



# SUNFLOWER TECH CLUB

## COMPUTER LAB USER GUIDE



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1. General Lab Setup
2. PC Operation
3. Apple Mac Operation
4. Printer Operation
5. PrintKey Operation
6. CanoScan Operation
7. 3D Printer Operation
8. Accessing the Tech Club WIFI

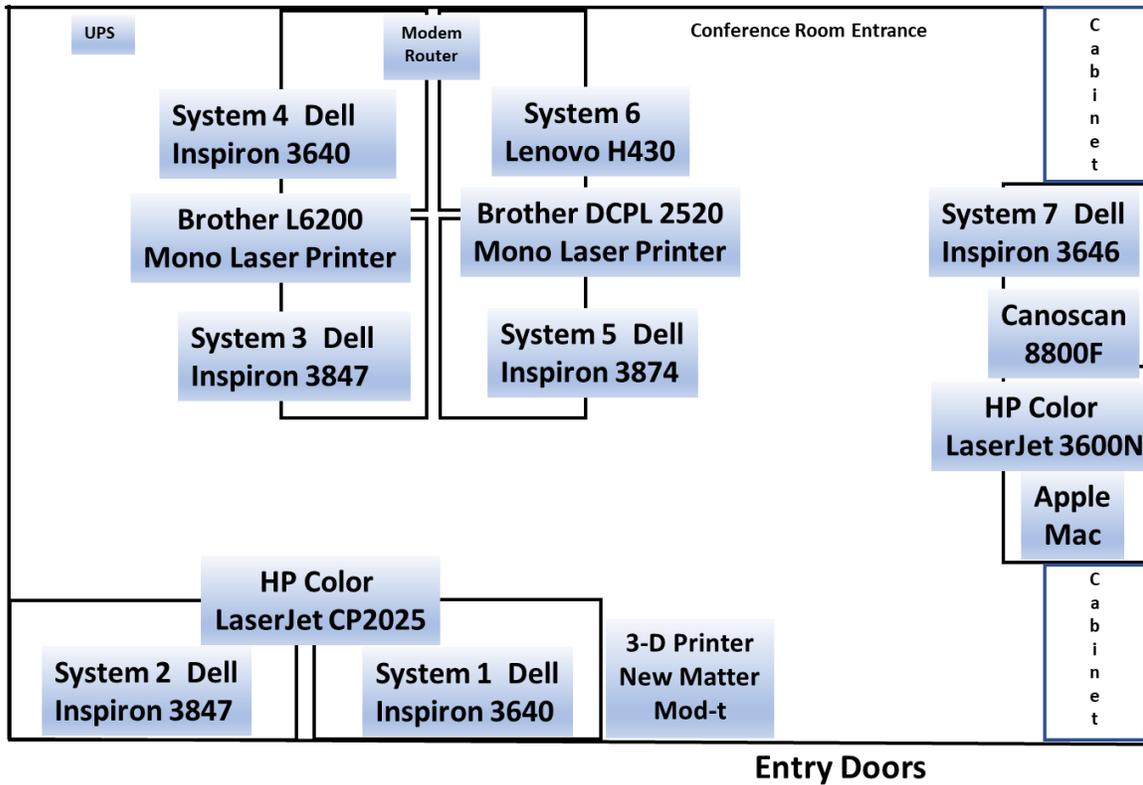
*This guide is a living document and will be revised as needed.*

*Please provide comments to Tim at [tim20@comcast.net](mailto:tim20@comcast.net)*

# GENERAL LAB SETUP

The Tech Club maintains the computer lab for members' use during normal Village Center hours. The lab contains 7 PCs running Windows 10, 1 Apple Mac, 2 Cannon printers, 2 Brother printers, a CanoScan scanner, a New Matter 3D printer, and a router for the Tech Club WIFI. In addition to WIFI, users can connect their laptops directly using available network connectors. Access to the lab equipment is controlled by password provided to paid members and is reset once a year. All equipment is protected by Uninterruptible Power Supply (UPS). Computer software is protected with a program called Deep Freeze which returns the system to a safe configuration each time it is restarted. The physical set up of the lab is shown below.

## SUNFLOWER COMPUTER LAB



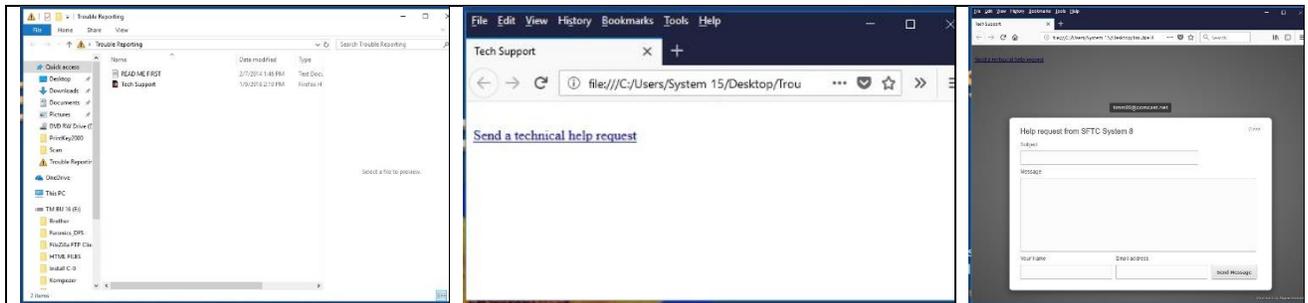
# PC Operation

The computer lab PCs use a standard desktop with icons or shortcuts for the most used applications (browsers, MS Office, etc.). There may be some variation depending on equipment connected to that specific computer. Apps can be opened by clicking (or double clicking) on the desktop shortcuts. The typical desktop is shown below.



For user security the desktop has a reminder to close all apps and then restart the computer when finished. This will delete any personal data to ensure it cannot be accessed by another user. Double clicking on the Restart Button (lower right) will restart the computer.

The desktop also has a note to use the trouble reporting log book in the lab to document any problems or suggestions related to lab equipment. There is also Trouble Reporting shortcut on the upper right that can be used to send an email to the tech team. The user can click on this icon, then click on Tech Support, then click on *Send a technical help request*. This will bring up a fill-in form to document the problem and send an email. Providing the user name and email will enable the tech team to respond to the user.



# Apple Mac Operation

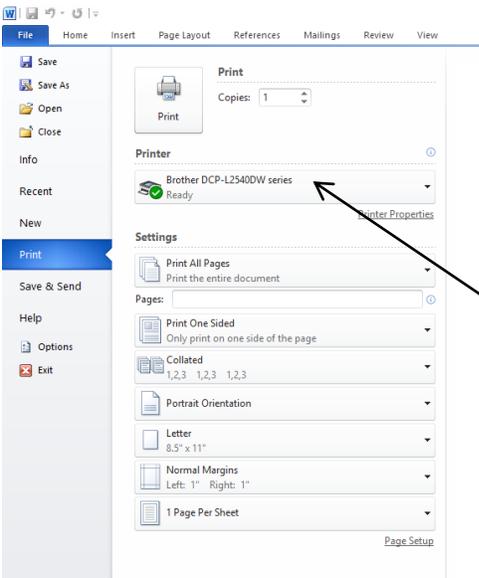
The Apple computer in the Technology Club lab uses a standard Apple desktop; it has a dock with shortcuts for the most used applications. There are also shortcuts to some applications that aren't in the dock on the desktop. All apps can be opened by clicking (or double clicking) on their icon.

For security, when finished using the computer, you should close all applications and log out (go to the apple in the upper left corner and down to log out). This will quit all applications and remove all of your personal data. You may also shut down the computer if you wish.

If you have any issues with the Apple, there is a log book in the file organizer on the wall by the conference room to document any problems or issues and also for leaving suggestions related to lab equipment.

# Printer Operation

## 2-Sided Printing with the Brother 2540 or 6200

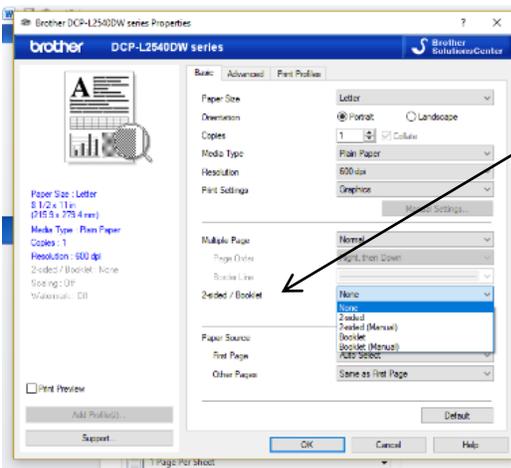


Use System 3, 4, 5. or 6 for 2-sided printing.

In your document, click on File, then Print to access printer settings.

Under **Printer** ensure that the 2540 or 6200 is select. Systems 3 and 4 should default to the 6200 and Systems 5 and 6 should default to the 2540.

Click on Printer Properties to get the properties window.



In the properties window, go down to the 2-Sided/Booklet drop down menu and select 2-sided.

Click OK to go back to the setting page.

Then click Print.

## Copying with the Brother DCP-I2540DW

Place sheet (or sheets) on top tray face up, or place document on glass under the cover. Use + or – key to select number of copies. Push Start button.

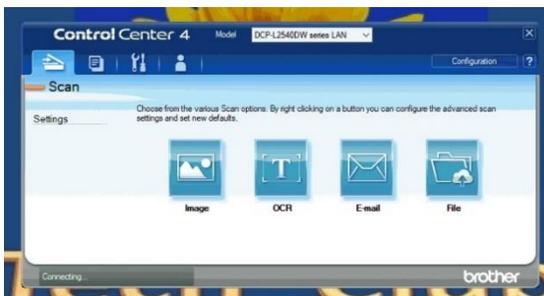
## Scanning with the Brother DCP-I2540DW

Use System 5 or System 6 for scanning with the 2540. Any scan the user wishes to keep, must be saved to the user's media (like a USB drive) prior to logging off. All data on the computer will be erased when the computer restarts.



Double click on the orange colored CC4 icon on the lower left of the desktop.

This will bring up the Control Center window below.

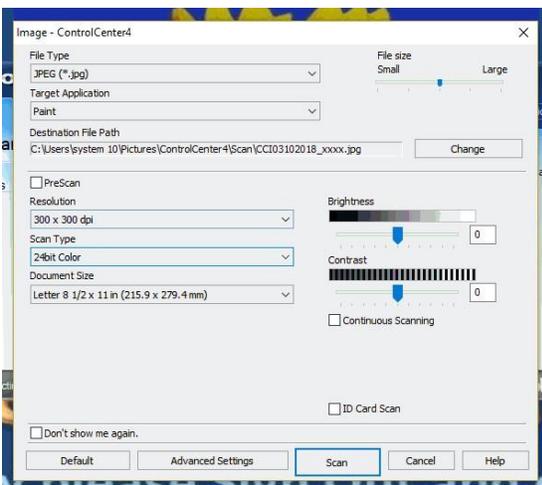


In the control Center window click on the scan option you need. Image or file are most common.

**Image** scans image and runs photo app.  
**OCR** scans document and converts to text.

**Email** scans document to email but no default email app is set in the lab.

**File** scans document and saves to specific file type.



For an image file the user can select options such as File Type and Target Application.

Click Change next to Destination File Path to ensure that the file is saved to the user's media and enter the name for the new file.

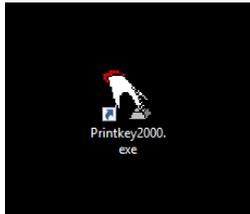
After the options are set, click on the Scan button and the printer will begin the scanning process and save the file. The process is similar for OCR and File.

## Wireless Printing with the Brother 6200

The user can connect to the 6200 through the tech club WIFI. When printing a document ensure that the 6200 is selected in the printer options and then click Print.

# PrintKey Operation

Printkey 2000 is a utility program used to capture any active window from any application. It can be used to save, edit, and print any screen shot. If the user wishes to save the screen shot, it must be save to the user's media (like a USC drive) prior to logging off. All data on the computer will be erased when the computer restarts.



Click on the Printkey Shortcut or press the Print Screen button on the keyboard. This will bring up the window shown to the left (browser webpage) with options shown below.



Listed below are the primary edit and save options	
Load	Allows user to load a different file.
Save	Allows user to save the screen shot to their media.
Paste	Allows user to past from the clipboard.
Copy	Allows user to copy to the clipboard.
Edit	Brings up a photo editor to make changes to the screen shot.
Rectangle	Allows user to crop a section of the screen shot.
Object	Allows user to select an object from the desktop.
Off	Turns auto save on or off.
Printer	Allows user to select the printer
Print	Prints image to selected printer.

Rectangle and Edit are very useful functions for modifying a screenshot. The user can then save that file for use later and/or print the screenshot for immediate use.

# CanoScan Scanner Operation

## Scanning Photos and Documents

**Important: System 7 must be used with the CanoScan.**

Scan documents such as photographs and text on the platen.

1. On the Windows desktop, double-click (MP Navigator EX 1.0).

Alternatively, on the Windows taskbar, click Start, point to (All) Programs, Canon Utilities, then MP Navigator EX 1.0. Then click MP Navigator EX 1.0.

The MP Navigator EX one-click mode screen or navigation mode screen opens.

After the mode screen opens, turn on the scanner by pushing the on/off button.

If the scanner does not connect to the computer, the user may have to turn off the computer and scanner, then power on the scanner, and then turn on the computer (lets system discover the scanner on start-up).

### One-click Mode Screen

You can complete from scanning to saving, etc. at one time by clicking the corresponding icon on the one-click mode screen. See the section below for details.

#### Easy Scanning with One-click

#### Navigation Mode Screen

When the one-click mode screen has opened, click the (Switch Mode) button to switch to the navigation mode screen.

#### Reference

If the Show this window at startup checkbox is not selected, the last used screen opens.

2. Point to Scan/Import and click Photos/Documents (Platen).

3. Place the document face-down on the platen, and select Document Type.

Place the document according to its type. Refer to the table below.

Document Type	How to place the document
Color Photo	Allow 3/8 inches (1 cm) or more space between the edges of the platen and the document.
Black and White Photo	
Color Document	Align a corner of the document with the corner at the arrow of the platen.
Black and White Document	
Magazine(Color)	
Text(OCR)	

Important - When you select Color Photo or Black and White Photo, the position or size of the image may not be scanned correctly if you do not leave 3/8 inches (1 cm) or more space between the edges of the platen and the document.

Reference - When you select Magazine(Color), the Descreen function will be enabled and scanning takes longer than usual. To reset the Descreen function, disable Descreen in the Scan Settings dialog box.

Select Text(OCR) to convert hand-written text or image data of printed text to text data with OCR software.

4. Click Specify... and set the preferences as required.

The [Scan Settings Dialog Box](#) opens. Specify the Document Size and Scanning Resolution.

5. Click Scan.

Scanning starts.

When scanning is completed, the Scan Complete dialog box opens. Select Scan or Exit. Select Scan to scan the next document, or select Exit to end.

When scanning is completed, the scanned image appears in the Thumbnail List area.

6. Edit the scanned image as required.

When there are multiple images, first select images to edit. (Selected images are outlined in orange.)

Use edit tools to rotate images, select a part of an image, etc.

For details, see the edit tools in [Scan/Import Documents or Images Screen \(Photos/Documents Platen\)](#).

Reference - Drag the mouse or use Shift + arrow keys to select multiple images. (Selected images are outlined in orange.)

7. Click Save or Save as PDF file.

8. Specify the following settings as required:

When Save is selected: The Save dialog box opens. Specify the destination folder, file name and file type.

Important: You cannot select JPEG/Exif when Document Type is Text(OCR).

Reference: The default folder is MP Navigator EX in the Pictures folder (Windows Vista) or in the My Pictures folder (Windows XP and Windows 2000).

See the section below for details on the Save dialog box.

### [Save Dialog Box](#)

When Save as PDF file is selected:

The Save as PDF file dialog box opens. Specify the file type, file name and destination folder.

Select from the following PDF file types:

PDF	When multiple images are selected, each image is saved as a separate PDF file.
PDF (Multiple Pages)	Multiple images are saved in one PDF file.
PDF (Add Page)	<p>Selected images are added to a specified PDF file. The images are added to the end of the PDF file. You cannot rearrange pages of the PDF file to which images are added.</p> <p><b>Important</b></p> <p>You can select only PDF files created with MP Navigator EX. You cannot select PDF files created with other applications. PDF files edited in other applications cannot be selected as well.</p>

Important: PDF (Multiple Pages) is displayed when multiple images are selected.

Reference: The default folder is MP Navigator EX in the Pictures folder (Windows Vista) or in the My Pictures folder (Windows XP and Windows 2000).

See the section below for details on the Save as PDF file dialog box and Set....

#### [Save as PDF file Dialog Box](#)

9. Click Save.

Scanned images are saved according to the settings.

To further use/edit the scanned images on MP Navigator EX, click Open saved location in the Save Complete dialog box. The saved images appear in the View & Use screen.

See the corresponding sections below for details on using images.

[Creating/Editing PDF Files](#)

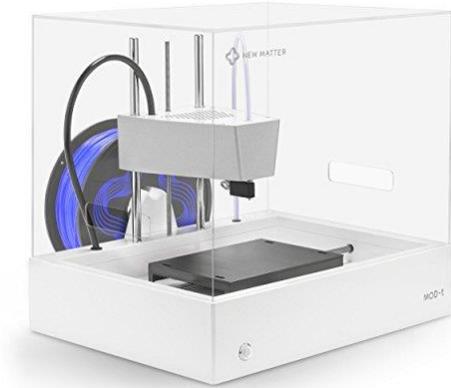
[Printing Documents](#)

[Printing Photographs](#)

[Sending via E-mail](#)

[Editing Data](#)

# NEW MATTER 3D PRINTER



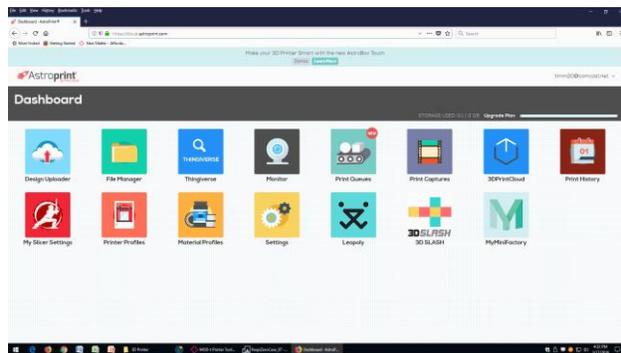
The MOD-t is a simple 3D printer that the average person can easily set up and use. AstroPrint is currently the best app to download model files to use with this printer.

Access to the printer is available only through System 1 next to the printer.

## Introductory Training

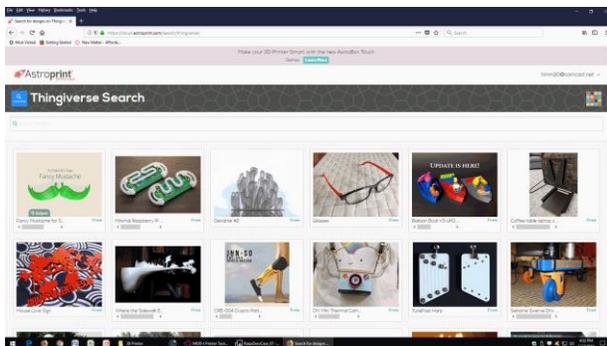
The New Matter web site for pattern download will no longer be available after the summer of 2018. An alternate printing method from AstroPrint is explained in a YouTube video at: <https://www.youtube.com/watch?v=UL1-fpE6NUI>. A new user should view this video for more detailed explanation of the steps described below.

## Setting Up User Account



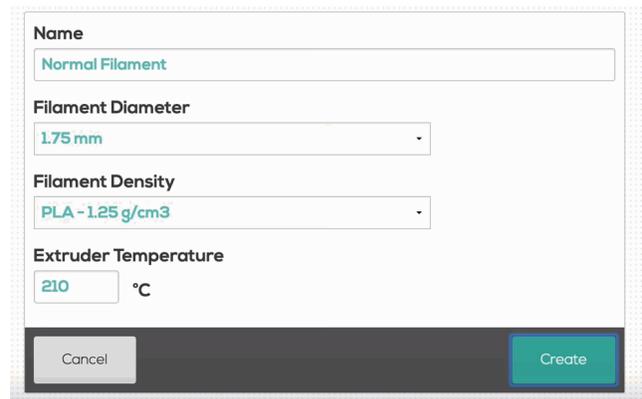
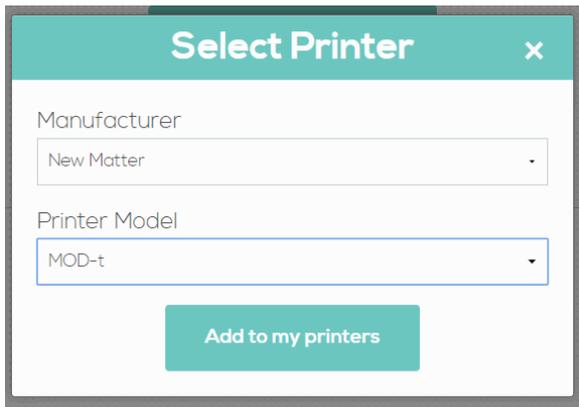
The user will need to create their own free AstroPrint account. This account can be used on any computer with internet access.

The link is <https://www.astroprint.com/>.



AstroPrint contains a link to Thingiverse which provides many patterns that can be downloaded for the user to print.

3DSLASH allows the user to create their own designs.

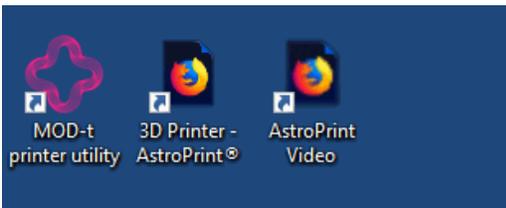


After creating an account, the user must do an initial printer and filament set up for the MOD-t printer as show above. Select Printer Profiles and Material Profiles for this setup.

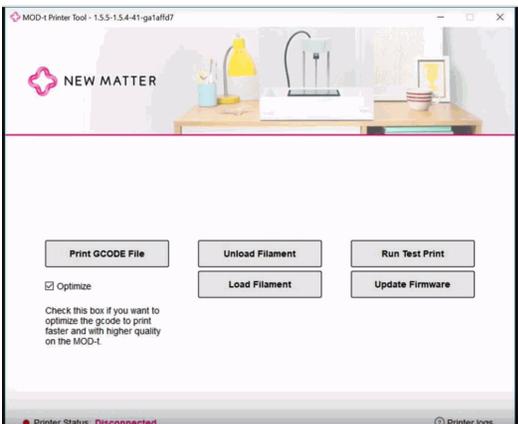
### Saving the Gcode File

After selecting or creating a pattern, the user must create a print file. In AstroPrint, Select File Manager, click the 3-dot button below the file name, and select Create Print File. If the pattern is too large, a resize window will appear where the user can decrease the size of the pattern. In the next window, be sure Printer and Material are set correctly, then click on the Slice button (do not select Print). This will create a Gcode file in the downloads folder for use with the MOD-t.

### Printing the Gcode File



The desktop on System 1 has 3 shortcuts dedicated to the MOD-t printer – Printer Utility, link to AstroPrint, and a link to the You Tube video.



After the Gcode file has been saved by AstroPrint to the downloads folder, the user can double click the Mod-t Printer Utility shortcut to access the window shown here. To print the model, click on Print GCODE File, select the file name in the Downloads Folder, and click OK. The printer will than start the printing process and show time remaining to complete.

All model selection, design, and conversion to Gcode steps described above can be done on a home computer or laptop using AstroPrint. After the Gcode file is saved to the local Downloads Folder the user can copy this file to a USB drive. This drive can then be loaded on to the 3D Printer computer (System 1) in the lab and can be accessed directly by the Mod-t Printer Utility. After clicking on Print GCODE File, the user will select the Gcode file on the USB drive rather than in the Downloads Folder. The printer will print directly from the USB.

***REMINDERS:***

Review the You Tube video for further clarification of this process.

All personal files stored on System 1 will be deleted when the computer is restarted.

## Accessing the Tech Club WIFI

Wi-Fi is available in the lab, craft room, lobby seating area, fitness center and the pool. The fitness center and pool show up as TechClub 2G.ext or TechClub 5g.ext but the logon process is the same and it uses the same password. The club utilizes a range extender in the fitness room to broadcast the wireless signal to a longer range. Like all wi-fi systems, the weaker the signal, the slower the connection. If you are at the far end of the pool and try to stream a video, it's likely not going to work. If you are closer to the building, it will stream fine.

You can connect via computer, tablet or smartphone (Apple or Android) to the wireless system. You can also easily print to the two Brother printers from the wireless side – no separate drivers or software needed on your device.

To connect, click on the wireless icon in the lower right corner of your screen on a laptop, or on a smartphone, click on settings, wi-fi (or wireless). You will see a list of wireless networks available; you are looking for the one labeled Techclub. You may see both a 2G and a 5G choice for the tech club. 2G provides greater range, 5G provides greater speed so generally choose 5G if it's a strong signal. When you click on the network name, you'll be asked to enter a password which is provided to all club members each year. You can also check the box which says "connect automatically" so that you will log onto the network anytime your device is within range and the password is still valid. Click connect and in a couple of minutes it will confirm "CONNECTED" and you can begin using the wireless. If it doesn't connect, recheck your password, check the caps lock and num lock keys as all passwords are case sensitive now.

The tech club wireless and the Sunflower Living wireless are two different systems and the tech club cannot assist users with the Sunflower Living connection – please see the front desk for help with that logon.