HARRISON TOWNSHIP
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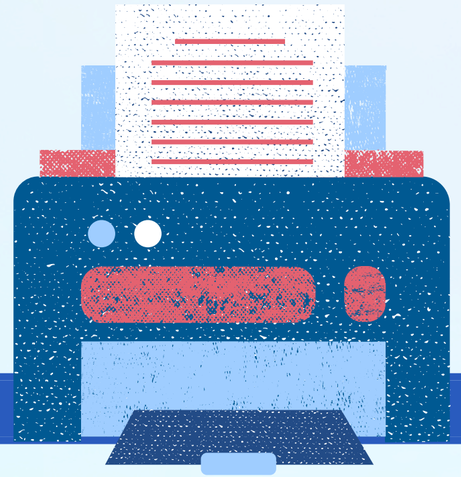
Tech Time at HTPL

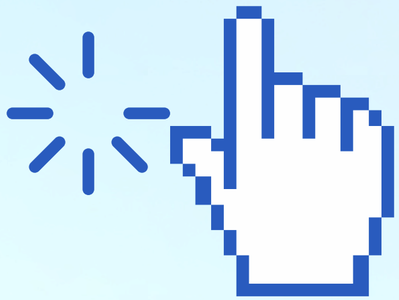
Intro to Printing & Scanning

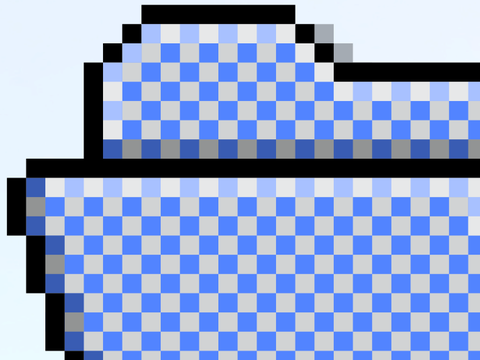


Printing Basics

What is a printer?

Per Lenovo: “A printer is a device that prints documents and images onto paper or other materials. It is usually connected to a computer, allowing you to use your word processor, spreadsheets, and other programs to create documents and images that are printed out on the printer. Printers come in many different types, including inkjet printers, laser printers, thermal printers, and 3D printers.”





Inkjet Printer

- Good for photo prints
- Uses liquid ink droplets to produce image
- Modern inkjet printers have higher speeds; older models may not

Laser Printer

- Good for documents and larger print jobs
- Known for sharpness and speed
- Uses laser beam and toner to produce prints

Thermal Printer

- Prints receipts, barcodes, labels, etc.
- Uses a heated thermal printhead pressed against a medium to produce black text or images

Other Types

- All-in-One Printers/Multifunction Printers: Combines printing, scanning, copying, and sometimes faxing into one unit
- LED Printers: Same function as laser printers but uses LEDs instead, which usually reduces size and sound
- 3D Printers: Turn digital designs into physical objects (this is a whole class on its own!)

Setting Up Your Printer

Most printers that are not wireless require you to plug in any USB cables/wires and turn the printer on. Then, you must add the printer to your device (computer or laptop). To do so, you'll follow any on-screen prompts that appear when you connect your printer to your device.

For wireless printers, you'll have to connect the printer to the same Wi-Fi network as the main device (computer, laptop, phone, tablet). You'll have to manually connect the printer under your device settings.

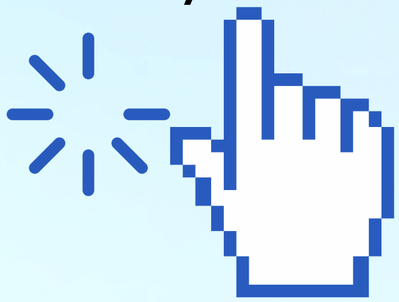
For more details:
https://support.microsoft.com/en-us/windows/add-or-install-a-printer-in-windows-cc0724cf-793e-3542-d1ff-727e4978638b

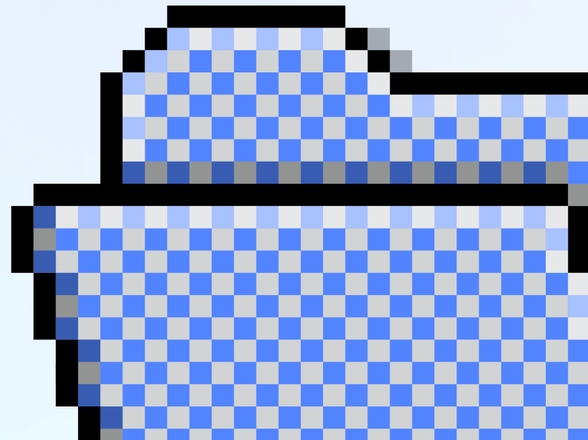
Wireless Printers

Wireless printers can print documents without the need for physical connections like USB cables. It connects to a computer, smartphone, or tablet over Wi-Fi or Bluetooth, enabling printing from anywhere within the printer's range.

Wireless printers can sometimes be smaller than wired printers, enabling you to take them on the go without the hassle. They also allow printing from multiple devices without any complicated set-up, and not all of them require Wi-Fi access, which means you can use them in areas where signal isn’t the greatest (think Up North!)

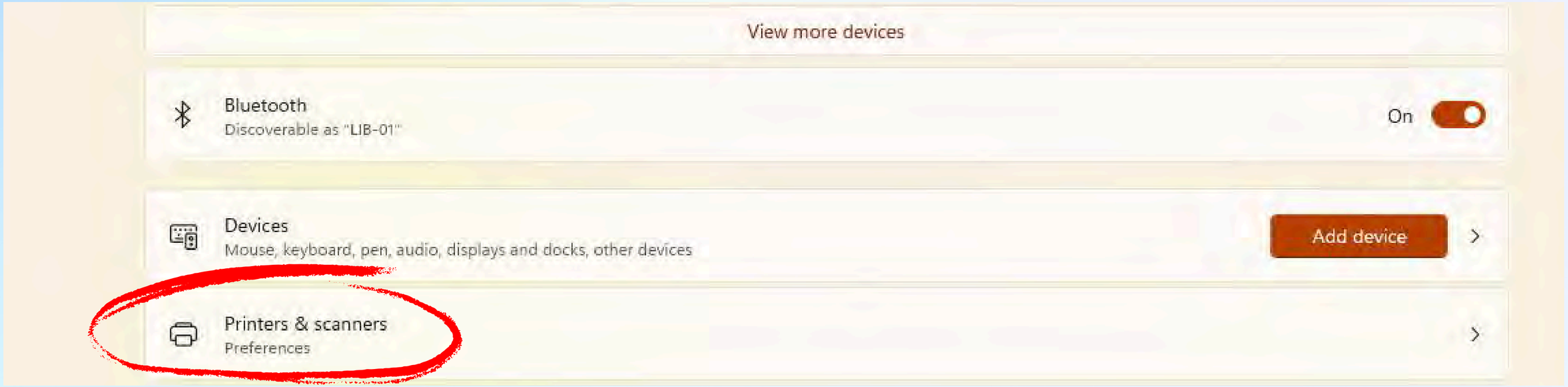
Many wireless printers also come with wires just in case!

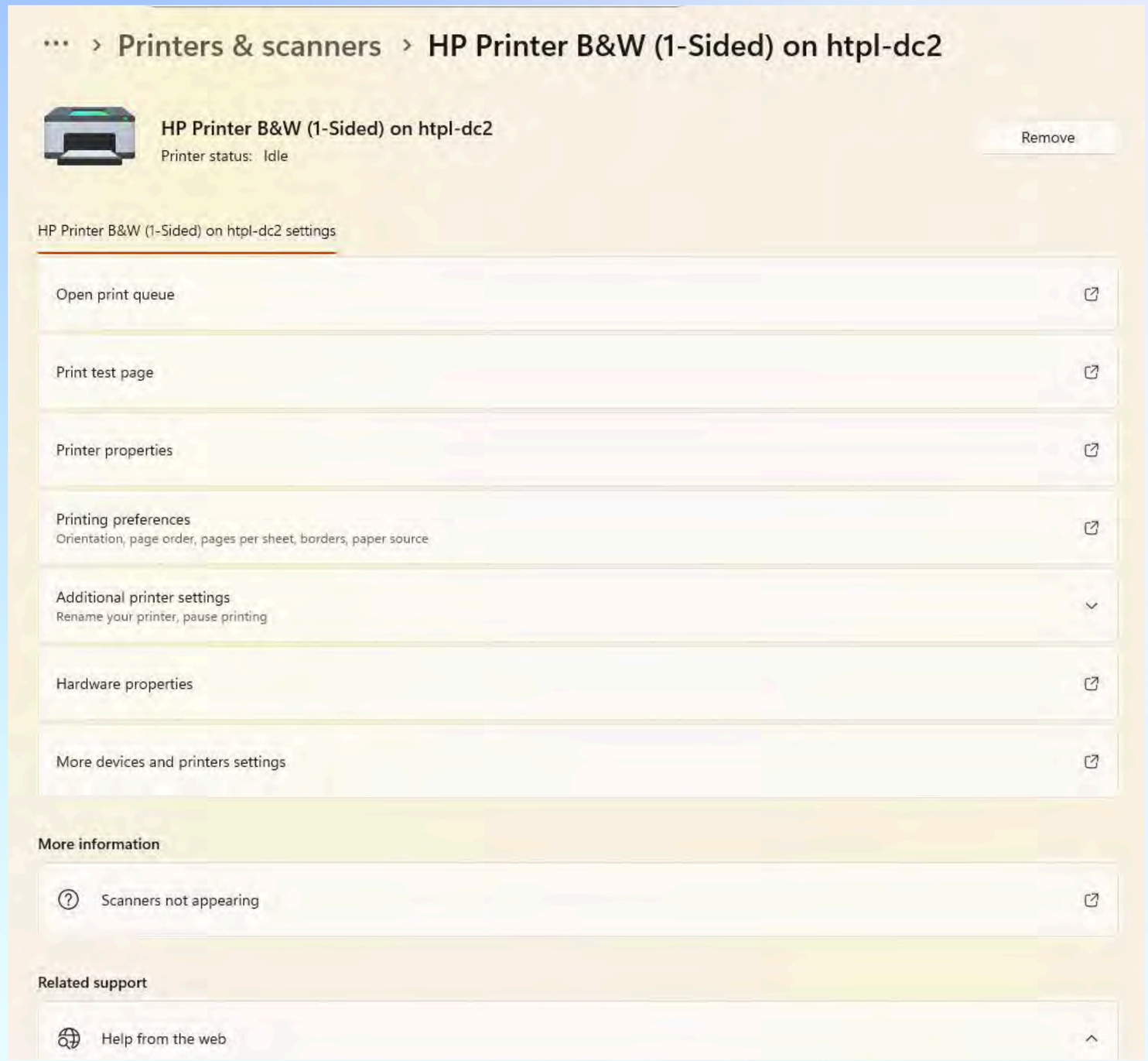




Adjusting Printer Settings

- Open settings on your computer
- Locate “Bluetooth & devices,” then there should be a setting for printers





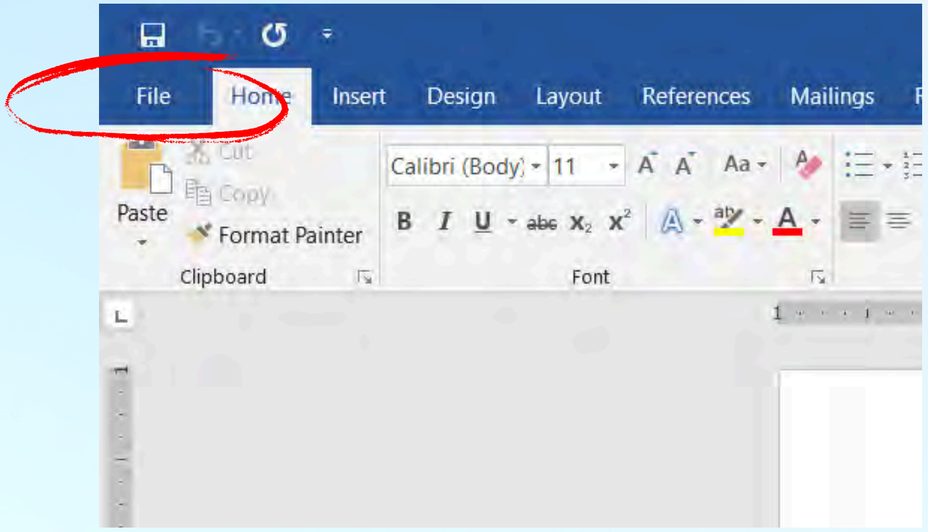
From there, you can click on the printer that is connected to your device to see advanced settings.

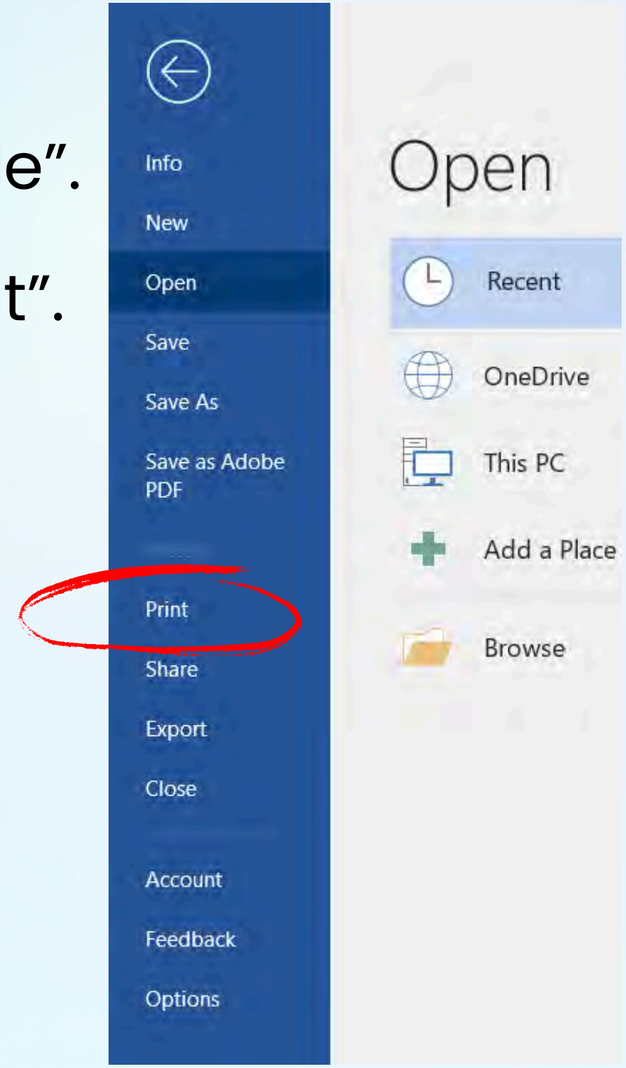
'Printing preferences' is where you can adjust specific customization for your prints like borders, paper source, etc.

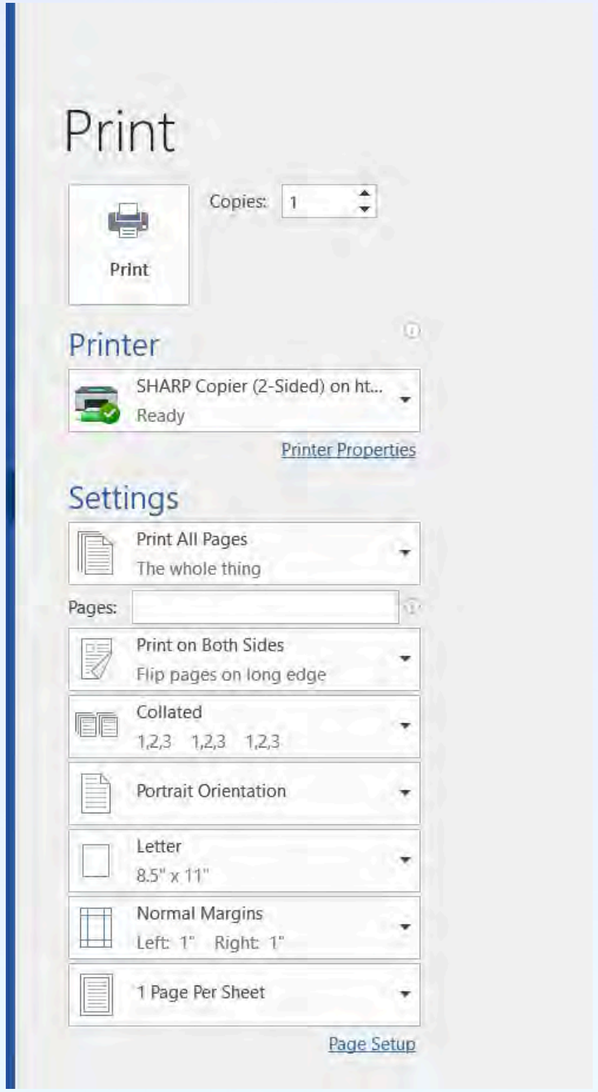
'Printer properties' and 'additional printer settings' is where you can adjust actual settings for the printer itself, not the print jobs you're completing.

Printing a Microsoft Word Document

- Navigate to the top left of a Word Document and click “File”.
- A new page will appear. Navigate down to select “Print”.
- This will take you to the print options.





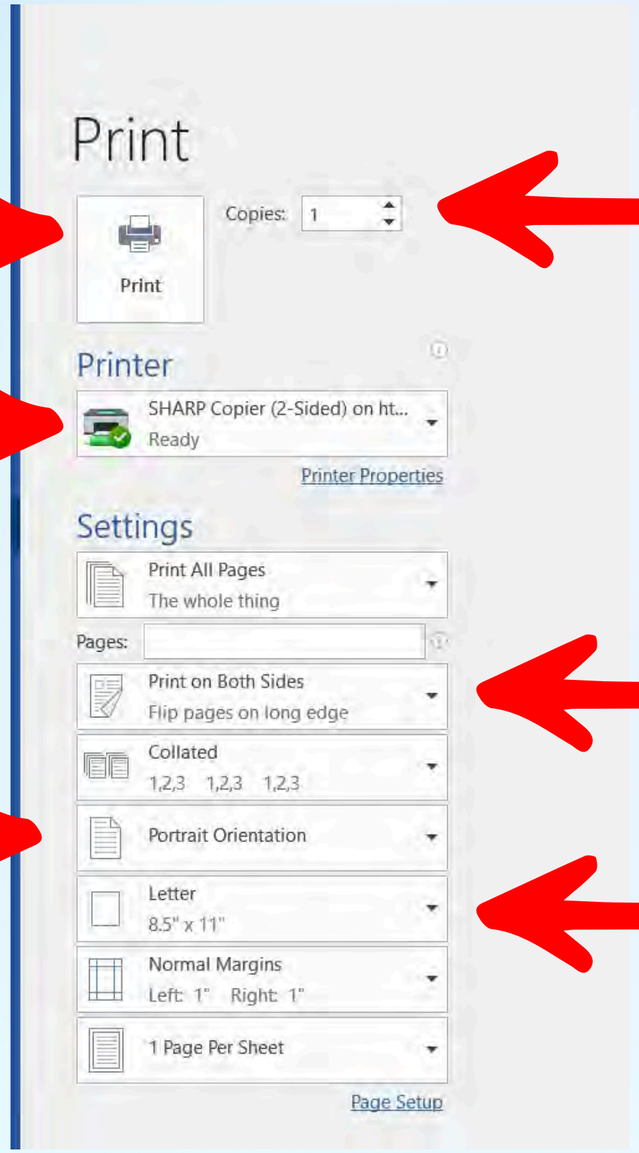


Printing a Microsoft Word Document

Hit this button when you are ready to print

Your printer

Portrait or landscape orientation



The number of copies you need to print

Print on one or both sides of the paper

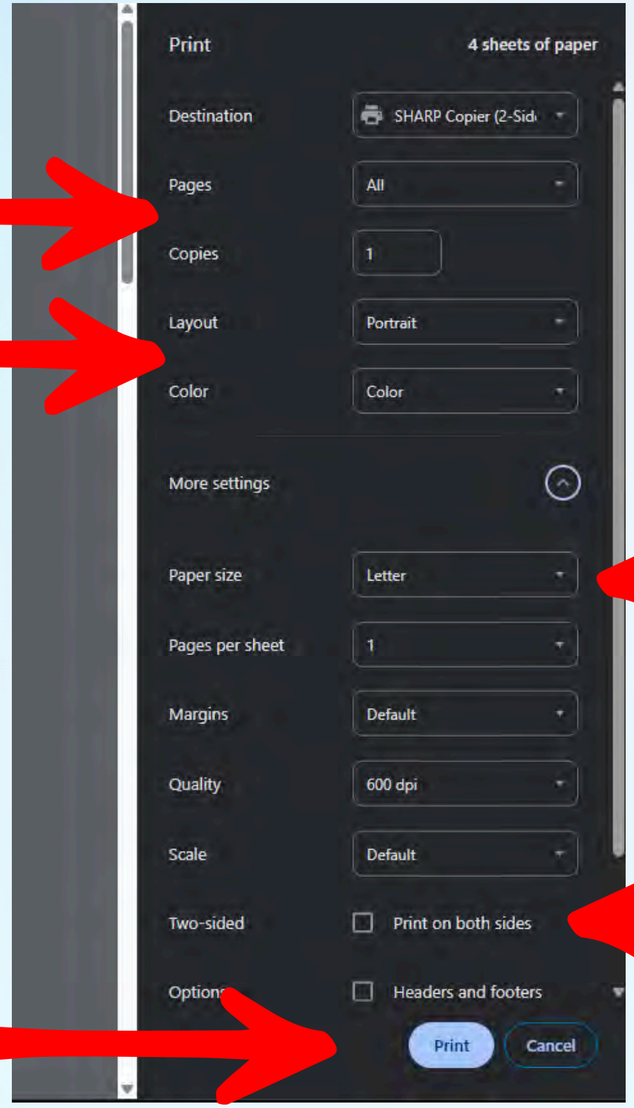
Paper size

Printing Shortcut

What pages and number of copies you need printed

Print in color or black & white

Portrait or landscape orientation



The primary keyboard shortcut for printing is Ctrl+P for Windows or ⌘+P for Mac, which opens the print dialog box for the current application

Size of paper

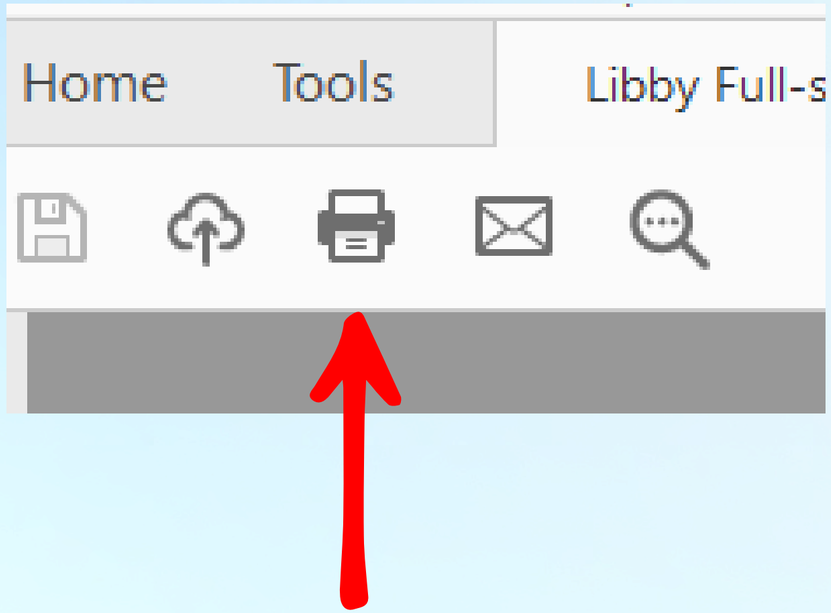
Print on one or both sides of the paper

Hit the Print button when you are ready to print

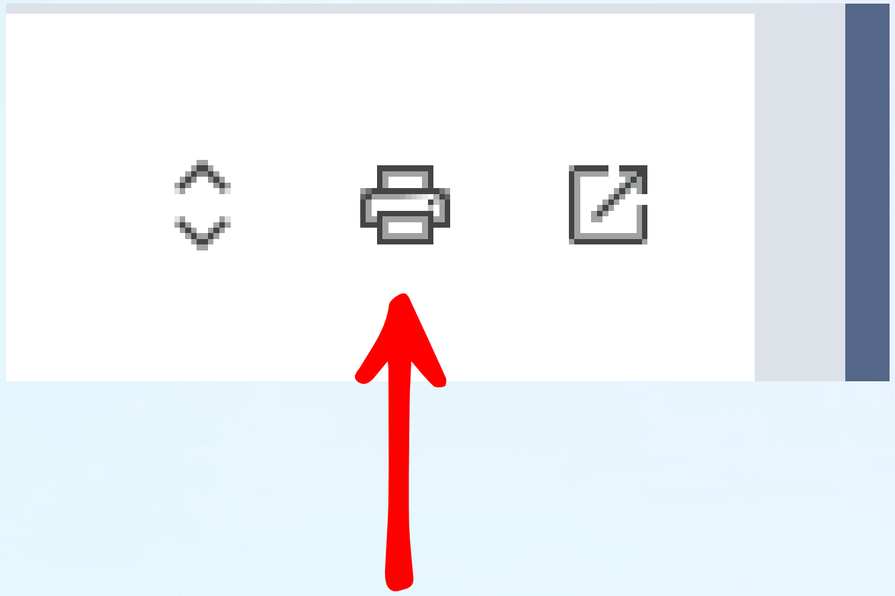
Printer Icons

You will commonly find the print symbol on the top left or right of the screen. Occasionally, it will appear after clicking on the three vertical dot icon that represents more options.

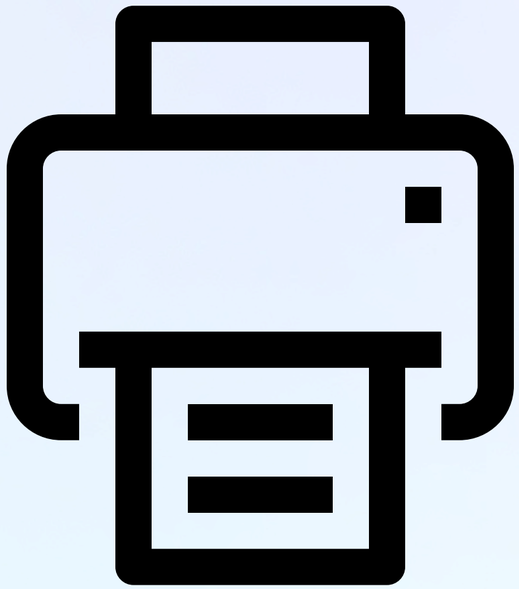
Adobe



Gmail



Common Printer Symbol



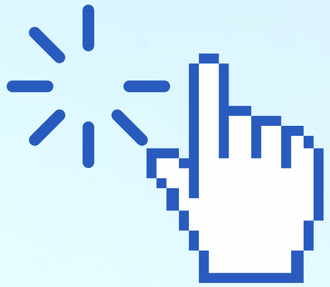
Common Printer Issues

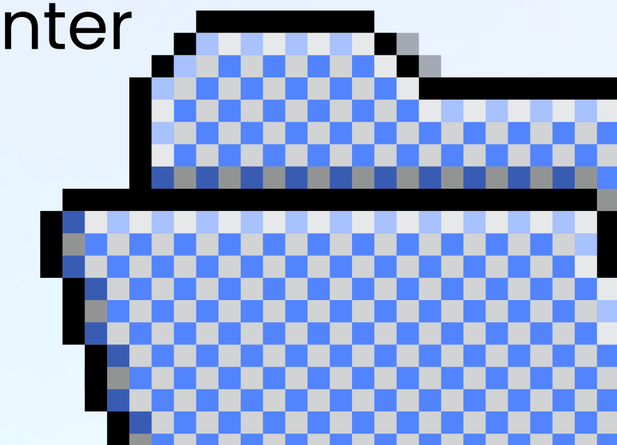
Nothing happens when I try to print

- Make sure all cables are connected and not loose
- Ensure paper is loaded into the correct tray
- Try cancelling the print job from your computer, then trying again
- Restart the printer
- If it’s a wireless printer, check your Wi-Fi or Bluetooth connection under device settings

The text/image is hard to see

- Change your ink cartridges/check ink levels on printer
- Restart the printer





Scanning Basics

Per Lenovo: “A scanner is a device that allows you to digitize physical documents, images, or even objects, and convert them into a digital format that can be viewed, edited, and stored on a computer. It's like a digital photocopier that captures the content of a document or image and saves it as a file.”

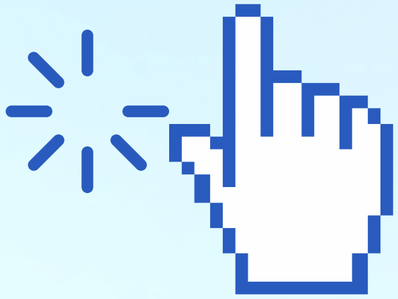
Scanners work by using a light source and a photosensitive sensor to capture the content of a document or image.

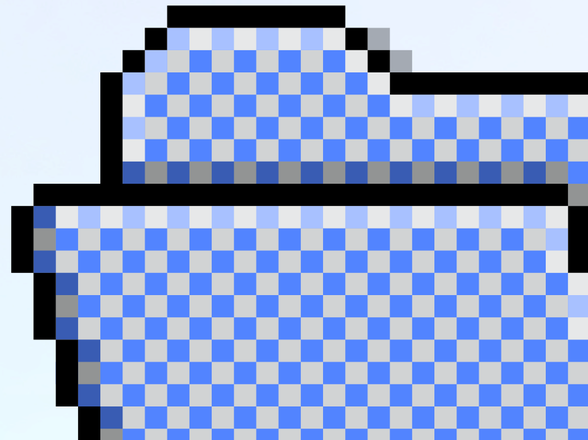
Types of Scanners

Many printers act as both printers and scanners.

The most common type of scanner is a **flatbed scanner.** These have a flat glass bed where you place the document or image. These are very common for scanning photos.

There are also **sheet-fed scanners.** These require you to feed documents through in a stack. These are useful when scanning a large portion of documents.





More Scanning Basics

Just like printers, scanners usually come with a software that will install on your computer/device once you first set up the scanner.

Within this software, many scanners allow you to edit photos after scanning them. You can preview the scan, crop or rotate the image, and sometimes edit the scan further (brightness, saturation, etc.)

Resolution/DPI

- DPI stands for “dots per inch,” and the number determines the quality of your scan. Higher numbers mean better quality but also larger file sizes. 300 dpi is often the default setting and is perfect for general use

After scanning and editing, your software will prompt you to save the scan.

- If saving a photo, consider .png or .jpeg formats (most common)
- If saving a document, consider .pdf format to best preserve its original format

COMMON SCANNING SETTINGS COMPARISON

SETTING	FOR WEB/ EMAIL	FOR PRINT	FOR ARCHIVAL/ ENLARGEMENT
RESOLUTION (DPI)	96	300+	600+
FILE FORMAT	JPEG, PNG	JPEG, TIFF	TIFF, PNG
COLOR MODE	24-bit Color	24-bit Color	24-bit Color

Source: https://info.gaylord.com/resources/scanning-basics-for-beginners

Scanning on Your Phone

iPhone:

- Scan a document in Notes
- Open Notes and select a note or create a new one.
- Tap the Attachment button, then tap Scan Documents .
- Place your document in view of the camera.
- If your device is in Auto mode, your document will automatically scan. If you need to manually capture a scan, tap the Shutter button or press one of the Volume buttons. Then drag the corners to adjust the scan to fit the page, then tap Keep Scan.
- Tap Save or add additional scans to the document.

Use Files to scan a document

- In the Files app, tap the More button.
- Tap Scan Documents.
- If your device is in Auto mode, your document will automatically scan. If you need to manually capture a scan, tap the Shutter button or press one of the Volume buttons. Then drag the corners to adjust the scan to fit the page, then tap Keep Scan.
- Tap Save or add additional scans to the document.

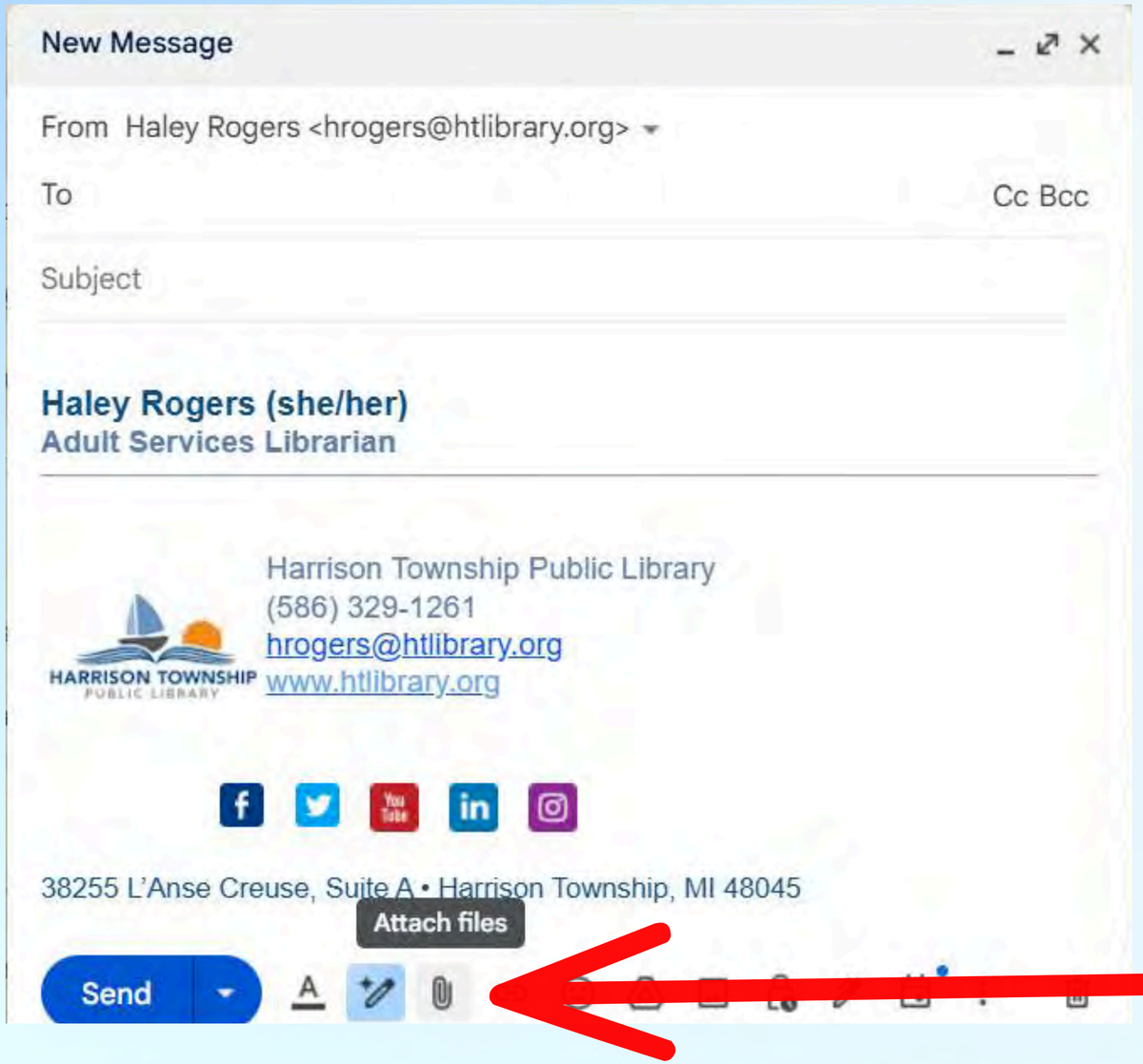
https://support.apple.com/en-us/108963

Scanning on Your Phone

Android:

1. Open the Google Drive app.
2. At the bottom right, tap Camera.
3. Point your device’s camera at a document.
    - A blue line outlines the document. This indicates where the picture will be cropped.
4. Take a photo of the document that you'd like to scan.
    - Optional: You can toggle automatic capture by choosing between Manual and Auto capture.
5. Adjust your scanned document.
    - Adjust scan area: Tap Crop & Rotate.
    - Adjust the colors, or make the image grayscale: Tap Filter.
    - Erase stains, fingers, and more: Tap Clean.
    - Scan another page: Tap Add.
    - Retake the photo: Tap Retake.
    - Delete a page: Tap Delete.
6. Tap Done.
7. Create your own file name or select a suggested title.
8. To save the scanned document in a specific format, select either .pdf or .jpg.
    - Optional: To select the Drive folder where you’ll save the document, tap Location.
9. To save the finished document, tap Save.

Sending a Scanned Document via Email



When sending a scanned document via email, you treat it like a regular attachment. Compose your new email, then select the paperclip icon, which will prompt you to attach files from your device.

The example image is from Gmail, but the universal icon of a paperclip is the same on most email serves like Outlook and Yahoo.

For Best Scanning Results

- Do a **test scan** before scanning anything important or a large batch
- **Adjust the lid** to ensure unwanted light is kept out
- **Handle delicate photos carefully** - avoid feeding old photos through a document scanner (consider a flatbed or using a smartphone instead)
- **Edit after scanning!** Use basic editing tools to crop, rotate, or enhance your images as needed. You can open them on your phone if you don't use photo editing software
  - When scanning old photos that may be grainy, you'll want to adjust the contrast, black point, shadows, highlights, and/or sharpness of the image

Maintenance

For printers:

- Wipe the exterior and interior down to prevent dust buildup (use a microfiber cloth or soft brush)
- Use paper and other products that are specific to your printer model
- Avoid using damaged or wrinkled paper
- Replace ink cartridges on a regular basis to avoid clogs

For scanners:

- Keep the scanning bed clean and free of dust or debris, as that can affect the quality of the scans (use a microfiber cloth or soft brush)
- Regularly update the scanner's firmware or software as prompted by your device

For both:

- Unplug when not using
- Avoid storing or using in a humid or dusty environment
- Keep away from direct sunlight

Finding the Printer/Scanner for You

Consumer Reports:

- Can be accessed with your library card. Go to htlibrary.org, hover over “services,” then select “eBooks, digital entertainment, and databases.” Scroll until you see Consumer Reports, then follow the prompts to sign in with your library card
- Can also view some articles via consumerreports.org

Popular Mechanics:

- A magazine that reviews popular science and technology items of interest
- popularmechanics.com

Best Buy:

- Utilize Best Buy employees at in-person stores; they are trained to understand what will best fit your needs
- Can also sort by price, brand, home or business needs on bestbuy.com if you search “printers” or “scanners.” They have categories that will appear, and you can select specific filters

Resources

How to set up a new printer: https://edu.gcfglobal.org/en/basic-computer-skills/how-to-set-up-a-new-printer/1/

How to clean an ink cartridge: https://tcsdigitalsolutions.com/how-to-clean-an-ink-cartridge/

Scanning on a printer: https://aispa.us/blog/how-to-scan-a-paper-on-a-printer/

NYT Best Printers of 2025:
https://www.nytimes.com/wirecutter/reviews/best-home-printers/

Popular Mechanics Best Scanners of 2025:
https://www.popularmechanics.com/technology/g38006160/best-document-scanners/?utm_source=social&utm_medium=copy&utm_campaign=action_bar