

Step 1

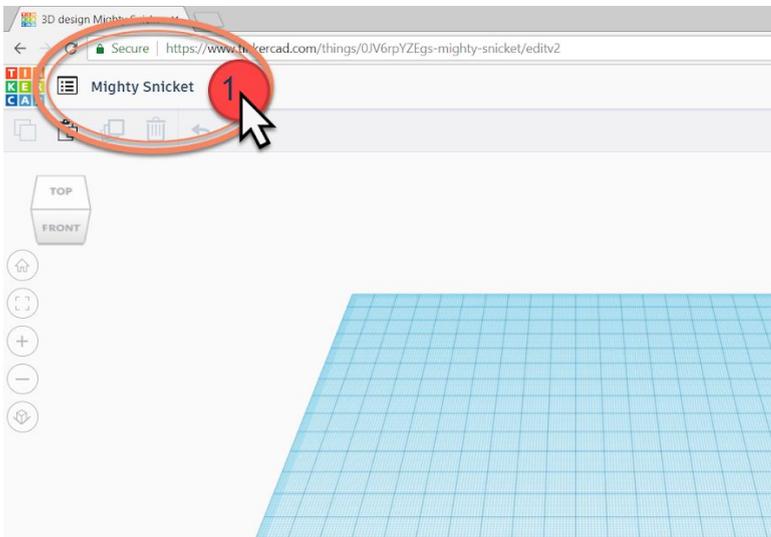
Open TinkerCad

Once open click top right on where you can sign up for the first time, or Sign In with your existing or classroom login.



Step 2

Once signed in, click 'Create new design'

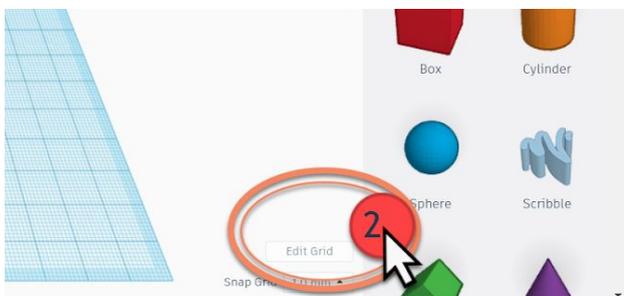


Step 3

Part A.

First, click up in the project name bar. Give your project a name that identifies what it is.

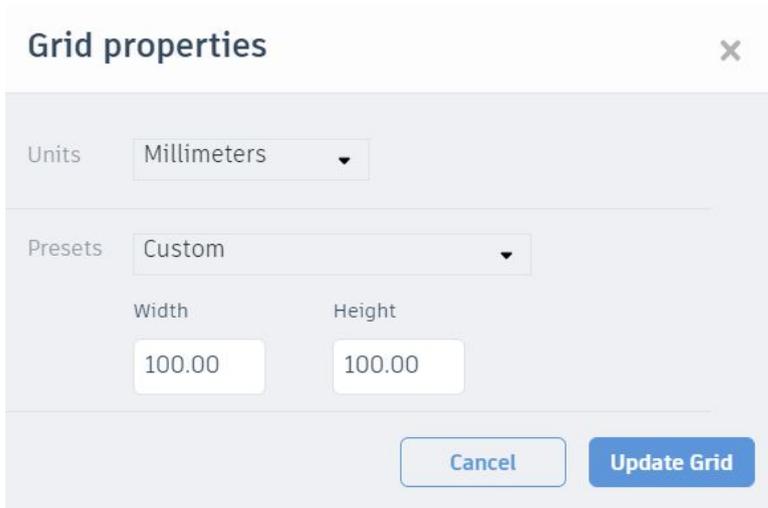
Below is an example:



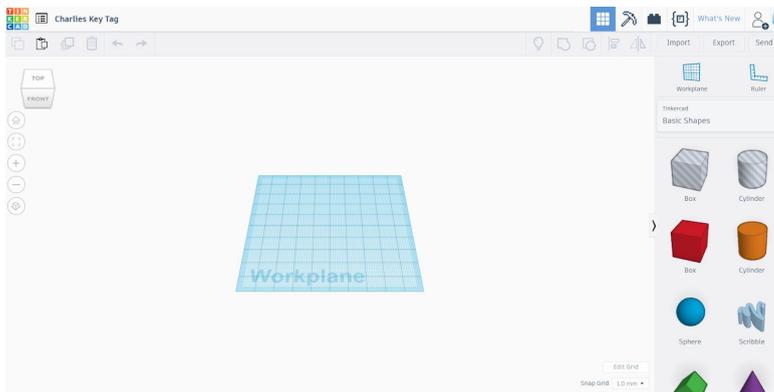
Part B.

Click on the Edit Grid at the bottom left of the working pane.





Grid properties allows us to set a screen view that will be relative to the size object we want to work with. Set to 100 w x 100 h and click Update Grid.



Your screen should now look like this. You can zoom in using the scroll wheel of your mouse.

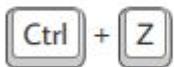
Tinkercad Keyboard Shortcuts



Copy selected objects



Paste objects



Undo



Redo

Using your mouse to navigate the TinkerCad workspace



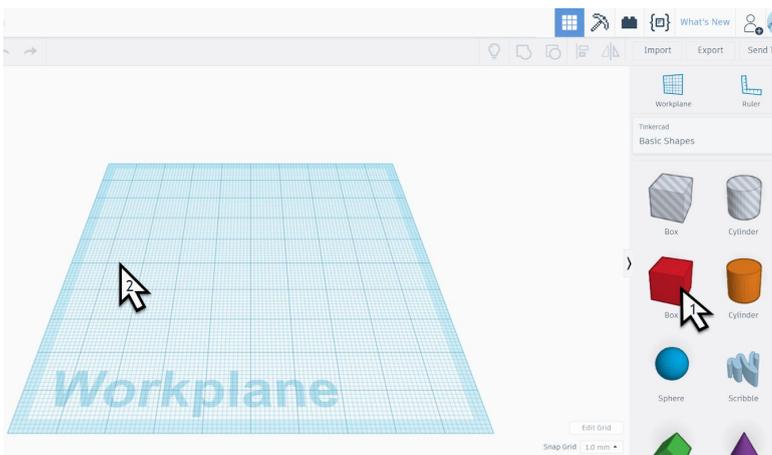
Left mouse button is used for selecting. Holding the mouse button down will help you size shapes or select an area.



Roll the scroll wheel to zoom in and zoom out. Holding the wheel button down all the way and moving the mouse will move the position of the grid.



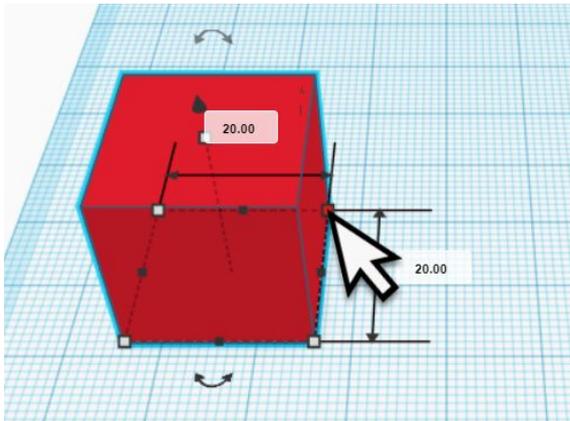
Holding the right mouse button down and pushing the mouse forward or pulling it back changes your viewing angle.



Step 5

Add a cube

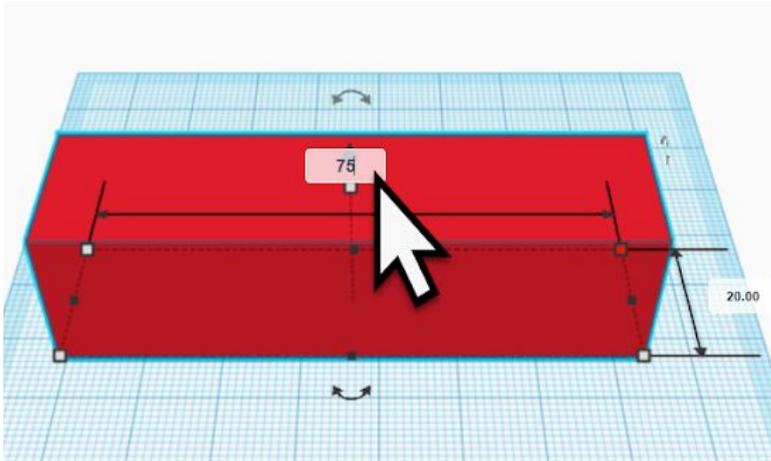
Left click on the box shape in the toolbar to the right. Drag this onto the Workplane, as shown by the second cursor in the image.



Step 6

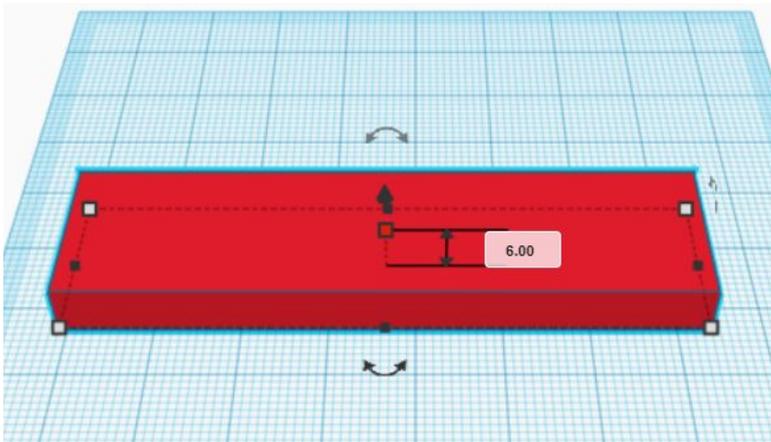
Edit the dimensions

Left click on one of the small boxes that appear mid-point in the dimensions.



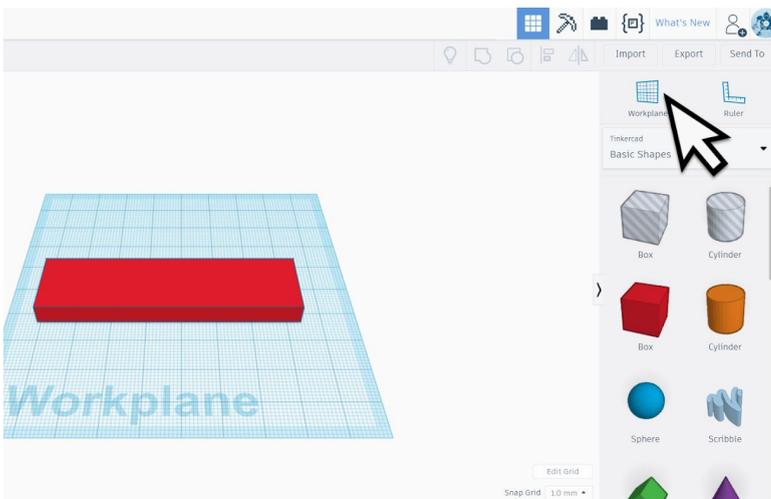
This allows you to set the length, height and width of the box.

We want the dimensions to be 75 long, 20 wide and 6 high. This will create a rectangular base for the key tag.



Click the small boxes on the dimension lines. Hovering over a box will turn it red and also show the corresponding dimension.

Click and drag these boxes to set the measurements as described above.

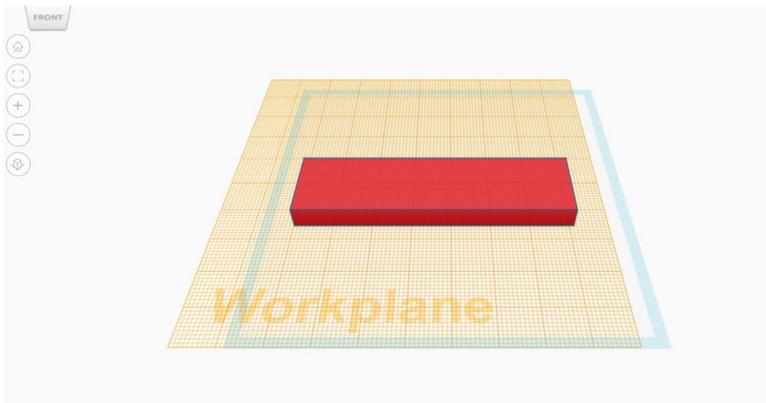


Step 7

Add a new workplane

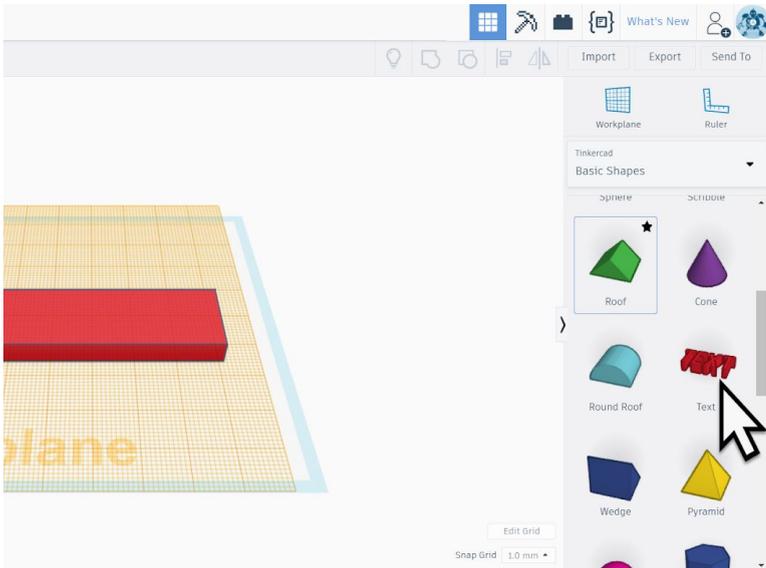
We're now going to prepare the base to add some text. First we need to change the position of our work area to be on top of our box. In right hand menu left click "Workplane".





Next, click on top of the our shape.

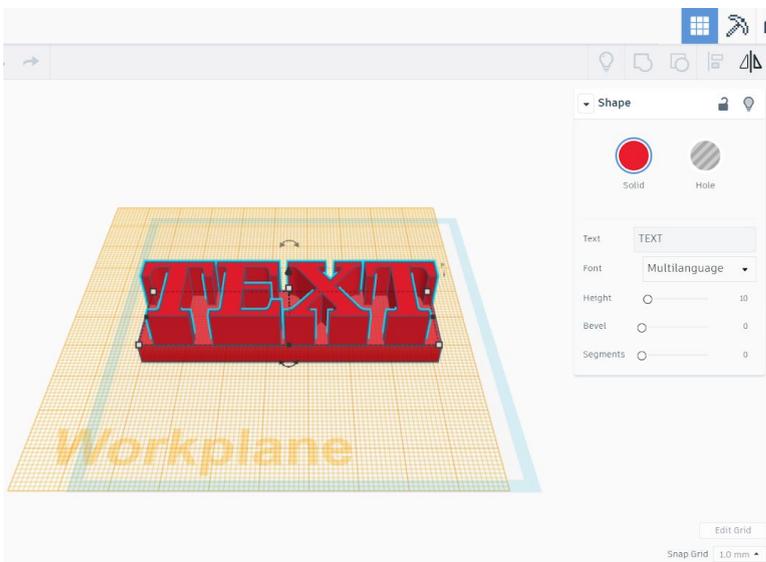
A new Workplane has now been created on top.



Step 8 Add a 'text' shape

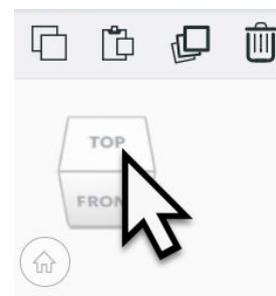
We can now add some text
From the right hand menu left click on TEXT.

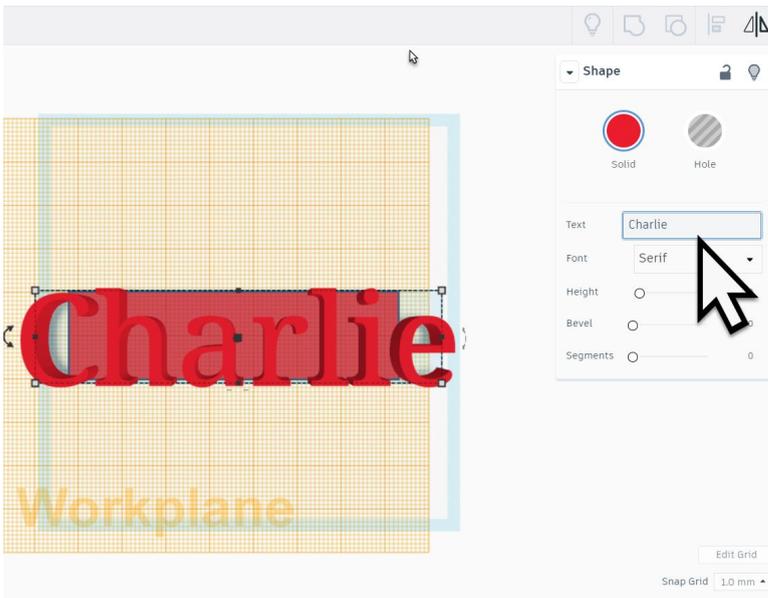
If the text option is not showing you might have to scroll down the right menu options.



Next, click on the left of our shape to place the text.

On the view box, click 'Top' to make it easier to see how the text fits (see below)



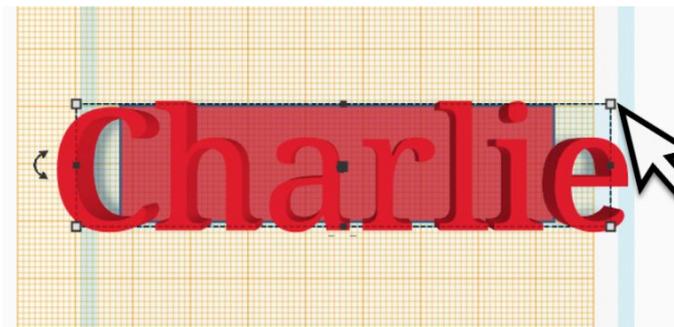


Step 9

Add your name. Or someone else's.

Now you have top view you can change the key tag text to be the name of your choice. Different font options are also available.

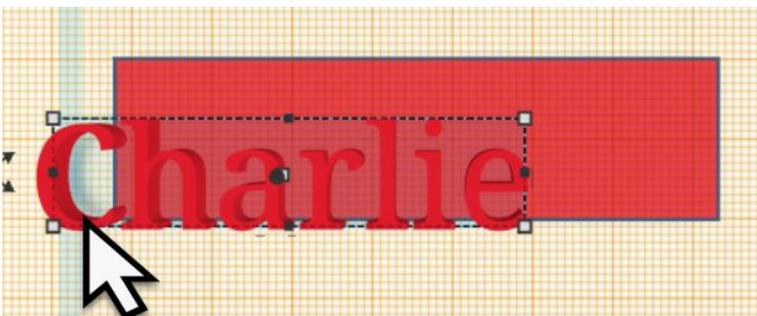
If you have a long name you will need to size it.



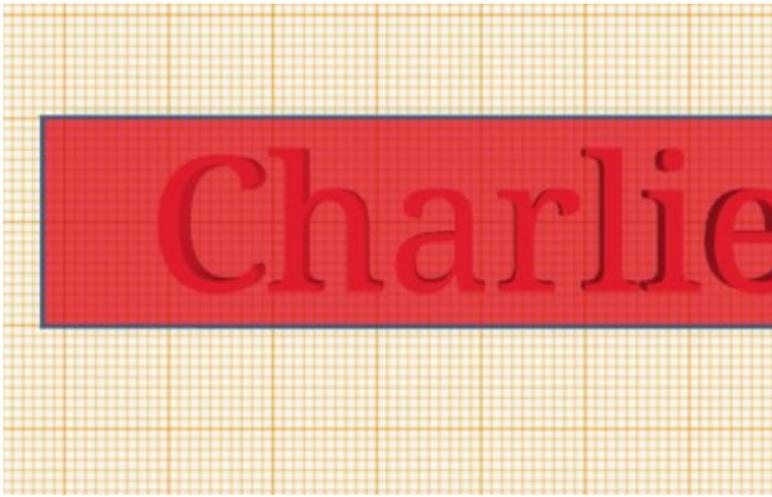
Hold down your shift key (to maintain height to width ratio during resize) and click on the top right corner and slide inwards to make smaller.



Now that it is resized we need to move the text onto the shape.



Left click the text to select it. Then click anywhere on the text and while holding down the left click button slide it onto the shape.

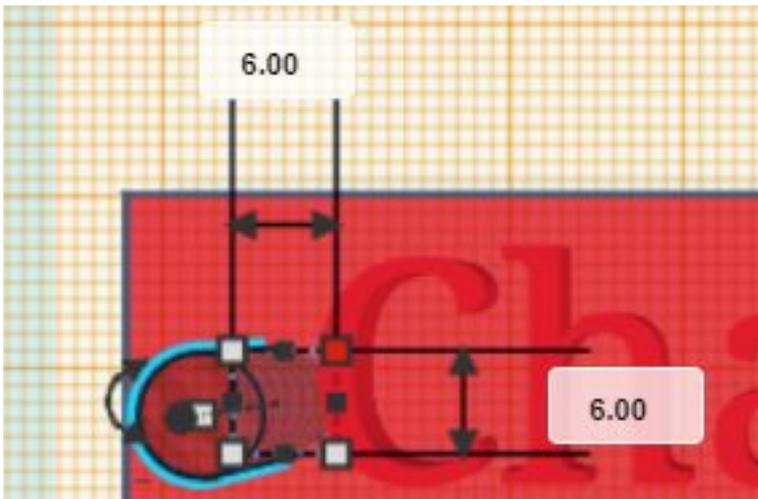


Step 10

Create a hole in our shape by clicking the hollow cylinder.

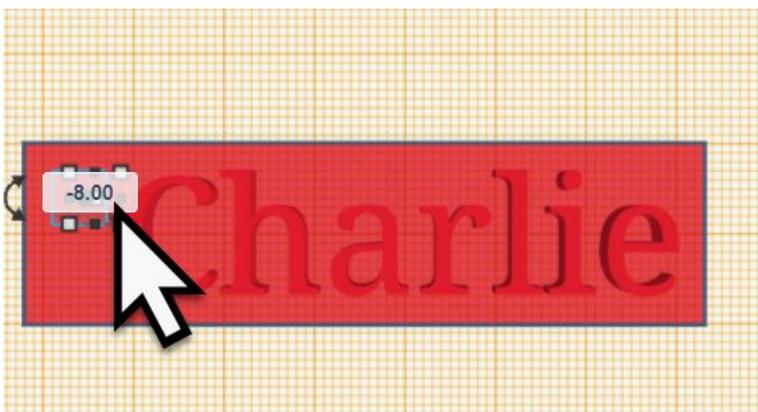


Click on our shape to place the hole by clicking the dimensions as we did for the rectangle.



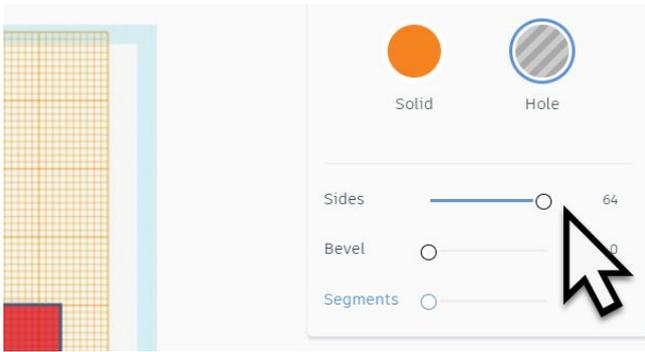
Clicking on the resizing boxes make the hole 6mm long x 6mm wide.

Next step will be to set the depth of the hole.



As we are working on top of the shape we need it to effectively drill down. Give the hole the size of -8.





Also, lets give the shape more sides which will make it smoother. You can slide it all the way to 64.

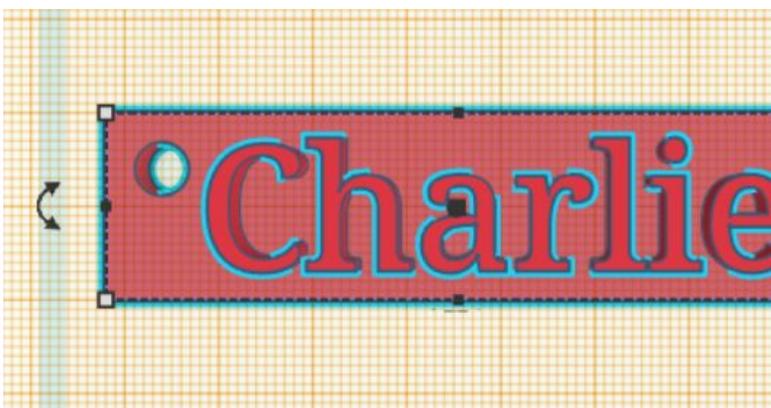


Step 11

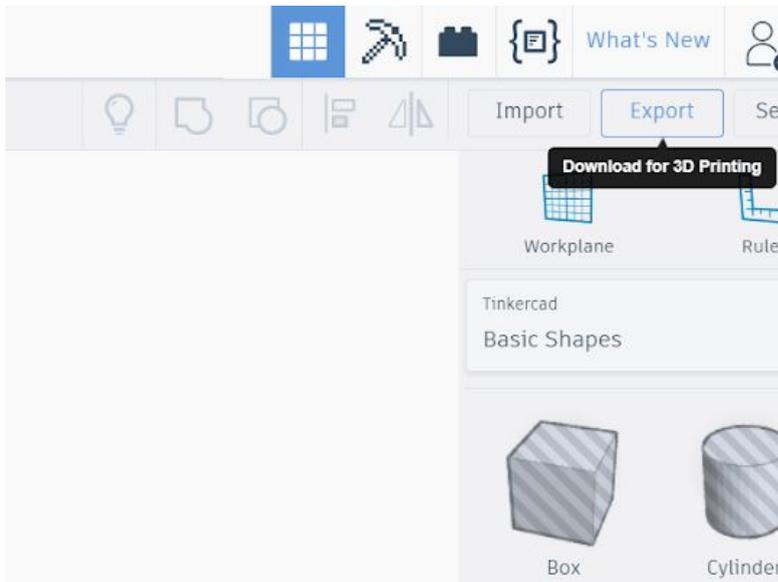
Group the hole and rectangle as one shape.

Set the selection area by holding the left mouse button down and let a rectangle be drawn around our shapes.

Now click the Group shape button (indicated by arrow 2 above).



Awesome work!
Now your tag is done.



Step 12

To convert this tag to a 3D printable file from the top right menu click on "Export". Choose the .STL format.



Your 3D printable file will now be saved and accessible from your computers downloads folder.