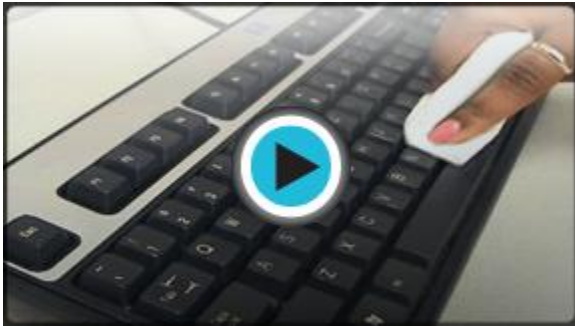


How do I keep my computer healthy?

Introduction

How Do I Keep My Computer Healthy?



Watch the video (2:18). [Need help?](#)

Computers are expensive, and with all big purchases, you probably want to **protect your investment**. Luckily, it is not difficult to **keep your computer healthy** and in good working order.

Basically, there are 3 areas that you need to maintain. You need to:

- Keep the **physical components** of your computer clean
- Protect your computer from threats such as **viruses**, and
- Keep your **files in order** to make day-to-day use of your computer efficient and easy.

Keep Your Computer Physically Clean

When dealing with computers, dust isn't just unattractive, it can potentially destroy parts of your computer. And while the problems that arise because of poorly cleaned computers can usually be fixed, it involves maintenance fees that no one really wants to spend. One of the best things you can do to keep your computer working properly is to **clean it regularly**.

Cleaning the Keyboard

A dirty keyboard doesn't look nice, and can cause your **keyboard to not work** properly. If dust, food, liquid, or other particles get stuck underneath the keys, they might not work. If you need to clean your keyboard, check your owner's manual to see if the manufacturer has provided you with instructions for your specific

keyboard. If so, you should follow them. If not, the following steps are **basic cleaning tips** that will help you keep your keyboard clean.



Tilt Keyboard and Spray Compressed Air



Can of Compressed Air

- Shut down the computer and unplug it.
- **Disconnect** the keyboard from the PS/2 or USB port.
- Use a can of **compressed air** to clean between the keys.
- Spray the air at an **angle** to best reach any particles beneath the keys.
- Turn the keyboard **upside down** and move back and forth to loosen dust. Also, **tap the bottom** of the keyboard while upside down to dislodge any other particles.
- Turn the keyboard right-side up.
- Pour **rubbing alcohol** on a paper towel or anti-static wipe.
- Wipe the keys and keyboard.
- **Reconnect** the keyboard to the computer once it is dry.

You can use an electronics cleaning fluid if you wish, but rubbing alcohol works just as well as specialized products and is usually less expensive. Whether using rubbing alcohol or another cleaning fluid, **never pour the liquid directly on the keyboard**. Always wet a anti-static wipe, or paper towel, and use it to clean the keyboard. You may want to use a plastic keyboard cover to protect the keyboard if dust or other particles are an issue.

What About Liquids?

If you **spill liquid** on the keyboard, quickly shut down the computer, and disconnect and turn the keyboard upside down to allow the liquid to drain.

If the liquid is sticky, you will need to hold the keyboard on its side under running water to **rinse** the sticky liquid away. Then, turn the keyboard upside down to drain for two days. The keyboard may not be repairable at this point, but rinsing the sticky liquid off the keyboard is the only chance for it to be usable again. Keep in mind, the best way to avoid this situation is to keep drinks away from the computer area.

Keep Your Computer Physically Clean



Optical Mouse



Mechanical Mouse

Cleaning the Mouse

There are two main types of mice, **mechanical** and **optical**. Each is cleaned in basically the same way, although the mechanical mouse requires a few extra steps.

Mechanical mice are especially susceptible to **dust** and **particles** that can

accumulate inside the mouse, which can make it difficult to track, or move, properly.

Optical mice require **no internal cleaning** since there aren't any rotating parts; however, they can get **sticky** over time as dust collects near the light emitter or on sticky pads, if your mouse has these. This can cause erratic cursor movement or the mouse to not work at all.

Before you clean your mouse, check your owner's manual to see if the manufacturer has provided you with instructions for your specific mouse. If so, you should follow those instructions. If not, the following steps are **basic cleaning tips** that will help you keep your mouse clean.



Mechanical Mouse with Ball-Cover Ring Removed

To Clean a Mechanical Mouse:

- Shut down the computer and unplug it.
- **Disconnect** the mouse from the PS/2 or USB port.
- Turn the mouse upside down.
- Push and turn the **ball-cover ring** in the direction indicated on the mouse to unlock the ring. If you don't see any arrows, push the ring and turn counterclockwise. If your mouse uses screws, use a screwdriver to unscrew the ring.
- Turn the mouse sideways to **remove the ring and tracking ball**.
- **Rinse** the tracking ball with water.
- Use an anti-static wipe, paper towel, or cotton swab dampened with rubbing alcohol to remove the dust from inside and outside the mouse.
- Let all the parts dry.
- **Reassemble** all the parts of the mouse.

- **Reconnect** the mouse to the computer.

To Clean an Optical Mouse:



Optical Mouse Turned Upside Down

- Shut down the computer and unplug it.
- **Disconnect** the mouse from the PS/2 or USB port.
- Turn the mouse **upside down**.
- Use an anti-static wipe or paper towel dampened with rubbing alcohol to lightly wipe the bottom of the mouse. Be sure the wipe is only lightly dampened.

OR, if specific areas are noticeably sticky,

- Use an anti-static wipe or paper towel dampened with water to wipe the areas.
- Place the mouse on a **clean, white sheet of paper** and run the mouse over it. Dust and/or particles should rub off onto the paper.

It is important to keep your mouse clean if you want to easily **point, click, and drag items** around the screen, as a dirty mouse can interfere with these actions.

Keep Your Computer Physically Clean

Cleaning the Monitor

Dirt, finger prints, and dust can make your computer screen difficult to read; however, it's easy to **clean your screen** when needed. As discussed in lesson 2, the two main types of monitors are **cathode ray tube (CRT)** and **liquid crystal display (LCD)**. The **CRT** monitors have **glass screens** and resemble a tube television, while the **LCD** monitor is a flat-panel monitor that is **not** made of **glass**. Both require different cleaning procedures. If you have a desktop computer, you will need to clean your monitor based by following the instructions for the type that you have. If you have a laptop computer, you will need to follow the LCD/flat-panel instructions.

To Clean a Glass Screen



Monitor Cleaner

- Turn off the computer and unplug it.
- **Disconnect** the monitor from the computer case.
- Use a paper towel, lint-free cloth, or monitor-cleaning cloth dampened with water to wipe the screen clean.

You can purchase and use **special monitor cleaning** products, but water is usually sufficient. Additionally, you can use a cloth dampened with an ammonia-free glass

cleaner to clean glass monitors.

You may want to consult your owner's manual to see what the manufacturer recommends. Be sure your screen does not have anti-glare protection if you are using anything other than water.

To Clean an LCD/Flat-Panel Screen

- Turn off the computer and unplug it.
- Disconnect the monitor from the computer case, if working with a desktop computer.
- Wipe a **dry, soft cloth** across the screen. Any soft cloth will work, or you can use a special monitor cleaning cloth.
- If dust, fingerprints, or dirt remain on the screen, dampen the cloth with rubbing alcohol.
- Wipe the screen with the damp cloth.

Do not spray any liquids directly onto the LCD screen. Do not use a paper towel as it can scratch the screen. Do not use glass cleaner on LCD screen, as it can remove any anti-glare protection that is on it.

Keep Your Computer Physically Clean (cont.)

Tips for Cleaning Other Computer Surfaces

- Dust is your computer's enemy main enemy. Use an **anti-static** wipe to lightly dust your monitor and surfaces. **Don't use** furniture cleaners or strong solvents.
- Use a can of **compressed air** with a narrow nozzle to blow out debris from the air intake slots.

- Spray cleaning solution (diluted ammonia cleaner or glass cleaner) on a **paper towel or anti-static** wipe. Clean the **monitor housing** and **case (not the monitor screen)** starting from the top and to the bottom.
- A safe cleaning solution for **computer surfaces** (not computer screens) is **ammonia diluted** with water, or **glass cleaner** comprised mostly of ammonia and water (check the label). Remember, the milder the solution, the better.

Keep it Cool

Don't restrict the airflow around your computer. Since it generates a lot of heat, an internal fan cools your computer. Dust and dirt can cause the fan to fail. So, avoid putting your computer in an area with a lot of dust and don't stack papers, books or other items on or around your computer.

Always place your computer in an **open area** that allows adequate airflow. A lot of the computer desks that you can buy have a narrow opening for the computer case. Be wary of these because they **may not allow for adequate airflow**. If you have this type of desk, you may want to position the case so it is not against the back side of the desk. If the compartment where the case is located has a door, leave it open when the computer is turned on.

Keep Your Computer Safe

Cleaning your computer and doing **preventive maintenance**, such as scanning for viruses, helps keep it running smoothly. Preventative maintenance saves you time, as well, since it saves you the hassle of dealing with systems failures and data loss.

Viruses, Trojan Horses, and Worms

Viruses

Just like a biological virus can make you physically sick, a **computer virus** can make your **computer sick**. **Avirus** is a small piece of software that finds its way onto your computer without your knowledge, and causes trouble on your computer system. You

may not even know your computer has been infected with a virus until your computer slows down, a program stops working, your computer crashes, or error messages begin appearing.

Many viruses are **transferred by email**. The virus will travel as an email attachment, and when the attached file is downloaded, the virus will begin to do its job. Often, email viruses will continue to spread by attacking your address book, emailing your contacts, and spreading the virus more.

Trojan Horses

Another destructive piece of software that is similar to a virus is called a **Trojan horse**. A Trojan horse is simply a program that **claims to do one thing, but really does something else** to your computer. For example, you may find a site on the Internet and download what you think is a solitaire game, only to run the program and have it delete files.

Worms

A third item you need to safeguard your computer against are **worms**. Unlike viruses, worms do not attach to other files or programs, but spread themselves over computer networks by taking advantage of the network setup. Worms can delete files or send emails like viruses, but usually they affect the computer's memory, which **slows down your computer**.

Protect Your Computer

You may be wondering where viruses come from. People are responsible for writing computer viruses. Some are meant to be funny, while others are meant to do damage to your computer. Since we can't control what people do, the real question is, how can I keep my computer safe from viruses?

Tips to Stay Safe

Use Anti-virus Software

The best thing you can do for your computer is use an **anti-virus software**. Anti-virus software is a program that **protects** your email, files, and downloads against viruses,

worms, and Trojan horses; removes existing threats from your computer; and protects against new viruses if the anti-virus software is updated regularly.

There are several free options, or you can purchase a commercial one such as Norton or McAfee, which are relatively inexpensive when you think about the damage that can be done to your computer. If you already have anti-virus software, verify your **virus protection is current**. New viruses are written all the time, so it is important that the virus protection that you use be current. This doesn't mean that you have to continuously purchase new software. Most anti-virus software vendors provide updates to your software regularly, and some even provide automatic downloads and updates.

Read [Lesson 15](#) of our Internet Safety tutorial to learn more about anti-virus software.

Avoid Downloading Programs from Unknown Sources

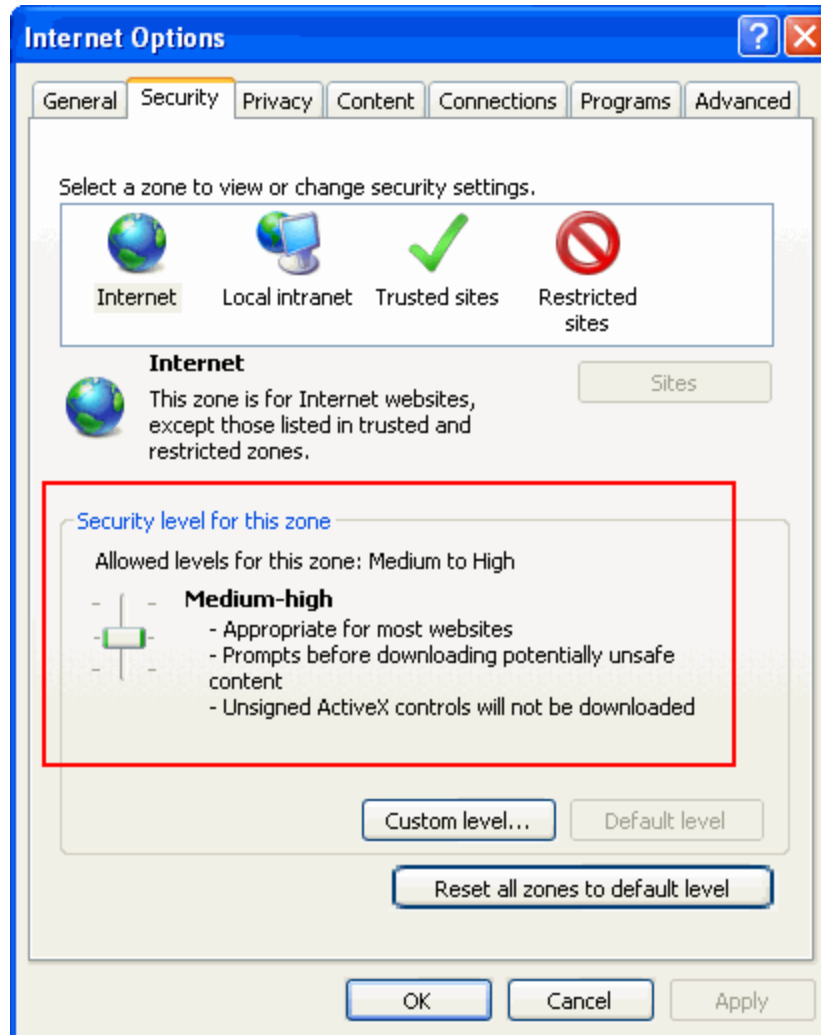
The Internet is full of unknown sources. If you are going to use the Internet, become a savvy web surfer. Learn to look and explore a website to determine if it is a **credible site** and most likely safe to download from. For example, if you spend some time on the GCFLearnFree.org site you will see that the site is organized and well designed. There is information about who we are, as well contact information in the form of a physical address and email addresses. We are a credible site. Think about who is responsible for the web site and make your **best judgment** before downloading games, programs, or documents from unknown sources.

Be Cautious of Email Attachments

Never double-click on an email attachment that contains an **executable file** with an extension such as .exe or .vbs. In general, be cautious of email attachments and **don't** download or **open files from people you do not know** or were not expecting to receive an email from.

Check the Internet Security Options in Your Browser

Whether you use Internet Explorer, Mozilla Firefox, Safari, or another browser, always check the Internet security options that are provided by your browser. Each browser is different, so use the Help tool in your browser to learn more about how it helps defend your computer against threats.



Internet Explorer Options Dialog Box

Take a look at our [Internet Safety lessons](#) to learn more about threats to your computer and what you can do to stay safe while using the Internet.

Deleting Files

To keep your computer running smoothly, it's OK to delete, or erase, unused files. Deleting files helps free up valuable hard disk space. For example, you may want to delete a flyer you created two years ago. However, consider whether you will ever want to use the file again **before** you delete it. Some files may be too important to get rid of.

To Delete a File or Folder:

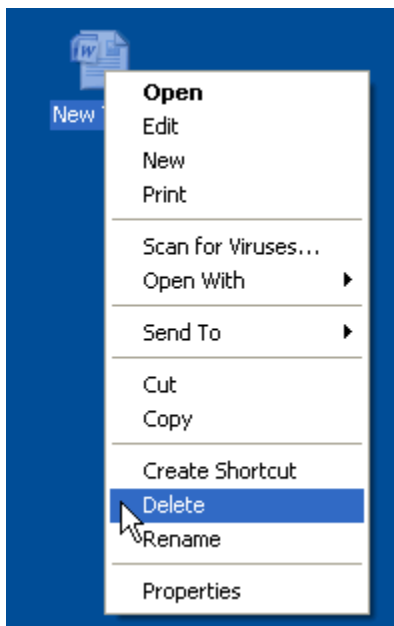
- Left-click the file or folder you want to delete.

- Drag the file or folder and drop it in the **Recycle Bin**, the desktop icon that resembles a wastebasket.



OR

- **Right-click** the file or folder. A menu appears.
- Choose **Delete** from the menu.



Emptying the Recycle Bin

When you delete a file from your computer, or move it to the Recycle Bin, it is **not automatically deleted**, but rather is temporarily stored in the Recycle Bin. This usually gives you the chance to restore the file if you decide you do not want to delete it. If you want to **permanently remove files** from the computer, thereby clearing the hard disk space the file is located, you need to permanently delete the files in the Recycle Bin. You can do this by emptying the entire Recycle Bin, or deleting individual files.

- Double-click the Recycle Bin icon to open it.

- Click **Empty the Recycle Bin** in the left pane to delete all the files.

OR

- Right-click a file or folder and choose **Delete** from the menu. This deletes the selected item.

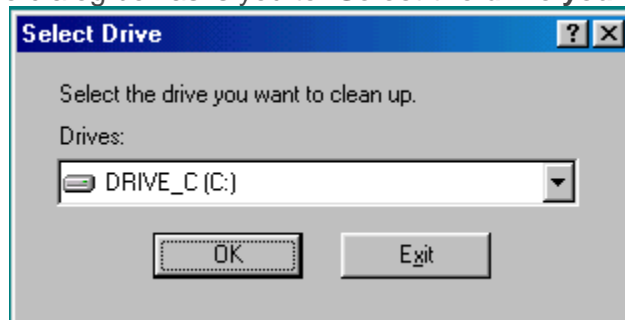
Disk Cleanup for Windows

When you install software, operate programs, and surf the Internet, temporary files are created. These files can clutter your computer and slow it down. Windows comes with a **Disk Cleanup** utility that removes temporary files and empties the Recycle Bin. Clearing out these files helps free up valuable hard disk space.

Windows XP

To Use Windows Disk Cleanup:

- Click **Start**.
- Choose **Programs → Accessories → System Tools → Disk Cleanup**.
- The **Select Drive** dialog box asks you to "Select the drive you want to clean up."



Disk Cleanup in Windows XP

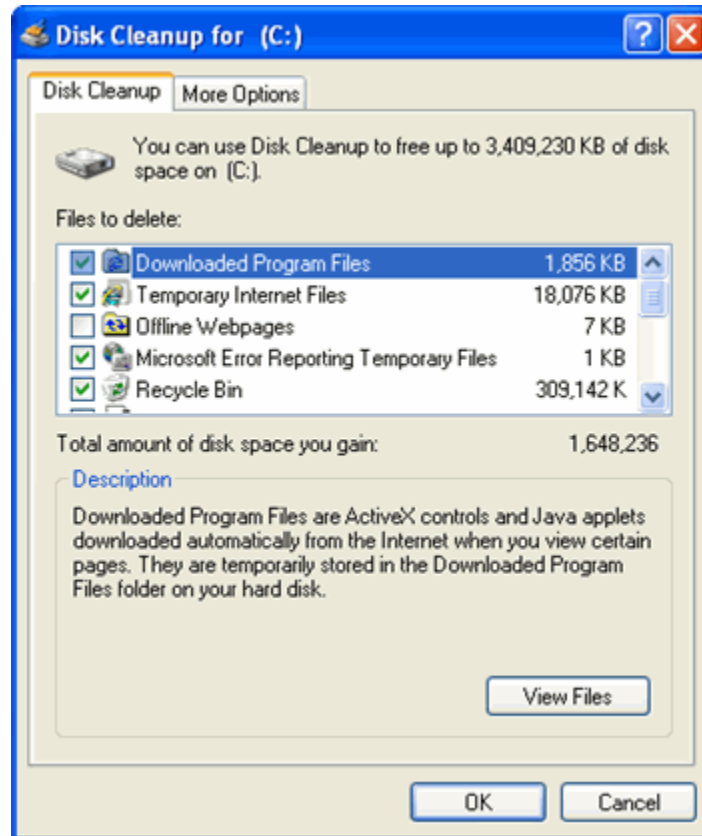
- The **C: drive** is usually selected by default.
 - Click **OK** to accept **DRIVE_C (C:)**.
 - The Disk Cleanup for **DRIVE_C (C:)** dialog box appears.
 - Select **Temporary Internet Files**, **Temporary Files** and/or **Recycle Bin**.
 - Click **OK** and the temp files you selected will be cleaned up.
- ✓ Many other utilities are available to clean up your hard disk including **CleanIt!** and **CleanWin**. Most are freeware or shareware.

Windows Vista

To Use Windows Disk Cleanup:

- Click **Start**.

- Choose **Programs → Accessories → System Tools → Disk Cleanup**.
- A **Disk Cleanup information box** appears as Windows calculates how much disk space you can free up on the C drive.
- The Disk Cleanup dialog box for drive C appears. Note: If the Disk Cleanup: Drive Selection dialog box appears, select the hard disk drive that you want to clean up, and then click OK. If not, the C drive will be chosen by default.



Disk Cleanup in Windows Vista

- Select the **check boxes** for the files you want to delete on the Disk Cleanup tab.
- Click **OK** when you finish selecting the files you want to delete.
- Click **Delete Files** to confirm the operation. Disk Cleanup will remove all the requested files from your computer.