

Turning 2d to 3d

To turn your 2d .png snowflake into a 3d .stl file we will use a Microsoft program called 3d Builder. This program comes installed on computers running Windows 10. If you don't have it on your computer you can download it from the Microsoft Store. This program is not compatible with Apple devices. The NOW Lab computers are all Windows based, so our programs focus on using applications that work with the Windows operating system.

Using 3d Builder

Before beginning, make sure your snowflake is in a .png file format.

The background should either be transparent or a high contrast color between the snowflake image and the background.

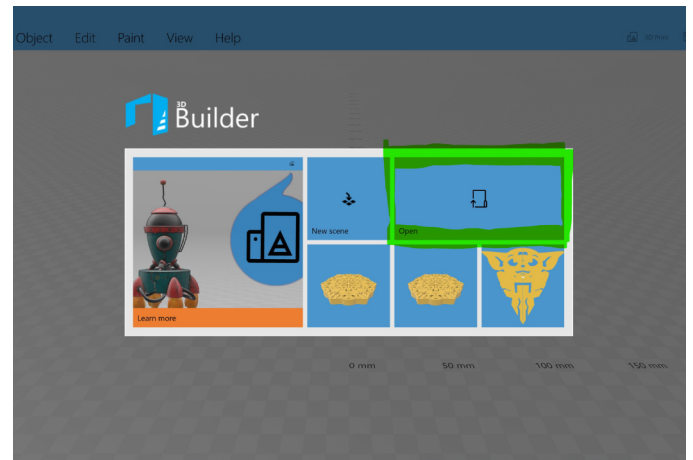
If you have questions at any point, please join the NOW Lab 3d printing google group. This is a private group staffed by volunteers who can try and answer any questions you may have about this process or any 3d printing projects. To join, email your request to nowlabnet@gmail.com.

This process can be used for almost any 2d objects. The Goodnow Library Foundation has donated filament which allows us to print one free 3d print a month for our patrons. If you enjoy this process, be sure to try it again with your own design.

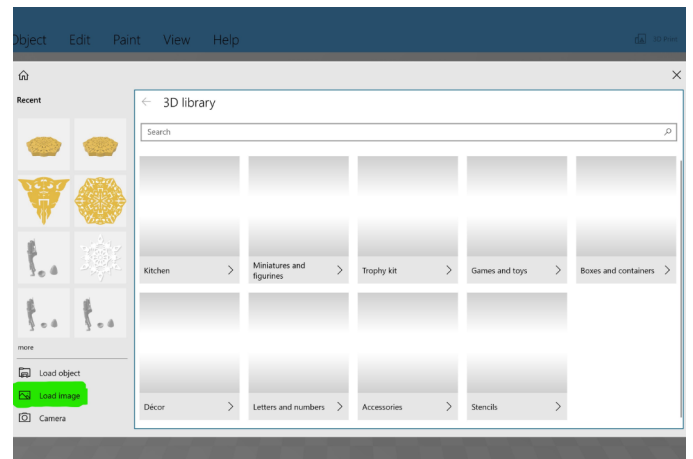
Submit your own designs by following this link:

<https://forms.gle/s9ceRPikZr4gMcdA7>

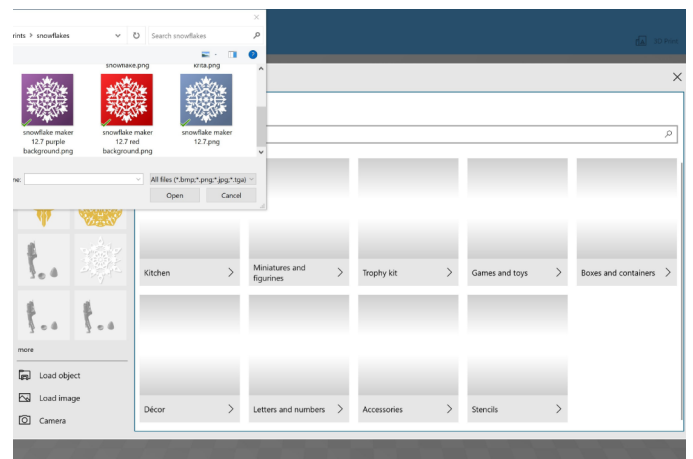
Open 3d Builder and select “Open”.



Select “Load Image” from the left side menu.

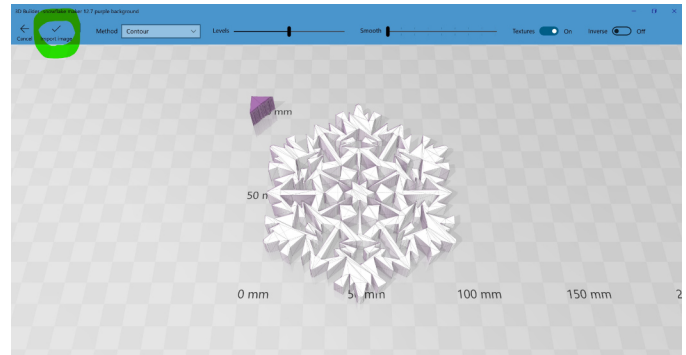


Open the .png file you want to convert.



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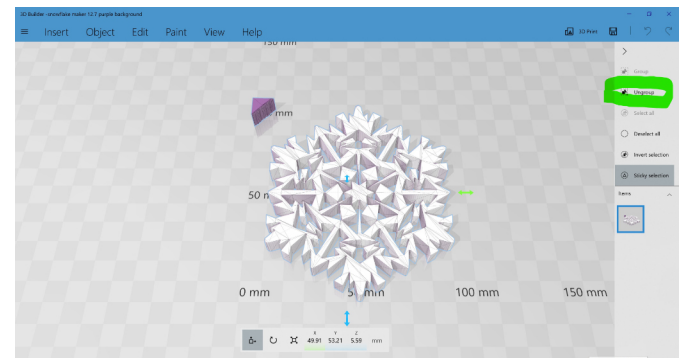
This will open the file on the 3d builder workspace. Click “Import Image” to import the file.



After the image is imported it may look like sort of translucent. That just means the object isn't selected. To select it, click on the thumbnail in the right side menu

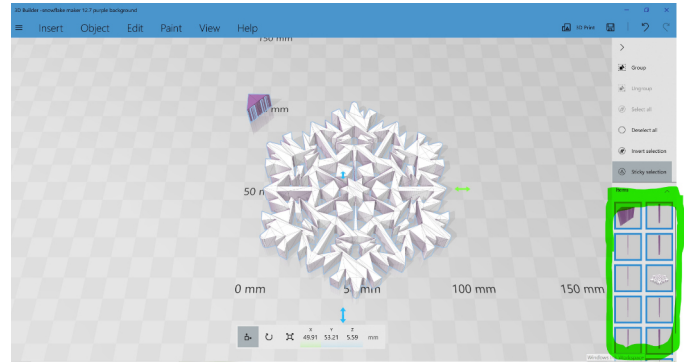


Sometimes your file will have elements you don't want printed. Some of the purple background was imported with this design which we don't want. With the object selected click “Ungroup” from the right side menu.

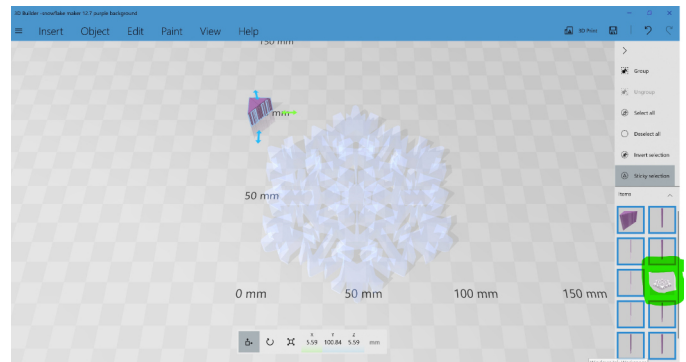


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Ungrouping will separate the object into pieces allowing you to delete the parts you don't want. All the pieces will show up in the right hand menu.

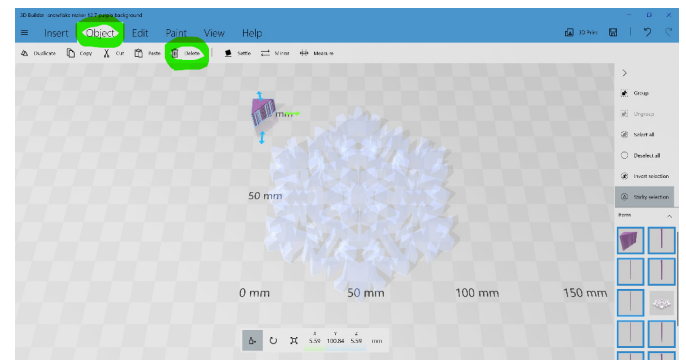


Click on the snowflake piece to deselect it.



With the unwanted pieces selected, go to "Object" and "Delete" which will delete the selected pieces.

**Helpful Hint:
Press ctrl Z to undo**



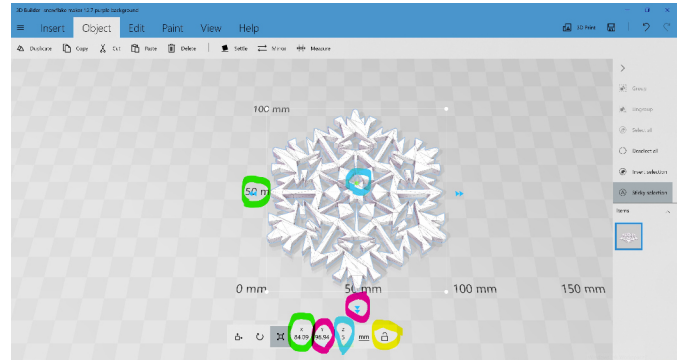
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If you want to change the size of your snowflake you can do it from the bottom menu.

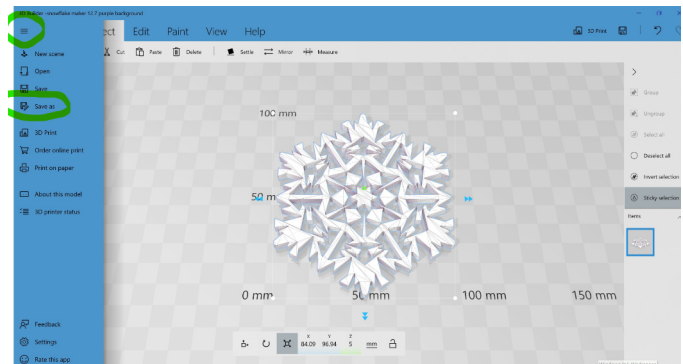
X (green) is the width
Y (pink) is the length
Z (blue) is the height

Good Measurements for printing:
X between 70-100mm
Y between 70-100 mm
Z between 10-20 mm

To keep the proportions in sync, make sure the lock (yellow) is closed. If you just want to just change one measurement make sure it's open.



When you're ready to save your project, select the 3 line (hamburger) button from the top left menu. Click on "Save As".

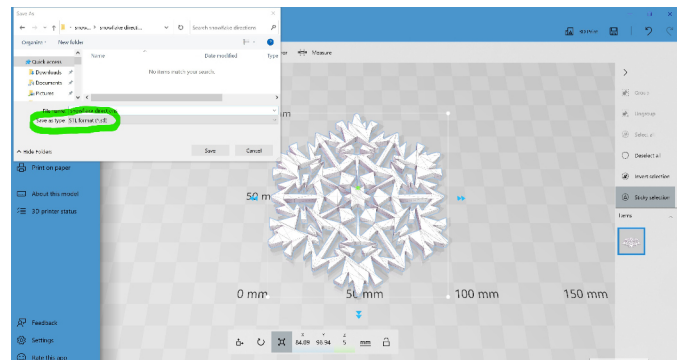


IMPORTANT! The document must be saved as an .stl file. The default for this program is .3mf. Make sure you change the file type when you save it.

Then upload it at:

<https://forms.gle/hoyYEGi2jiJ9B27i6>

We'll let you know when it's ready for pick up!



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