MOB SETUP

To start printing, you need to install two types of software:

Pronterface for controlling the printer and printing models:
WINDOWS
http://koti.kapsi.fi/~kliment/printrun/Printrun-Win-Slic3r-10Mar2014.zip
(Please extract this folder to desktop and create a desktop shortcut for "pronterface.exe".)
MAC
http://koti.kapsi.fi/~kliment/printrun/Printrun-Mac-10Mar2014.zip

Cura for slicing models:
WINDOWS
http://software.ultimaker.com/
MAC
http://software.ultimaker.com/
 (Under first time run wizard:
1. Choose "Other" followed by "Custom" for your machine information.
2. Name your machine as you wish.
3. Enter "200, 160, 160, 0.4" for machine width, depth, height and nozzle size respectively.
4. Check the heated bed box.)

Open Cura.

Enter the following settings on Cura:
https://drive.google.com/folderview?id=0B76U_UNjsYZFTmlBalZZdlB2c0U&usp=sharing

Download an STL file from http://www.thingiverse.com/ to test a print.

In Cura, go to File > Load model file to load the downloaded STL file.

Save the file as G-code. (File > Save GCode).

Connect your printer to a power source and then connect your printer to your computer using the USB cable .
WINDOWS
Open "device manager" and look for "Ports (COM & LPT)". There should be a "USB Serial Port (COM#)". The "#" will be the Pronterface port.
(If you cannot find it, please download FTDI drivers: http://www.ftdichip.com/Drivers/VCP.htm
Make sure that you pick the correct version for your computer.)
MAC
Open a terminal (Go > Utilities > Terminal) and enter: ls /dev/cu.*
A list of all USB devices connected will be shown. Look for the one that mentions USBSERIAL, for example: /dev/cu.usbserial-A101OV1W
The "/dev/cu.usbserial-A101OV1W" will be the Pronterface port.

Open "pronterface.exe".

Enter the "COM#" as shown in the red box:
https://drive.google.com/file/d/0B76U_UNjsYZFSTVBQ0FYTnR1Qnc/edit?usp=sharing

Enter baud rate = 250000 as shown in the orange box:
https://drive.google.com/file/d/0B76U_UNjsYZFSTVBQ0FYTnR1Qnc/edit?usp=sharing

Enter the rest of the information as shown in the yellow and blue boxes:
https://drive.google.com/file/d/0B76U_UNjsYZFSTVBQ0FYTnR1Qnc/edit?usp=sharing

Enter the nozzle temperature and print bed temperature for printing PLA as shown in the green box:
https://drive.google.com/file/d/0B76U_UNjsYZFSTVBQ0FYTnR1Qnc/edit?usp=sharing
!!! If you are using ABS, enter 230 for nozzle temperature and 110 for print bed temperature.

Go to Settings > Options and enter everything as shown in the black box:
https://drive.google.com/file/d/0B76U_UNjsYZFUDJqd2g2RXZaNkE/edit?usp=sharing

Click "Connect".

Set the nozzle temperature and print bed temperature by clicking on both "Set" (as shown in the purple box) to begin heating up the nozzle and print bed.
https://drive.google.com/file/d/0B76U_UNjsYZFSTVBQ0FYTnR1Qnc/edit?usp=sharing
Do not touch the extruder nozzle or print bed.

After heating up the nozzle to more than 160 degrees C, feed new filament into the extruder. Click "Extrude" to help remove the remaining filament in the nozzle. Change extruding amount to 20mm or more (initially set at 5mm) to extrude more filament at one click.
!!! If you are using ABS, wait for nozzle temperature to reach more than 200 degrees C.

 (Please only click "Extrude" after you have heated up your nozzle to more than 160 degrees C.)
!!! If you are using ABS, wait for nozzle temperature to reach more than 200 degrees C.

Play around with the x/y direction navigation buttons (numbered 1 to 12) on Pronterface to get a feel of how the extruder and print bed move.
https://drive.google.com/file/d/0B76U_UNjsYZFU24zcnJfek8xdUk/edit?usp=sharing

"Home X","Home Y" and "Home Z" (as shown in the black boxes) will move each respective axis (X, Y and Z) to its home position, where each axis will hit its respective end stop and come to a halt.
https://drive.google.com/file/d/0B76U_UNjsYZFSTVBQ0FYTnR1Qnc/edit?usp=sharing
IMPORTANT: On clicking "Home Z", the print bed rises and when it finally stops moving, the nozzle is supposed to barely touch the print bed. Click "+z 10" (numbered 13) to lift up the nozzle before clicking other navigation buttons.
https://drive.google.com/file/d/0B76U_UNjsYZFU24zcnJfek8xdUk/edit?usp=sharing

Place a small piece of paper on the bottom left corner of the print bed. Use the x/y direction navigation buttons to move the extruder such that it is above the piece of paper. On clicking "Home Z", the print bed rises and stops when the Z end stop is hit. At this point of time, the nozzle should be a paper's distance away from the surface of the print bed, so that the nozzle will not scratch the print bed, and that the filament can stick on the print bed nicely. A slight tug should remove the piece of paper.

If the nozzle is too close to (the paper cannot be removed) or too far away from (the paper is removed too easily) the print bed , tighten/loosen the thumb nut/screw that is located at the bottom left corner of the print bed. Tightening the thumb nut/screw increases the distance between the nozzle and the print bed while loosening decreases it.

Move the nozzle to the remaining three corners of the print bed and repeat the previous steps (Place a piece of paper on the remaining corners that need to be calibrated > Use x/y direction navigation buttons to move the extruder > Click "Home Z" > Tighten/loosen thumb nut/screw). Spend some time in calibrating as this is a very important step in ensuring good prints.

After calibration is complete, run the nozzle all over the print bed (after clicking "Home Z") again to make sure that the nozzle is not scratching the print bed nor is it too far away from the print bed.

Enter "M106" in the bottom right text box and click "Send" to turn on the large fan.
https://drive.google.com/file/d/0B76U_UNjsYZFbjFVS201RkwxTTQ/edit?usp=sharing
(The large fan is used to cool the print. It can be turned off by sending "M107".)

Click "Load file" to load the G-code saved earlier.

Extrude some filament again until there is smooth filament flow. Clean up all the extruded filament.

You are now ready to print! Click "Print"!

When not printing, click both "Off" to disable the heating of the nozzle and print bed.