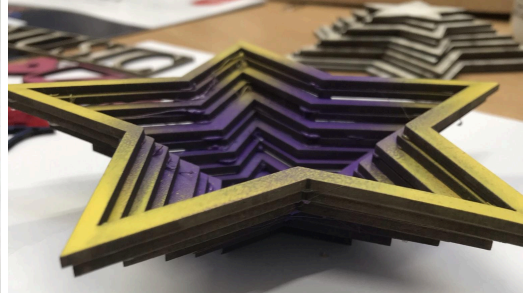
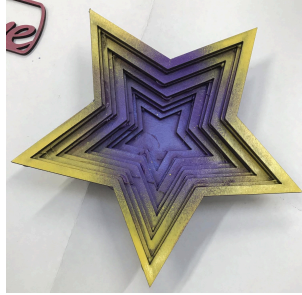
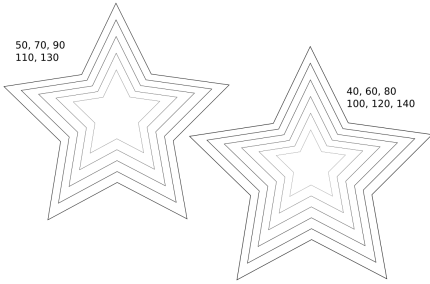


# STACKED LASER CUT BOWLS

*This will show you how to design, laser cut, and build a stacked bowl quickly and easily.*

These bowls waste very little material during manufacturing.

They can be made from a variety of materials like: plywood, solid wood, and acrylic.



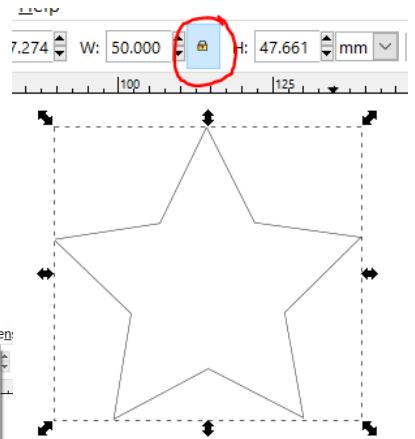
*~ \* ~ \* ~ \* ~ \* ~ \* ~ \* ~ \* ~ \* ~* INSTRUCTIONS *~ \* ~ \* ~ \* ~ \* ~ \* ~ \* ~ \* ~ \**

## Getting started:

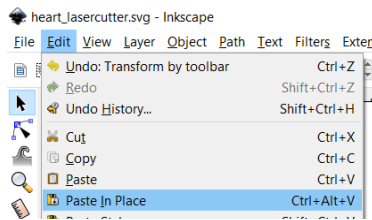
1. Open Inkscape
2. Make sure you save the file - named appropriately

**First group of shapes:**

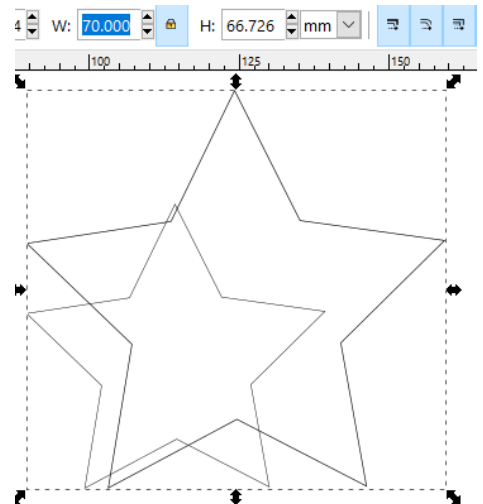
3. Create a Shape
  - a. Adjust the design / size if need be
  - b. When changing the dimensions make sure you have the **LOCK** on so that it resizes proportionally



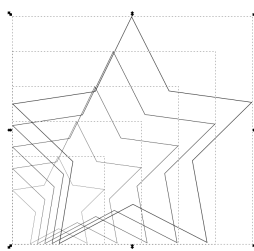
4. Copy (CTRL + C)
5. Paste in place (CTRL + ALT + V)  
*Note the outline will just look a bit darker*



6. While the object is still selected **Resize** by changing the dimensions - *you will need to work out the gap you want - 20mm increase each time means you will have 10mm difference when layering*



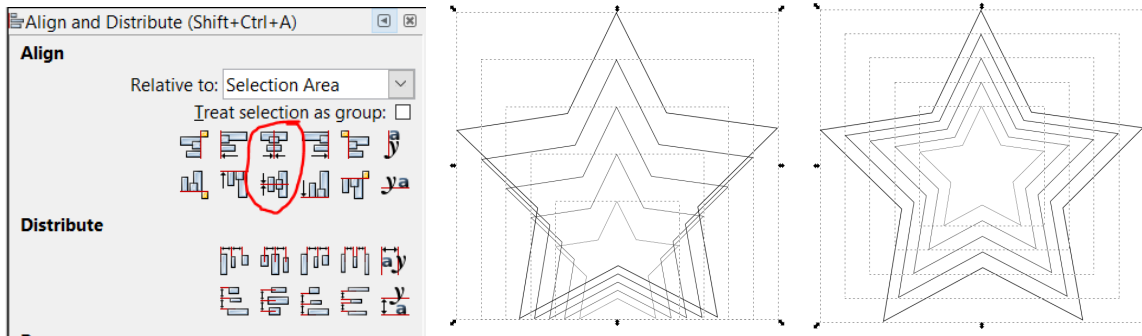
7. Repeat 3-7 as many times as you need



## You can use align and distribute to center the objects

- Select all the objects

- In the Object menu near the bottom select the **align & distribute** menu.
- Then click the **center on vertical axis** and **center on horizontal axis** buttons (circled below)



\*\*\* Note: If it is a natural shape you will may need to make some of your own adjustments

### Second group of shapes:

8. Select all of the shapes you have made
9. Copy and paste
10. Move to its own space
11. Adjust the measurements to be halfway between your last group so when you stack them you use alternate shapes.

*For example*

- if my first shapes were 50, 70, 90, 110, 130 change to 40, 60, 80, 100, 120, 140. 20mm between each shape, 10mm difference between the groups when staked
- if my first shapes were 20, 50, 80, 110, 140 change to 35, 65, 95, 125, 155. 30mm between each shape, 15mm difference between the groups when stacked

12. Save your file



### Laser Cutting:

1. Put your svg file on a usb
2. Take to the laser cutter
3. Open Lightburn
4. File -> Import and find your file
5. All of these will be line - change settings accordingly
  - If cutting on cardboard use the settings: Speed 50 / Power 60 / Pass Count 1
  - If cutting on 3mm acrylic use the settings: Speed 50 / Power 70 / Pass Count 2