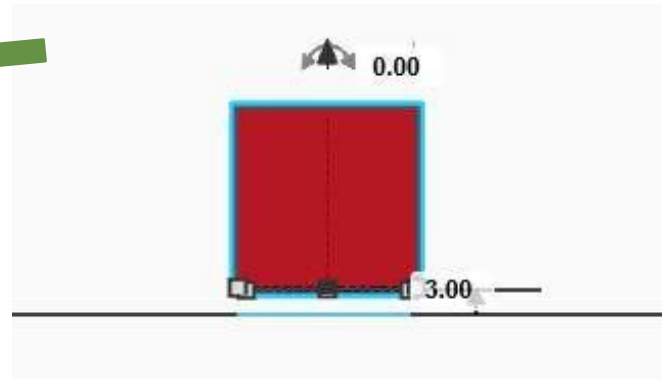
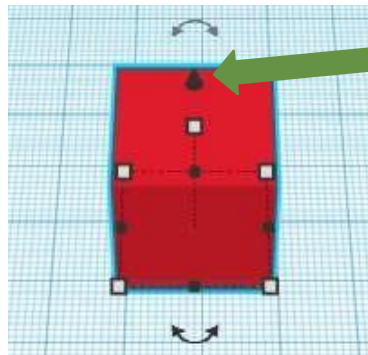
Click and drag the small white circles when you have a shape selected to make changes.



*Note: Alternatively, you can left click and drag any of the points to change the size/shape of the object selected.

III. Moving a shape above or below the Workplane.

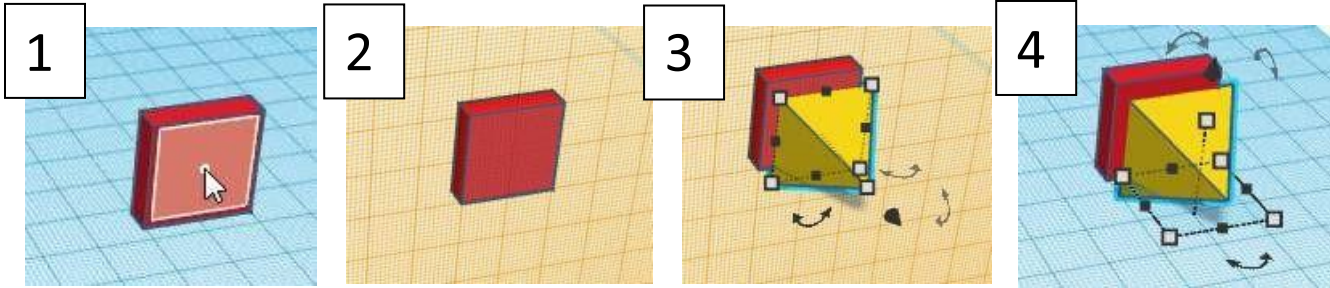
- a. You can move a shape above the Workplane by clicking and dragging the coneBshaped handle above your shape. This function allows you to stack shapes on top of each other.
- b. Remember to view your shape from the front to make sure it's not floating above the Workplane. This could mess up your 3D print if the base of your project isn't touching the Workplane.



The Workplane button:



If you would like to work or build on the side of a shape, you can change the Workplane to be the surface of a shape side by clicking this button and then clicking the side of a shape.

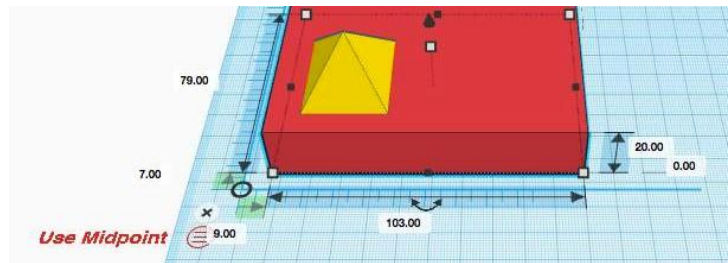


The Ruler button:



To use the ruler, click on the ruler button and then click where you would like the ruler to appear on the Workplane.

Once you have the ruler on the Workplane, you can select an object and then have the option to view the midpoint of the object selected or the endpoint.





Your turn. Become a master builder.



Start with a basic house (if you want to be really fancy, add a ).

Step 1: Click and drag a “Box” shape from the Basic Shapes menu to your Workplane. Step 2: Change the size of your box to be the size of house that you prefer.

Step 3: Change the area of your Workplane to the top of the box in order to add your roof. Step 4: Add a “Roof” shape on top of your box shape to make a house.

Step 5: Change the color of your house.

