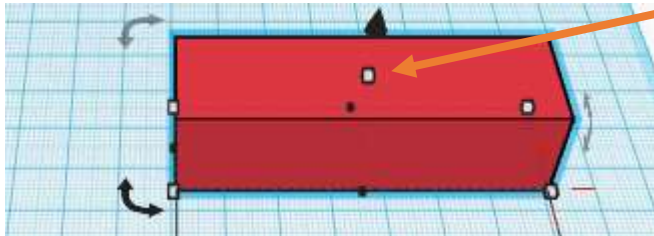
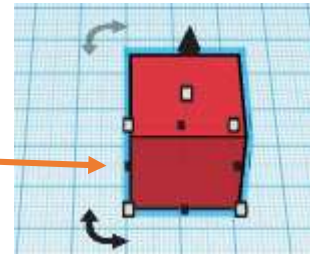
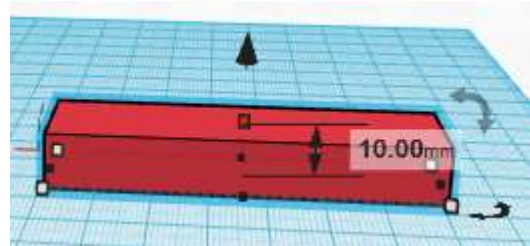


## Using Holes and adjusting sizes

1. Select create a design.
2. Drag a box onto the workplane.
3. Resize the box with the Black hands on the faces.
4. We could use the white handles to move both dimensions at once but it is more accurate and easier to use the black ones in one direction only.
5. Set the width to 100mm, leave the depth at 20mm.

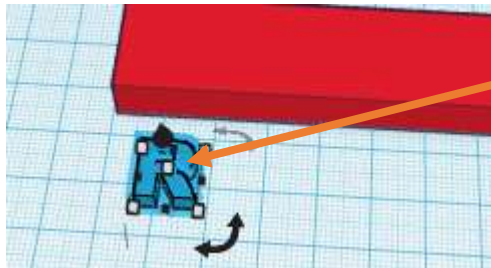


6. Use the height (z-axis) handle to lower the box to 10mm.



7. Rotate the view to look for the top.

8. Drag the letter R onto the workplane.



9. Use the height handle to increase to 10mm.

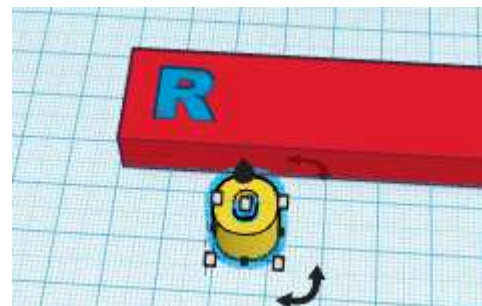
10. Then move letter into the box.

11. Repeat with other letters for ROOM.

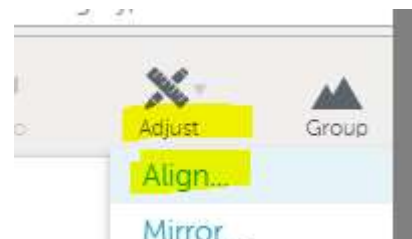
12. Then add the number for your classroom.

13. Line up the letters and numbers, neatly.

14. To centre the letters drag the mouse over all the objects to select them.



15. Next select the Adjust tool from the menu bar and select align.

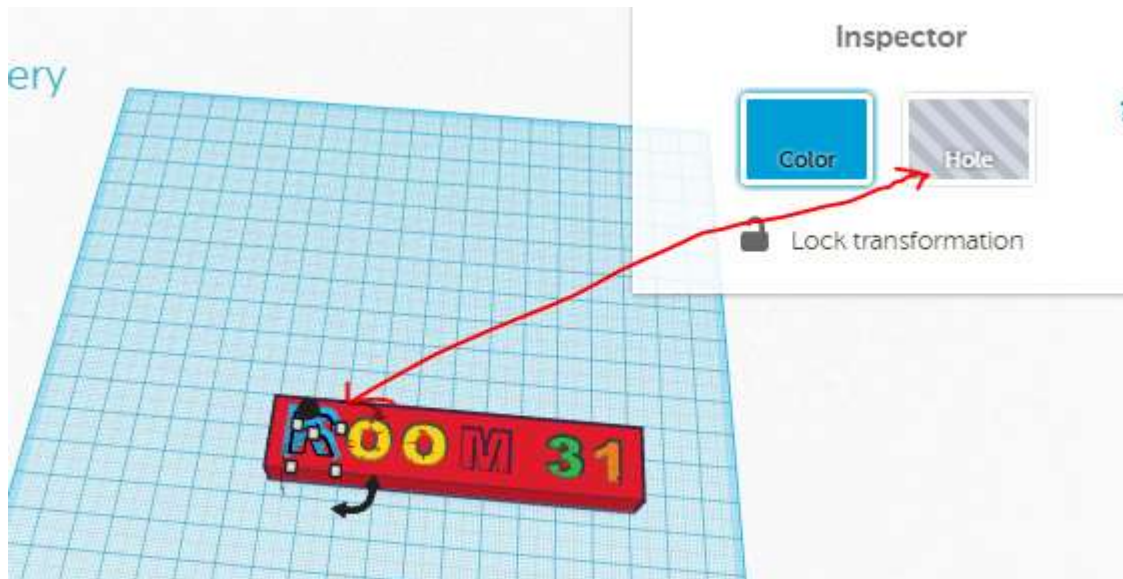


16. Now only select the side middle dot.

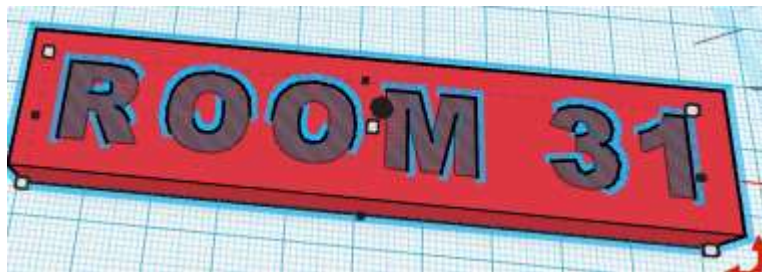


17. Now we will turn each of the letters into a hole.

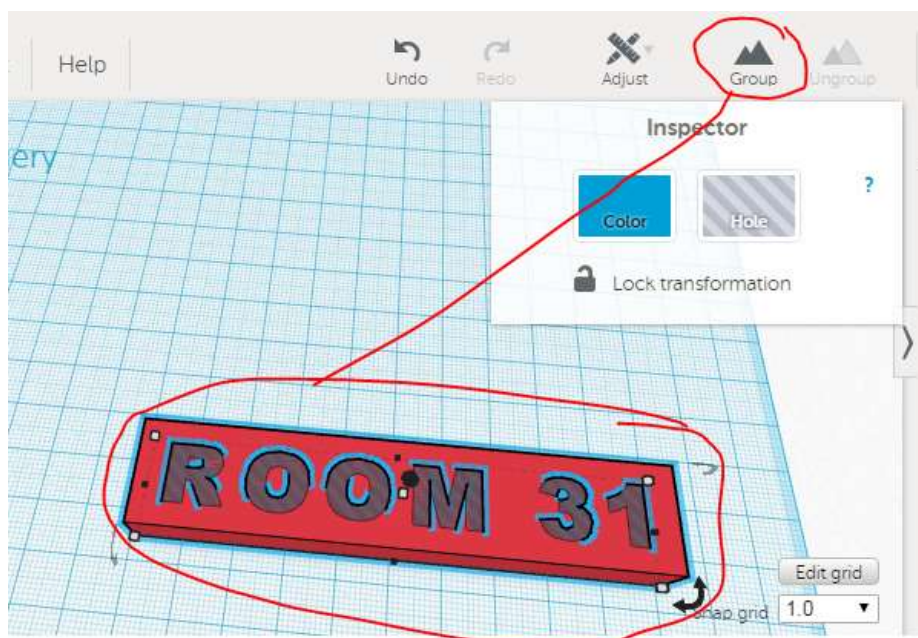
18. Select one letter and then click hole.



19. Do the same for the remaining letters and numbers



Then drag mouse over everything to select it all and click on Group



20. You should now be able to see through your box.

Question what will happen to the centre of the letter "O" and "R"?

## Extension activity

*How could you fix that?*

- Give support to the pieces – make linking connections (rods)
- Delete the pieces - create custom holes over them
- Place whole thing on a base, build a base, or just lift each letter .1 off the workplane

