

3D PRINTER STEP-BY-STEP



FILE PREP IN PRUSASLICER

Use the taskbar to find and open **PrusaSlicer** on the Makerspace 3D printing computers

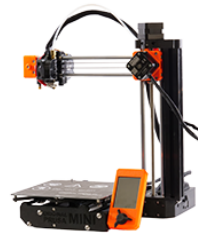
Complete the start-up tasks

Under 'Welcome,' click **Next >**

Under 'Prusa FFF,' deselect 0.4 mm nozzle under Original Prusa MINI and **select 0.4 mm nozzle under Original Prusa i3 MK3S & MK3S+v 1**

In the bottom right corner of the pop-up, click **Finish**

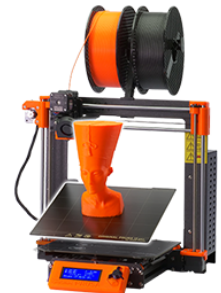
1



Original Prusa MINI & MINI+

- ☐ 0.4 mm nozzle
- Alternate nozzles:
- ☐ 0.25 mm nozzle
- ☐ 0.6 mm nozzle
- ☐ 0.8 mm nozzle

MK3 Family



Original Prusa i3 MK3S & MK3S+

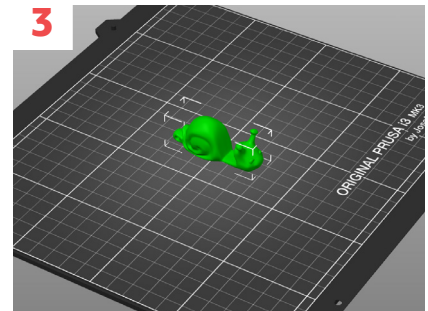
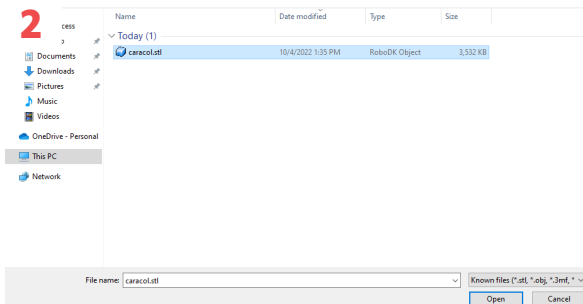
- ☒ 0.4 mm nozzle
- Alternate nozzles:
- ☐ 0.25 mm nozzle
- ☐ 0.6 mm nozzle
- ☐ 0.8 mm nozzle

IMPORTING FILE

In the upper gray taskbar, select the 'Add' icon **1**

Select the .stl file you would like to print and click 'Open' **2**

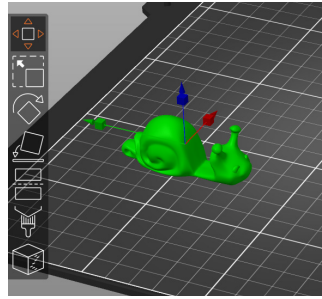
Your object should appear in the center of the build plate **3**



POSITIONING AND TRANSFORMING

Manipulate your object as you wish by clicking on it and using the left-hand taskbar

The task bar includes tools to move, scale, rotate, place on face, and cut your object



PRINT SET UP

Under the Print settings dropdown, select **0.20mm QUALITY**

Under Filament, select **Generic PLA**

If your object has large overhanging areas, click **Support on build plate only** in the Supports drop-down

Set the Infill to **15% infill** (appropriate for most builds)

Hit **Slice Now** in the bottom right corner.

Check the **estimated print time** in the bottom right corner of the screen. **1**

Larger and more complex objects will take longer to print than small simple objects

Use the cubes in the bottom left corner to flip between an editable model and your g-code. Manipulate/scale your object as needed. **2**

Print settings :

0.20mm QUALITY (modified)

Filament :

Generic PLA

Printer :

Original Prusa i3 MK3S & MK3S+

Supports: Support on build plate only

Infill: 15% Brim: ☐

Object manipulation

Name: caracol.stl

	X	Y	Z	
Position:	130.63	158.96	10.94	mm

Sliced Info		1	2
Used Filament (g)	9.34		
Used Filament (m)	3.13		
Used Filament (mm ³)	7529.01		
Cost	0.24		
Estimated printing time:			
- normal mode	1h3m		
- stealth mode	1h4m		
Export G-code			

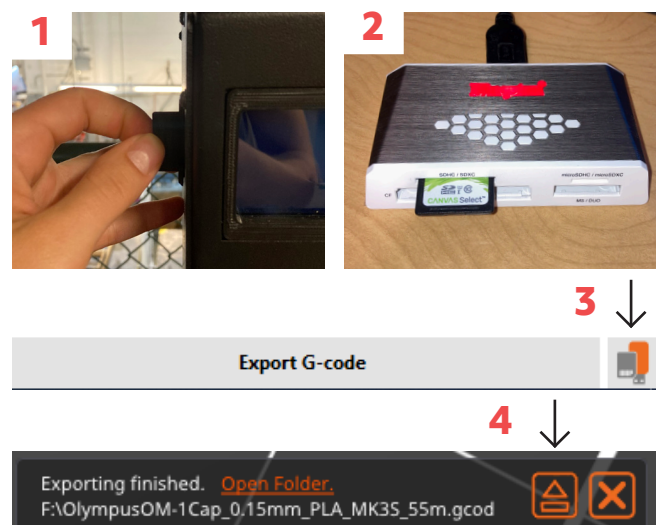
SAVE TO SD CARD

Remove the SD card from the left side of the Prusa (if the printer is not currently in use!) **1**

Insert it into the card reader for the 3D printing computer **2**

Click the **flashdrive** next to Export G-code **3**

Click the **Eject** arrow on the pop-up that appears on the bottom of the screen. The SD card can now be safely removed **4**

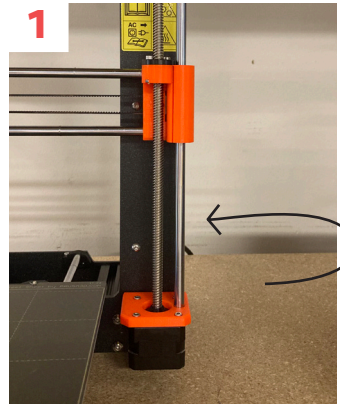


PREPARING THE PRINTER

Make sure the print bed is fully cleaned off (remove any plastic scraps or strings, brush off debris into dustpan).

Re-insert the SD card into the card reader on the 3D printer

Flip the red button on the back right of the printer to the 'On' position to turn it on **1**



START PRINTING

Press on the knob to go to the selection menu **1**

Use the knob to scroll down until you reach '**Print from SD**'. Press the knob again to select **2**

Scroll down until you reach **your file** (it should be at the top of the list) and press on the knob to select it **3**

If you need to pause or stop your print, press on the knob and select 'Pause print' or 'Stop print', or find a Makerspace staff member to help you out

Once the print is complete, lift the build plate off the printer. Flex it from side to side to pop off your print. Pop any excess filament off the plate and return the plate to the print bed **4**

Flip the red button to the 'Off' position to turn the printer off

