HOW TO 3D PRINT with



1. Browse *Thingiverse.com* (shortcut available on the Desktop) for a 3D model or create your own on TinkerCAD.

2. Click the project you want to make and click **DOWNLOAD ALL FILES.** Navigate to the Downloads folder if not already there.



3.Go to the **DOWNLOADS** folder and find your project. It will likely be in a compressed (zipped) folder. If not, proceed to Step 8.

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4. Then Right-Click on your project and select EXTRACT ALL.

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\leftarrow	📱 Extract Compressed (Zipped) Folders	
	Select a Destination and Extract Files	
	Files will be extracted to this folder:	
	C:\Users\Library Computer\Downloads\Baby Yoda Browse	
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6. Open the *Cura Lulzbot* application from the shortcut on the Desktop or from the Start Menu.

7. Click the top left **Open File** icon.

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8. Find your project in the *Downloads* folder and double-click it to open it.

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9. Double-click on the *Files* folder, then select the *Makerbot stl* file and click on *Open*.

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🖊 Downloads	*	Baby Yoda	7/29/2021 2:01 PM	3D Object	134,560 KB
Documents	*	Baby_Yoda_v2.2	7/29/2021 2:01 PM	MakerBot stl file	76,010 KB

10. Depending on your project, you may adjust the model or change setup. First click on your model on the build plate. Then you can move your object around on the build plate by using the *Move* button, increase or decrease the size of your object with the *Scale* button, change its orientation (vertical, sideways, etc.) by using the *Rotate* button, or reverse/invert the object with the *Mirror* button.



11. Many 3D projects will require a raft (a base upon which to build the object) to keep the object from sliding around on the build plate. To add a raft, click the *Built Plate Adhesion* menu item on the right side of the screen and select *Raft* for *Build Plate Adhesion Type*.



12. Many 3D projects will require supports. If part of your object extends out into midair (such as Yoda's ears in this example) it will need supports. To add supports, click the *Support* menu on the right side of the screen and click the *Generate Support* box.



13. Note the time estimate for your project. You are limited to 12 hours of 3D Printer time per month. If the estimate is longer than 12 hours, reduce the scale of your project until it will take 12 hours or less.

Please note the material usage amount listed below the time estimate (9.55m in this example) and let the Library Staff know how much filament will be needed.

Support Line Distance	8	1.6667	mm
Support Z Distance	8	0.1	mm
Support Top Distance	8	0.1	mm
Support Bottom Distance	8	0.1	mm
Support X/Y Distance	8	1.5	mm
Support Distance Priority	8	Z overrides	X/Y 🔻
Minimum Support X/Y Distance	8	0.25	mm
Support Stair Step Height	8	0.3	mm
Support Stair Step Maximum Width	8	5.0	mm
Support Join Distance	8	2.0	mm
Support Horizontal Expansion	8	0.2	mm
Ready to Save to File		Save to File	•
9.55m / ~ 76g			

14. Once all settings are as you want them to be, click the *Save To File* button. Navigate to the SD Card provided by the Library Staff and please use the file name format *Last Name_Filament Color_Date*, i.e., *Smith_Green_29Jul21*. Do NOT close the *Cura Lulzbot* program until you have verified with the Library Staff that the project is properly prepared.



15. Give the SDCard to the Library Staff and let them know the estimated printing time and filament usage. They will verify that the project is properly prepared and schedule your project for printing.

LULZBOT® FILAMENT COLORS

BL	ACK		TRUE PURPLE
BLI	JE		RED
GR	AY		TRANSLUCENT RED
NE	ON GREEN		TEAL
TR	UE GREEN	\bigcirc	WHITE
OR	ANGE		YELLOW
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