1

PART 1: PREPARING FILES TO PRINT
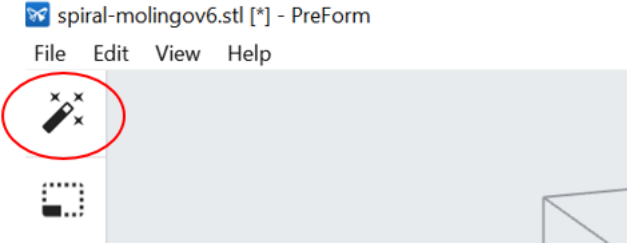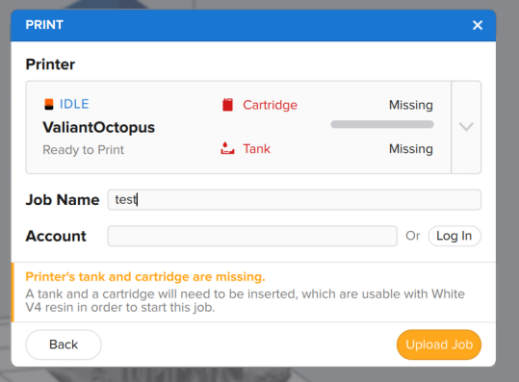
STEP BY STEP INSTRUCTIONS: PREFORM SOFTWARE

FRISCO PUBLIC LIBRARY
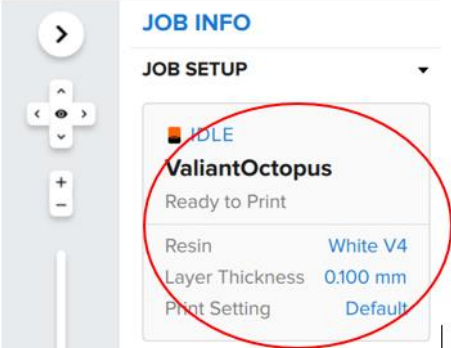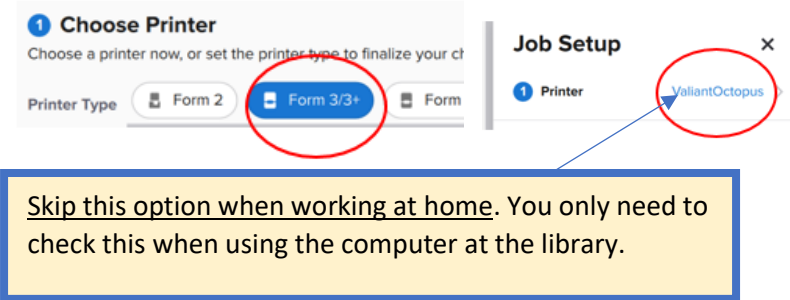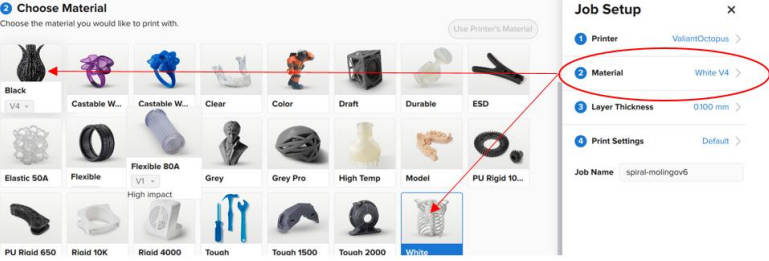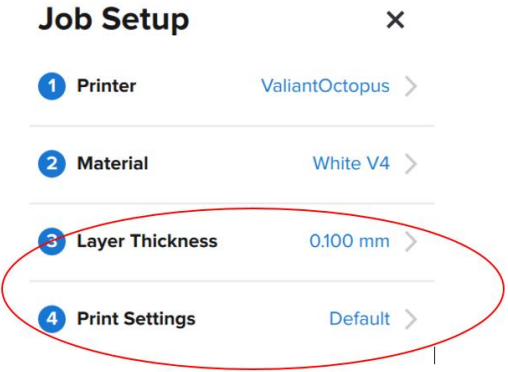February 1, 2024
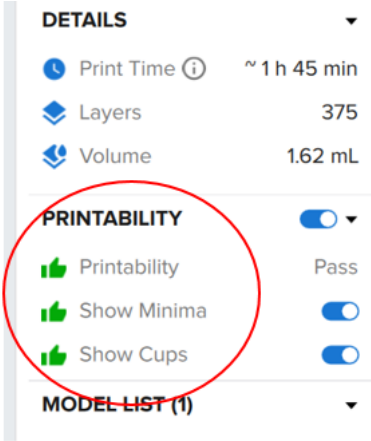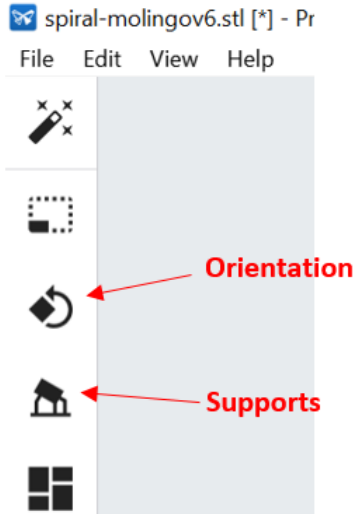
Preparing File to Print
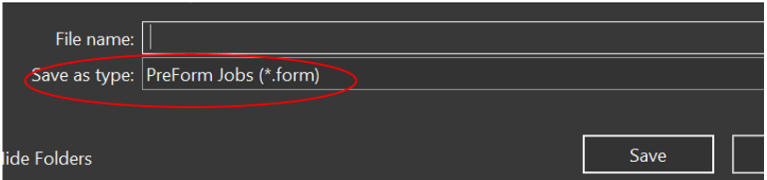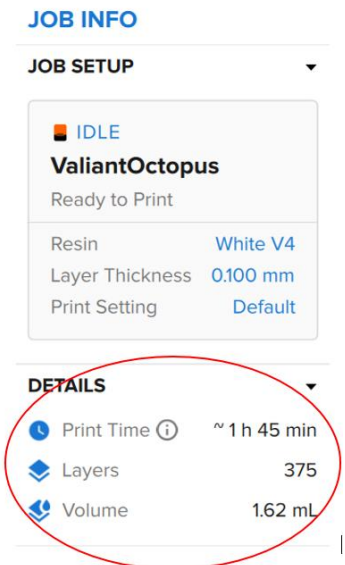
Typical time to prepare files: 45 minutes
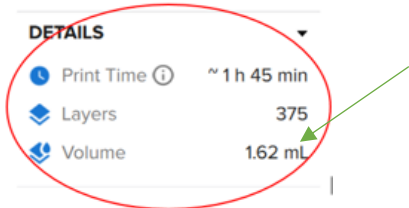
1	Launch PreForm software. Available for free download at home: https://formlabs.com/software/preform/	The library computer will have preform icon on desktop.	

2	Open your STL or OBJ file.
	   1. Click **File** Menu
	   2. Select **Open…**
		You will need either:
		
		  • .stl
		  • .obj	

3	Click **Job Setup** details	This will allow you to adjust the printer, resin, layer thickness and print settings.	

4	Make sure the following are selected: • Printer Type: **Form3/3+** • Printer: **ValiantOctopus (SKIP IF AT HOME)**	The printer option (ValiantOctopus) will not be available when using PreForm at home.	 Skip this option when working at home. You only need to check this when using the computer at the library.
5	Select resin type.	Available types: • White v4 • Black v4 • Clear v4	

6	Keep default settings for:
	    Layer Thickness: **0.100mm**
	    Print Settings: **Default**
		We recommend using the **0.100 layer height** for the best chances at a successful print.	

7	Click Apply button		

			Apply

8	Use One-Click Print
	    1. Click the magic wand icon
	    2. Click **Set Up Your Print**
	
	There will likely be a couple of minutes while the software configures your print.
		This will automatically apply supports and adjust orientation for a successful print. It is the fastest and most reliable way to prepare your model to print.	spiral-molingov6.stl [*] - PreForm
			File Edit View Help

9	AT LIBRARY ONLY – (SKIP IF AT HOME) You may get a screen with a yellow UPLOAD JOB button if your object passes a printability check. Option 1: Upload now and **skip to step 14**. This will accept all default orientation and support setup selections made by the software. Option 2: Close this window to review options.	Accounts are not required and we ask that users <u>do not</u> log into a personal account.	PRINT × Printer ■ IDLE ■ Cartridge Missing **ValiantOctopus** Ready to Print ▲ Tank Missing **Job Name** test **Account** Or (Log In) **Printer's tank and cartridge are missing.** A tank and a cartridge will need to be inserted, which are usable with White V4 resin in order to start this job. Back Upload Job

10	Review Printability Check.
	
	You need the green thumb ups on all categories:
	    Printability
	    Show Minima
	    Show Cups
		If there is an issue it will flag it in red on the model preview.
		
		It is okay for sections to be in red if the overall printability is a PASS.	

11	Adjust if needed:
	    Cups Error: Adjust Orientation
	    Minima: Adjust Supports
		Orientation and Supports:
		
		Try using the **Auto-Generate** button to assist in correcting issues.	

12	Insert USB drive in computer.	You will save this setup to the USB drive to be used later for printing.	
13	**Save As** to USB drive. 1. **File** menu – **Save As** 2. Select your USB as the destination drive 3. Enter a file name 4. Save as type: **PreForm Jobs (*.form)** 5. Click **Save**	**.form** file type saves all the details you have applied for printer type, resin type, supports, and orientation for a successful print.	

14	Note details on 3D print forms before reserving printer.
	    -Total Print Time
	    -Volume in mL
		When reserving the printer, in addition to the print time, be sure to give yourself extra time:
		
		50 min to wash object.
		
		50 min to cure object.
		
		30 min to clean up.	

| 15 | Reserve the Form3 Printer Online:

www.friscolibrary.com/makerspace | Cost to print your object will be 30 cents per mL of resin (Volume) as displayed in the Details section of PreForm.

==Please round the volume up to the next whole mL==.

Example:
1.62mL → 2.0mL | |