



DIGITAL LITERACY · GRADES 9–12

Meet Your Devices

Know Your Tools Before You Use Them

Identify and operate the main types of devices, understand their hardware and inputs, and log in securely.

Chapter 1

Your Foundation for a Connected World

5 sections

41 slides

What You'll Learn

The big ideas in this chapter

IN THIS CHAPTER

Identify and operate the main types of devices, understand their hardware and inputs, and log in securely.

Know Your Tools Before You Use Them

- 1 1.1 The Family of Devices
- 2 1.2 The Hardware: Parts You Can Point To
- 3 1.3 Turning On, Logging In, and Getting Started
- 4 1.4 Tablets and iPads: The Touch-First World
- 5 1.5 Making Devices Work for You: Accessibility

Why Start Here

Digital literacy is not being able to poke around until something works.

It is understanding your tools well enough to use ones you have never seen, and to fix things when they break. That pays off in every class, every job, and most of adult life.

The Family of Devices

Four types, and what each is genuinely for



Smartphone

On-the-go tasks, messaging, quick lookups

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Four types, and what each is genuinely for



Smartphone

On-the-go tasks, messaging, quick lookups



Tablet / iPad

Reading, drawing, watching, light schoolwork

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Laptop

Writing, research, most schoolwork and jobs

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Four types, and what each is genuinely for



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On-the-go tasks, messaging, quick lookups



Tablet / iPad

Reading, drawing, watching, light schoolwork



Laptop

Writing, research, most schoolwork and jobs



Desktop

Powerful work, gaming, offices

Touch, Type, or Point

The difference that actually matters



Touchscreen

Phones and tablets. You tap, swipe and pinch directly — no pointer in between.



Mouse or touchpad

Laptops and desktops. A pointer plus a physical keyboard.

Think About It

Name one task an iPad genuinely beats a laptop at, and one where it doesn't — and say what the deciding factor is.

Pause the video and think it through.

Think About It

Name one task an iPad genuinely beats a laptop at, and one where it doesn't — and say what the deciding factor is.

The deciding factor is almost always the input method.

The iPad wins where a stylus or direct touch is the natural input: sketching, annotating a PDF, handwritten notes. The laptop wins wherever you need sustained text entry or several windows at once. Screen size and power matter far less than how you get information in.

Hardware

**Hardware is the physical stuff — and you should be able to
name it.**

Not for a test. Because when you call support, or read a spec sheet, or buy a machine, the vocabulary is the difference between being helped and being sold to.

The Parts You Can Point To

Follow the highlight



System unit

The box holding the processor, memory, and storage. Built into the body on a laptop or phone.

The Parts You Can Point To

Follow the highlight



System unit

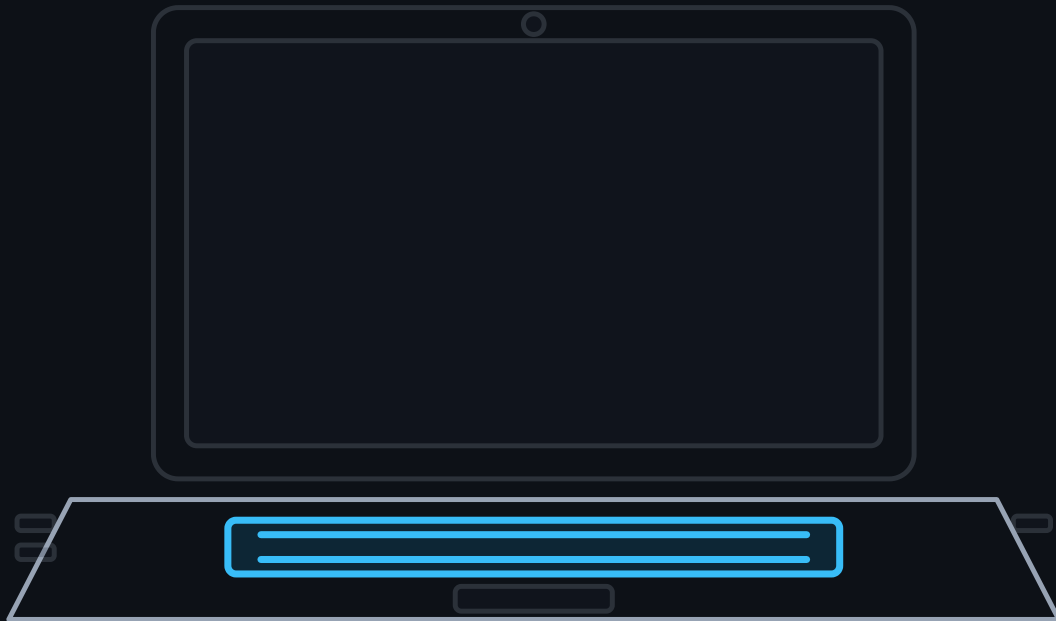
The box holding the processor, memory, and storage. Built into the body on a laptop or phone.

Monitor / screen

Displays everything you see.

The Parts You Can Point To

Follow the highlight



System unit

The box holding the processor, memory, and storage. Built into the body on a laptop or phone.

Monitor / screen

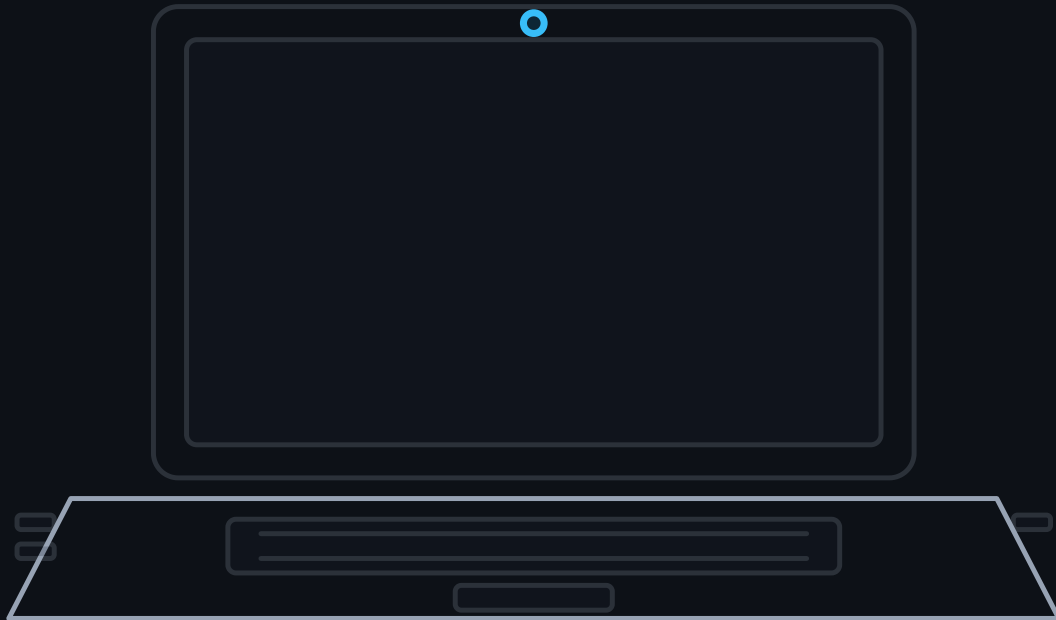
Displays everything you see.

Keyboard and touchpad

The keys you type on, and the pointer control.

The Parts You Can Point To

Follow the highlight



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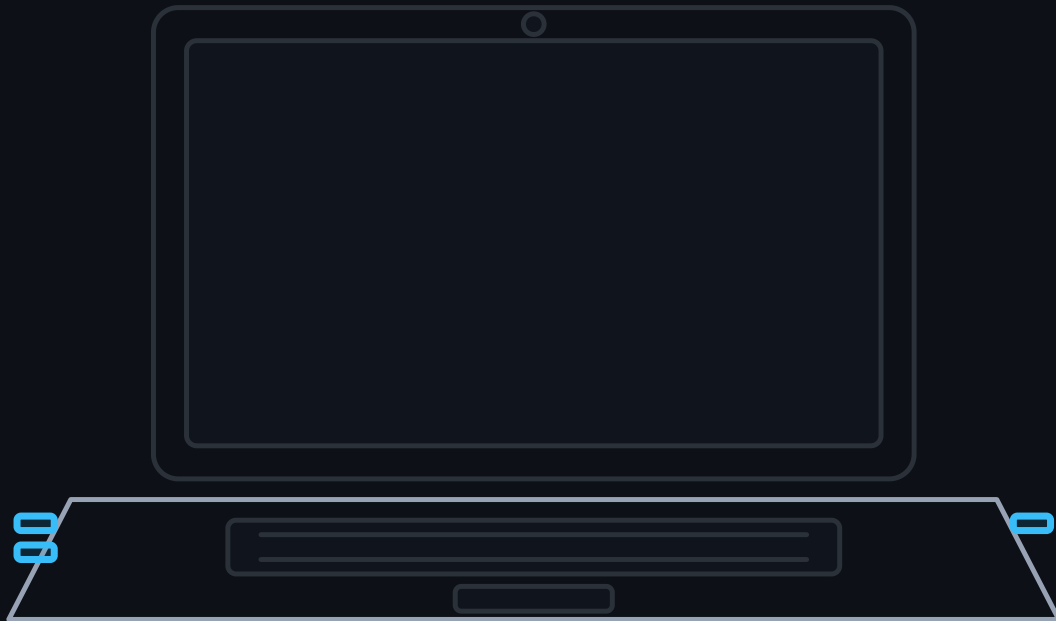
The keys you type on, and the pointer control.

Camera and microphone

On nearly every modern device — video calls, photos, voice input.

The Parts You Can Point To

Follow the highlight



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The box holding the processor, memory, and storage. Built into the body on a laptop or phone.

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Camera and microphone

On nearly every modern device — video calls, photos, voice input.

Ports

Where you plug things in. Increasingly USB-C: charging, data and video in one small oval.

Where Your Files Actually Live

Two options, and knowing which is which prevents the classic panic



Local storage

Physically inside the device, or on a plug-in flash drive. Fast, and tied to that one machine.



Cloud storage

On the internet — iCloud, Google Drive, OneDrive. Reachable from anywhere and backed up automatically.

Think About It

**You save an essay to Downloads on a school computer on Friday.
On Monday that machine has been reimaged. Where is your
essay?**

Pause the video and think it through.

Think About It

You save an essay to Downloads on a school computer on Friday. On Monday that machine has been reimaged. Where is your essay?

Gone. And this is not a rare accident.

Downloads is local storage on a shared, managed machine, and managed machines get wiped on a schedule. Anything you need to survive the weekend has to be in the cloud or on your own drive. Treat a school computer's local storage as temporary by default.

Power and Identity

Every device needs two things: power, and **proof that you're allowed in.**

Both of those sound trivial. Both of them have a right way and a wrong way, and the wrong way costs you files.

Shut Down Properly. Restart Often.

Shut down through the menu, and learn to **restart**.

A proper shutdown lets the system finish writing to disk and close programs cleanly. And restarting is genuinely the most useful troubleshooting move you will ever learn.

Three Ways to Prove It's You



Password or PIN

Something you know



Biometrics

Something you are



Username

The name identifying your account

Three Ways to Prove It's You



Password or PIN

Something you know



Biometrics

Something you are



Username

The name identifying your account

Three Ways to Prove It's You



Password or PIN

Something you know



Biometrics

Something you are



Username

The name identifying your account

Two Small Things Worth Knowing



The “see password” icon

Lets you check what you typed before submitting. Useful — and a bad idea on a screen someone can see over your shoulder.



Long and unique

Those are the two properties that matter. Chapter 5 goes deep; for now, do not reuse passwords across sites.

You Are Already a Target

The moment you can log in, someone wants your login

From: it-helpdesk@district-portal-verify.net

ACTION REQUIRED: Your student portal password expires today. Verify your account within 2 hours to avoid losing access to your grades and assignments:
district-portal-verify.net/login

Think About It

From: it-helpdesk@district-portal-verify.net

ACTION REQUIRED: Your student portal password expires today. Verify your account within 2 hours to avoid losing access to your grades and assignments: district-portal-verify.net/login

Three specific things give this away. What are they?

Pause the video and think it through.

Four Tells

From: it-helpdesk@district-portal-verify.net

ACTION REQUIRED: Your student portal password expires today. Verify your account within 2 hours to avoid losing access to your grades and assignments: [district-portal-verify.net /login](https://district-portal-verify.net/login)

- 1 Manufactured urgency — a two-hour window exists only to stop you thinking.
- 2 It threatens something you care about: your grades and assignments.
- 3 The domain is not your district. Read it rather than skimming it.
- 4 And the structural tell: your school's IT does not email from an outside domain.

The Touch-First World

Touch devices now **dominate schools, homes, and a lot of workplaces.**

And they work differently enough from a laptop to trip people up. Four things to know.

Four Things to Know



Everything is an app

No desktop, no taskbar — a home screen of icons you tap.

Four Things to Know



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Gestures replace buttons

Swipe up for home, swipe between apps, pinch to zoom.

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They do real work

With a keyboard and stylus: papers, photo and video editing, handwritten notes.

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No desktop, no taskbar — a home screen of icons you tap.



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They do real work

With a keyboard and stylus: papers, photo and video editing, handwritten notes.



The App Store is the front door

Official stores also help keep out malicious software.

Make the Device Fit You

You can **change how a device works.**

Accessibility settings are on every major device, and most people never open them.

What You Can Change



Larger text and contrast

Increase text size or contrast for easier reading.

What You Can Change



Larger text and contrast

Increase text size or contrast for easier reading.



Screen readers and captions

Have the screen read aloud, or add captions to video.

What You Can Change



Larger text and contrast

Increase text size or contrast for easier reading.



Screen readers and captions

Have the screen read aloud, or add captions to video.



Adjust the mouse

Swap buttons for left-handed use, or change pointer speed.

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Screen readers and captions

Have the screen read aloud, or add captions to video.



Adjust the mouse

Swap buttons for left-handed use, or change pointer speed.



Not just for disability

Larger text in bright sun. Captions in a noisy room. Everyone benefits.

Words to Know

Say them, use them, own them

device

A piece of electronic equipment you can use to compute, communicate, or access the internet — such as a smartphone, tablet, laptop, or desktop computer.

mouse

A hand-controlled pointing device that moves a cursor on the screen; a laptop's built-in version is a touchpad.

storage

Where a device keeps your files and data, either physically on the device (hard drive, flash drive) or on the internet (cloud storage).

login

The process of proving who you are to a device or account, usually with a username and password, a PIN, or biometrics like a fingerprint or face scan.

touchscreen

A screen you control by touching it directly with your fingers — tapping, swiping, and pinching — instead of using a mouse.

hardware

The physical parts of a computer or device that you can see and touch, such as the screen, keyboard, and ports.

cloud storage

Storing your files on servers on the internet — like iCloud, Google Drive, or OneDrive — so you can reach them from any device and they're backed up automatically.

accessibility

Features that let people customize a device to fit their needs — such as larger text, screen readers, captions, high contrast, or adjusting a mouse — making technology usable by everyone.

The Device Detective

Your turn — work through each part

1**Identify and Label**

Choose one device. Create a labeled diagram or list identifying at least six hardware parts and what each does. Include how you control it.

2**The Login and Power Checklist**

Write out, in order, the exact steps to properly turn the device on, log in (noting which method it uses), and shut it down or restart it.

3**Personalize It**

Change one accessibility or display setting and describe what it did. Then explain one situation where that setting would genuinely help someone.

4**Compare**

Compare a touch device with a traditional computer. Name one task each is better for, and explain why.

You've Got This

Tick every box you can do on your own

- | | |
|--|---|
| ☐ I can name the main types of devices and what each is best for | ☐ I can explain the difference between touchscreen, touchpad, and mouse control |
| ☐ I can identify common hardware parts, including ports, camera, and microphone | ☐ I can explain the difference between local storage and cloud storage |
| ☐ I can properly turn on, log in to, restart, and shut down a device | ☐ I can describe different login methods, including passwords, PINs, and biometrics |
| ☐ I can recognize a suspicious “your account is locked” scam message | ☐ I can explain how touch-first devices like the iPad organize apps and use gestures |
| ☐ I can find and use accessibility settings to customize a device | ☐ I can compare a touch device and a traditional computer for a given task |



DIGITAL LITERACY · GRADES 9–12

Finding Your Way Around a Device

The Operating System, Your Files, and Not Losing Your Work

Navigate an operating system, manage files and folders, save your work where you can find it, and use cloud storage.

Chapter 2

Your Foundation for a Connected World

5 sections

35 slides

What You'll Learn

The big ideas in this chapter

IN THIS CHAPTER

Navigate an operating system, manage files and folders, save your work where you can find it, and use cloud storage.

The Operating System, Your Files, and Not Losing Your Work

1 2.1 The Operating System: The Boss of the Device

2 2.2 Windows and Their Controls

3 2.3 Files, Folders, and Saving on Purpose

4 2.4 Your Files in the Cloud

5 2.5 Settings, Updates, and Keeping a Device Healthy

The Most Common Frustration

“I made the file — where did it go?”

Losing your own work is not a sign that you are bad with computers. It is a sign that nobody ever taught you how a device is organized. This chapter fixes that.

The Operating System

The master software that runs everything else



Windows 10 / 11

Taskbar and Start Menu

The Operating System

The master software that runs everything else



Windows 10 / 11

Taskbar and Start Menu



macOS

Dock and Menu Bar

The Operating System

The master software that runs everything else



Windows 10 / 11

Taskbar and Start Menu



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iPadOS / Android

A home screen of apps

The Operating System

The master software that runs everything else



Windows 10 / 11

Taskbar and Start Menu



macOS

Dock and Menu Bar



iPadOS / Android

A home screen of apps



ChromeOS

Chromebooks, built around the browser

The Skills That Transfer

True on every one of them



Start and exit programs

Open what you need and close it properly.

The Skills That Transfer

True on every one of them



Start and exit programs

Open what you need and close it properly.



Search

There is always one — the magnifying glass, or the Start menu.

The Skills That Transfer

True on every one of them



Start and exit programs

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Switch between open windows

Several things open at once, and move between them.

The Skills That Transfer

True on every one of them



Start and exit programs

Open what you need and close it properly.



Search

There is always one — the magnifying glass, or the Start menu.



Switch between open windows

Several things open at once, and move between them.



Reach Settings

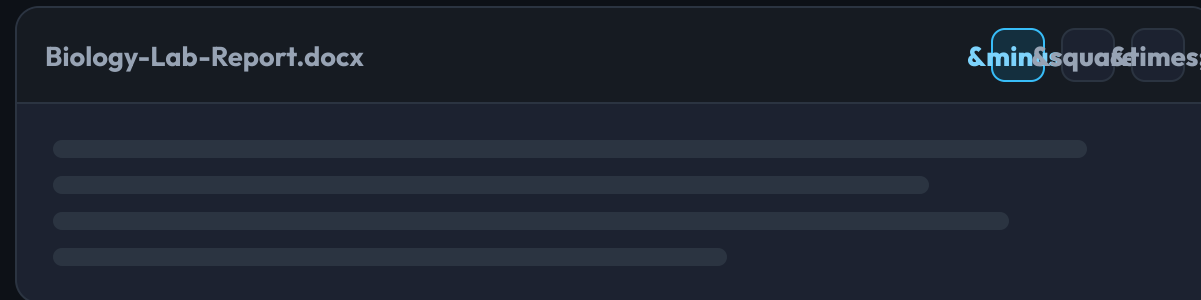
Change how the device behaves.

Windows and Their Controls

Every open program lives in a window.

A frame you can move, resize and stack — and three small buttons in the corner control all of it.

Three Buttons

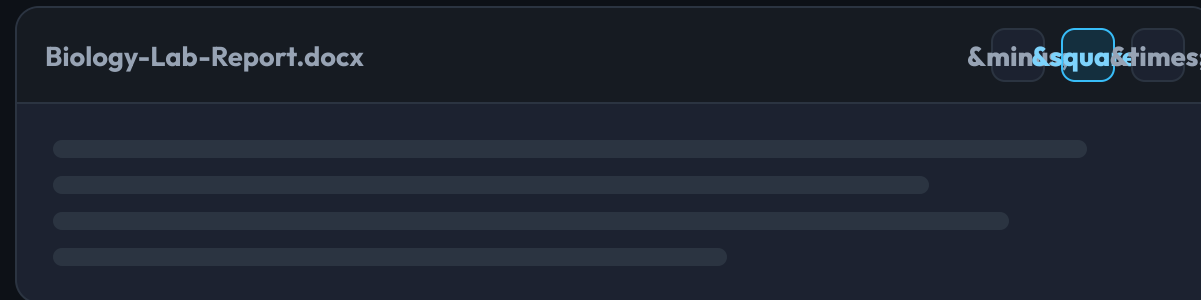


Minimize

Maximize

Close

Three Buttons

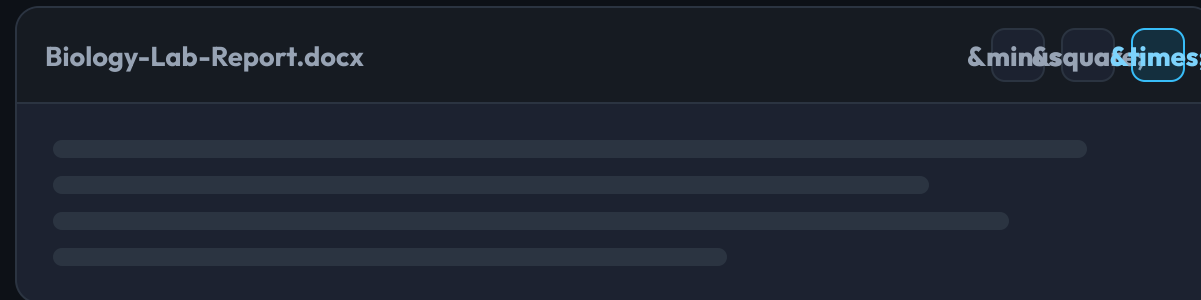


Minimize

Maximize

Close

Three Buttons



Minimize

Maximize

Close

The Shortcut Worth Learning

Alt+Tab on Windows. **Command+Tab** on Mac.

Switching windows from the keyboard feels like a superpower the first week and becomes invisible after that. Learn it now.

The Heart of the Chapter

Save on purpose.

A file called Untitled3 buried in Downloads is a file you will lose. That is not bad luck — it is the predictable result of letting the computer decide for you.

A Filename Has Two Halves

And they are addressed to different readers

Biology-Lab-Report **.docx**

the name — for you the extension — for the computer

This half is for you and for anyone you send it to. It should say what the thing is without having to open it.

A Filename Has Two Halves

And they are addressed to different readers

Biology-Lab-Report **.docx**

the name — for you the extension — for the computer

This half is for the computer. It decides which program opens the file and how other systems treat it.

The Extensions You'll Meet

**.docx**

A Word document — editable text.

**.pdf**

A fixed, printable document. Looks identical everywhere, deliberately hard to edit.

**.jpg / .png**

An image.

**.mp4**

A video.

**.xlsx**

An Excel spreadsheet.

Finding It Again



File Explorer and Finder

Windows browses files with File Explorer; Mac with Finder. Both create folders, rename, and move.



Or search for it

Usually faster than browsing — but only if you gave the file a real name.



Recycle Bin and Trash

Deleted files stay recoverable until the bin is emptied.

Think About It

You deleted a file an hour ago and now you need it. What is your first move — and what is the move that makes it unrecoverable?

Pause the video and think it through.

Think About It

You deleted a file an hour ago and now you need it. What is your first move — and what is the move that makes it unrecoverable?

First move: check the Recycle Bin or Trash. The unrecoverable move: emptying it.

Deleting relocates a file rather than destroying it. It stays there until the bin is emptied — so the reflex to “empty the trash to free up space” is exactly what turns a recoverable mistake into a permanent one.

Your Files in the Cloud

Increasingly your files don't live on one device at all.

OneDrive, iCloud, Google Drive. Three separate things happen once your work lives there, and people tend to blur them together.

Three Different Things



Syncing

A change in one place shows up everywhere, automatically.

Three Different Things



Syncing

A change in one place shows up everywhere, automatically.



Backup

Lose or break a device and your work is still safe.

Three Different Things



Syncing

A change in one place shows up everywhere, automatically.



Backup

Lose or break a device and your work is still safe.



Sharing

Give other people access — but be deliberate about who, and at what level.

Why This Changed Everything

“My laptop broke and I lost everything” is far rarer than it used to be.

But only for people whose work was genuinely saved there. The cloud protects you from the thing you didn't plan for — as long as you set it up before you needed it.

Settings Is the Control Room

Most things that feel broken are **Settings problems.**

“My volume won't work.” “My screen is too dim.” “I'm out of space.” Those are not mysteries.

They are two-minute fixes if you know where to look.

Two Maintenance Habits



Software updates

Not nagging. Updates fix bugs and patch the security holes attackers exploit. An out-of-date device is a vulnerable device.



Managing apps and storage

Uninstall what you don't use and see what's taking space. A “full” phone usually just needs old photos moved to the cloud.

Think About It

Explain why postponing a software update for two months is a security decision, not just a convenience one.

Pause the video and think it through.

Think About It

Explain why postponing a software update for two months is a security decision, not just a convenience one.

Because updates are public, and so are the holes they patch.

When a vendor ships a security update, the vulnerability it fixes becomes widely known. Attackers read those notes too. An unpatched device isn't merely old — it has a known, documented way in that someone has already written a tool for.

Words to Know

Say them, use them, own them

operating system (OS)

The main software that runs a device and lets you use it — managing the screen, files, apps, and settings. Examples include Windows, macOS, iPadOS, Android, and ChromeOS.

file

A single saved item on a device — a document, photo, song, or video. Each file has a name and a type (shown by its extension, like .docx or .jpg).

window

A rectangular frame on screen that holds an open program or document; you can have several open at once and switch between them.

folder

A container that holds files (and other folders), used to organize your work so you can find it later — like a labeled drawer.

Organize Your Digital Backpack

Your turn — work through each part

1**Build a Folder System**

Create a folder structure for your schoolwork — a main folder with a subfolder for each class. Screenshot or draw it, and explain why organizing this way saves time.

2**Save, Name, Find**

Create a document, save it into the right folder with a clear name, close it, and find it again two ways: by browsing, and by searching. Note which was faster and why.

3**Cloud Check**

Identify which cloud service you have access to. Explain one real benefit of keeping work there and one thing to be careful about.

4**Health Check**

In Settings find whether your device needs an update and how much storage is free. Write down what you found and one action to keep it healthy.

You've Got This

Tick every box you can do on your own

- | | |
|---|--|
| ☐ I can identify which operating system a device is running | ☐ I can start and exit programs, search, and switch between windows |
| ☐ I can minimize, maximize, and close windows | ☐ I can explain the difference between a file and a folder |
| ☐ I can read a file extension and tell what type of file it is | ☐ I can save a file intentionally by name and location, and find it again |
| ☐ I can recover a deleted file from the Recycle Bin or Trash | ☐ I can explain how cloud storage syncs, backs up, and shares files |
| ☐ I can use Settings to change how a device behaves | ☐ I can explain why keeping software updated matters for security |



DIGITAL LITERACY · GRADES 9–12

Exploring the Internet

Finding What You Need — and Knowing If You Can Trust It

Use browsers and search effectively, read web addresses, evaluate whether information is trustworthy, and protect your privacy online.

Chapter 3

Your Foundation for a Connected World

5 sections

35 slides

What You'll Learn

The big ideas in this chapter

IN THIS CHAPTER

Use browsers and search effectively, read web addresses, evaluate whether information is trustworthy, and protect your privacy online.

Finding What You Need — and Knowing If You Can Trust It

1 3.1 Getting Connected and Getting Around

2 3.2 Reading a Web Address

3 3.3 Searching Like a Pro

4 3.4 Is This True? Evaluating Information

5 3.5 Protecting Your Privacy While You Browse

Exploring the Internet

The most powerful information tool ever built, and the largest pile of junk ever assembled.

The difference between using it well and getting fooled is not luck. It is four learnable skills, and this chapter builds all of them.

Know Which Connection You Are On



Wi-Fi

A wireless signal from a nearby router. Free, at home, school and cafés.

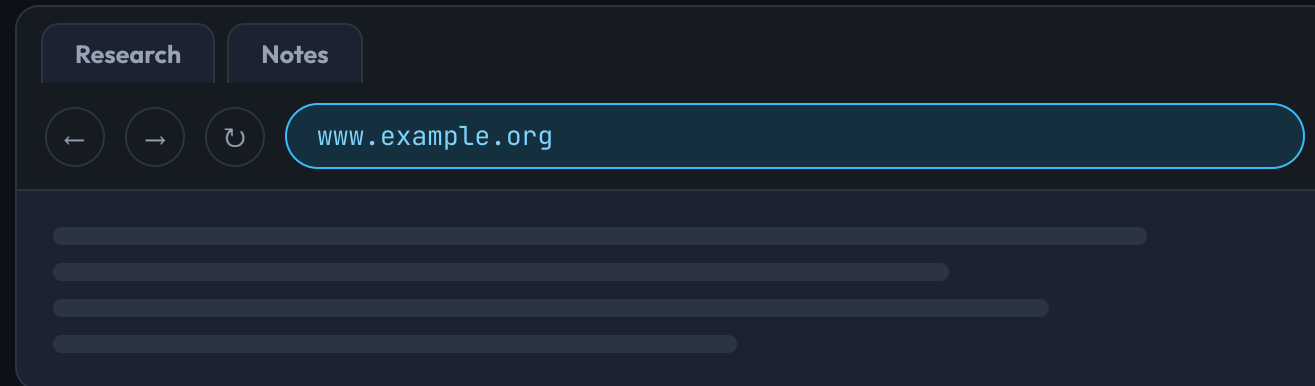


Cellular data

Over the 4G or 5G network. Almost anywhere, but capped by a monthly plan.

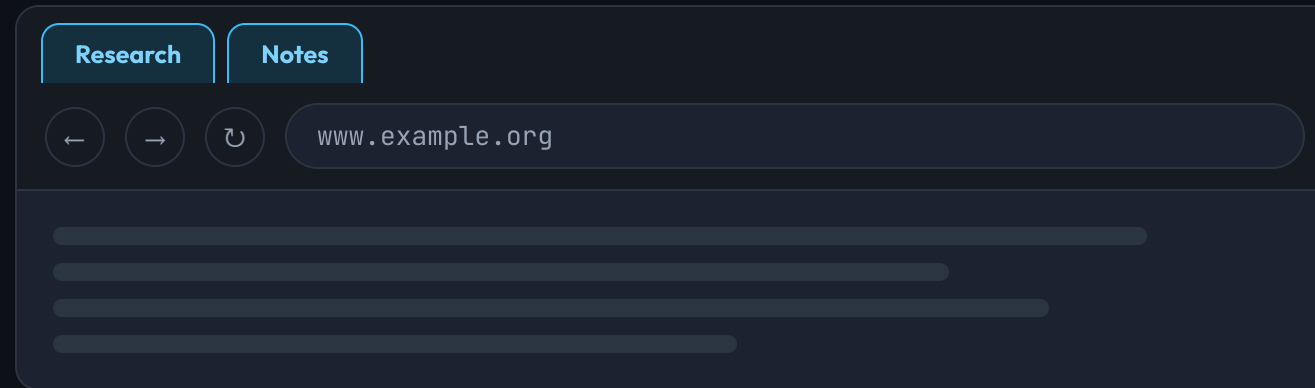
Reading the Browser

The same tools in every browser



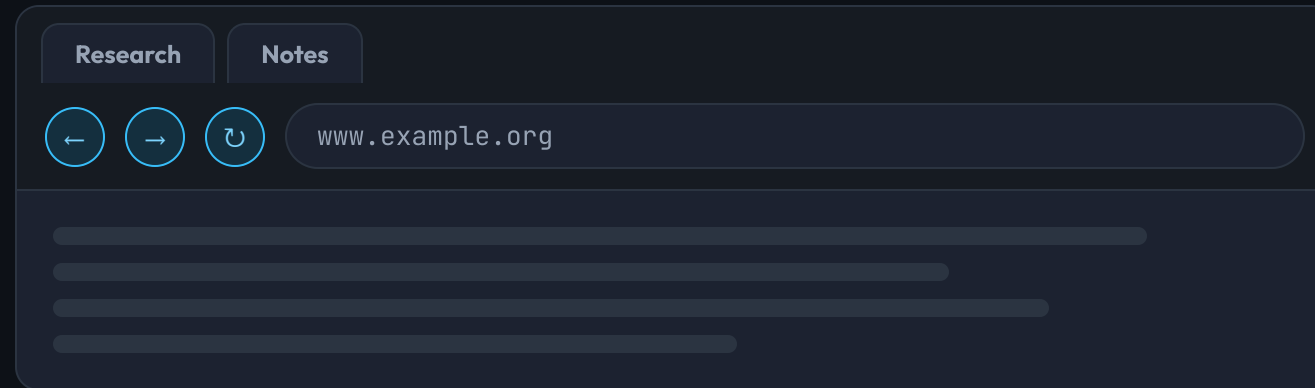
Reading the Browser

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Reading the Browser

The same tools in every browser



Reading a Web Address

A URL carries more information than people realize.

And reading it is a key safety skill — arguably the most useful one in this chapter.

Taking One Apart

Three parts, three pieces of information

https:// **www.example** **.org**

secure — encrypted the site's real name top-level domain

The s means the connection is encrypted. Plain http, with no s, is a warning sign.

Taking One Apart

Three parts, three pieces of information

`https://www.example.org`

secure — encrypted the site's real name top-level domain

The site's real name — and the part scammers work hardest to imitate.

Taking One Apart

Three parts, three pieces of information

`https://www.example.org`

secure — encrypted

the site's real name

top-level domain

.com commercial, .org organizations, .edu schools, .gov government — hard to fake.

Spotting Fakes



paypal.com

The real domain. Ordinary letters, nothing added.



apple-support-login.com

Extra words bolted on. The real company's domain is your anchor.

Think About It

A site shows https and a padlock. Is it safe to enter your password?

Pause the video and think it through.

Think About It

A site shows https and a padlock. Is it safe to enter your password?

Not necessarily. https means encrypted, not honest.

It guarantees nobody can read the connection in transit. It says nothing about who is on the other end — and scam sites can and do have padlocks. Read the domain as well.

Searching Like a Pro

Getting to the right answer *fast* is a real skill.

Four techniques, and one habit that matters more than any of them.

Four Techniques



Use specific terms

“Why does my Windows laptop battery drain fast” beats “computer slow.”

Four Techniques



Use specific terms

“Why does my Windows laptop battery drain fast” beats “computer slow.”



Put phrases in quotes

"digital literacy standards" searches that exact wording.

Four Techniques



Use specific terms

“Why does my Windows laptop battery drain fast” beats “computer slow.”



Put phrases in quotes

“digital literacy standards” searches that exact wording.



Use filters

Narrow by images, video, news or date — especially for recent information.

Four Techniques



Use specific terms

“Why does my Windows laptop battery drain fast” beats “computer slow.”



Put phrases in quotes

“digital literacy standards” searches that exact wording.



Use filters

Narrow by images, video, news or date — especially for recent information.



Scan before you click

The first result isn't always best, and the top ones are often ads.

Searching Is Iterative

Try, look at what came back, refine.

That loop is faster than scrolling endlessly through one bad search — which is what most people do instead.

Is This True?

The internet **does not sort itself into true and false for you.**

So you have to. Four questions, asked in order.

Four Questions



Who is the source?

A known news organization, university or government site beats an anonymous post. Find out who is behind it.

Four Questions



Who is the source?

A known news organization, university or government site beats an anonymous post. Find out who is behind it.



Is there bias?

Inform you, sell you something, or make you angry? A page selling a supplement is not neutral on health.

Four Questions



Who is the source?

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Is there bias?

Inform you, sell you something, or make you angry? A page selling a supplement is not neutral on health.



Does other coverage agree?

A shocking claim on one obscure site and nowhere reputable deserves scepticism.

Four Questions



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Does other coverage agree?

A shocking claim on one obscure site and nowhere reputable deserves scepticism.



How current is it?

For fast-moving topics, an old page may simply be wrong now.

The Habit That Beats All Four

When something makes you want to share it **immediately —
that is the moment to check.**

Especially if it is shocking, or makes you angry. That reaction is the product, not an accident.

The AI Wrinkle



Confidently wrong

AI can invent facts and fake sources, in the same tone it uses when correct.



A starting point, not an authority

Verify anything that matters, especially for schoolwork.

Protecting Your Privacy

The goal is not paranoia. It is awareness and control.

Knowing what is tracked, and choosing your settings deliberately — especially on shared devices.

Four Controls



Private / incognito windows

Don't save history on the device — but they do not make you invisible to websites.

Four Controls



Private / incognito windows

Don't save history on the device — but they do not make you invisible to websites.



Clear history, don't save passwords

On a shared computer, this keeps the next user out of your accounts.

Four Controls



Private / incognito windows

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Clear history, don't save passwords

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Cookies

Small files sites use to remember you. Often harmless, also used to track you for ads.

Four Controls



Private / incognito windows

Don't save history on the device — but they do not make you invisible to websites.



Clear history, don't save passwords

On a shared computer, this keeps the next user out of your accounts.



Cookies

Small files sites use to remember you. Often harmless, also used to track you for ads.



CAPTCHAs

How a site checks you are human rather than a bot. Normal and safe.

Words to Know

Say them, use them, own them

browser

An app used to visit websites — such as Chrome, Safari, Edge, or Firefox.

cellular data

Internet delivered over the cell phone network (4G/5G), available almost anywhere but usually limited by a monthly data plan.

top-level domain

The last part of a web address (like .com, .org, .edu, .gov) that hints at the type of organization behind a site.

Wi-Fi

A wireless internet connection from a nearby router, common at home, school, and public places. Usually free and doesn't count against a phone data plan.

URL

The address of a web page (Uniform Resource Locator), typed into the address bar — for example, <https://www.example.org>.

The Source Investigator

Your turn — work through each part

- 1 Decode URLs**
Find three websites. Write each URL, identify the top-level domain and whether it uses https, and say what the domain tells you about who runs it.
- 2 Search Showdown**
Search a real question with vague words, then with specific words and a phrase in quotes. Compare the top results and explain which won.
- 3 Fact-Check a Claim**
Find a surprising claim. Evaluate it against all four questions — source, bias, agreement, date — and give your verdict.
- 4 Privacy Setup**
Explain when you would use a private window and what it does not hide, then change one privacy setting on a shared computer.

You've Got This

Tick every box you can do on your own

☐ I can name common browsers and explain the difference between Wi-Fi and cellular data

☐ I can read a URL, including https and the top-level domain

☐ I can search effectively using specific terms, quotes, and filters

☐ I understand that AI-generated answers can be confidently wrong and need verifying

☐ I can explain what cookies and CAPTCHAs are

☐ I can use the address bar, tabs, back, refresh, and bookmarks

☐ I can spot a fake or suspicious web address

☐ I can evaluate a source by asking who made it, its bias, agreement, and date

☐ I can use private browsing and explain what it does and doesn't do

☐ I can adjust privacy settings on a shared computer



DIGITAL LITERACY · GRADES 9–12

Communicating and Creating

Email, Video Calls, and the Software That Runs School and Work

Write professional email, run video calls, and create with documents, spreadsheets and slides — including cloud collaboration.

Chapter 4

Your Foundation for a Connected World

5 sections

28 slides

What You'll Learn

The big ideas in this chapter

IN THIS CHAPTER

Write professional email, run video calls, and create with documents, spreadsheets and slides — including cloud collaboration.

Email, Video Calls, and the Software That Runs School and Work

1 4.1 Email: The Professional Standard

2 4.2 Video Calls: Being There from Anywhere

3 4.3 Creating Documents

4 4.4 Spreadsheets and Slides

5 4.5 Working Together in the Cloud

Email: The Professional Standard

Email is how school, work and organizations communicate formally.

It is also, very often, the first impression somebody forms of you before they meet you.

The Anatomy of an Email

A real request, done properly

TO admissions@university.edu

CC j.reyes@school.org

SUBJECT Question about the January transfer deadline

MESSAGE Dear Admissions Office,

I am a senior at Riverside High planning to apply for January transfer. The website lists two different deadlines and I want to be sure I have the right one.

Could you confirm which applies to transfer applicants?

Thank you for your time,
Alex Chen

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Etiquette, and Safety



Clear subject, greeting, closing

Three small things that make you read as competent.



No all-caps

It reads as shouting, whatever you meant.



Reply All, wisely

It goes to everyone. This is the most common email mistake there is.



Email safety

Be careful with unknown senders and unexpected attachments, and sign out on shared computers.

Being There from Anywhere

Classes, job interviews, remote work, and telehealth.

Being smooth on a video call is a genuine modern skill, and people notice when you are not.

The Core Controls

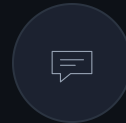
Find them before you need them



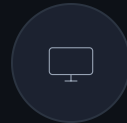
Mute



Video



Chat



Share screen

The Core Controls

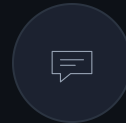
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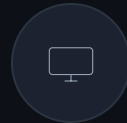
Mute



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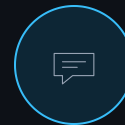
Find them before you need them



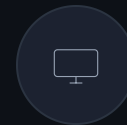
Mute



Video



Chat



Share screen

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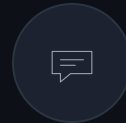
Find them before you need them



Mute



Video



Chat



Share screen

Set Up Well, and Fix It Fast



Light in front, not behind

A window behind you turns you into a silhouette.



Camera at eye level

Raise the laptop. A camera looking up is nobody's best angle.



A private space for telehealth

A medical appointment deserves a room where you are not overheard.



When it goes wrong

Check your connection, then close and reopen the app. That fixes most of it.

Creating Documents

You do not need every feature.

About ten of them cover essentially everything you will ever actually do.

The Ones That Matter



Create, save, open

Chapter 2's skills in action — and know where it saved to.



Format text, bullets, numbering

Size, colour, font, spacing, alignment — structure a reader can follow.



Insert images, tables and links

Plus cut, copy, paste and undo.



Spell check, then print or export as PDF

PDF looks identical everywhere, which is why people ask for it.

Spreadsheets

The power is not the grid. It is the calculation.

And it keeps calculating every time a number changes.

One Formula

Everything else is a variation

	A	B
1	Tuition	1200
2	Books	340
3	Supplies	85
4	Total	=SUM(B1:B3)

Three costs, and a total somebody has to work out.

One Formula

Everything else is a variation

	A	B
1	Tuition	1200
2	Books	340
3	Supplies	85
4	Total	=SUM(B1:B3)

Every formula starts with = . This one adds B1 to B3 — and re-adds them the instant any of those numbers changes.

And Presentation Software



Text-heavy slides

Nobody can read a slide and listen to a speaker at once. They will do both badly.



Limited, readable, clearly titled

Slides support you. You are the presentation.

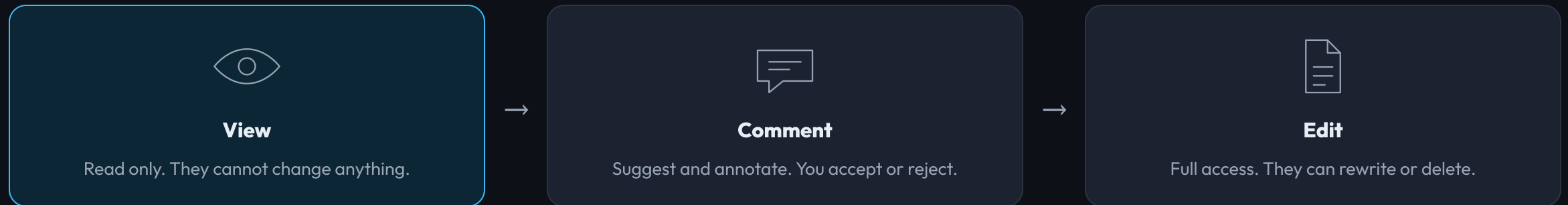
Working Together in the Cloud

Several people, one document.

Which creates exactly one decision you need to get right, every single time you share.

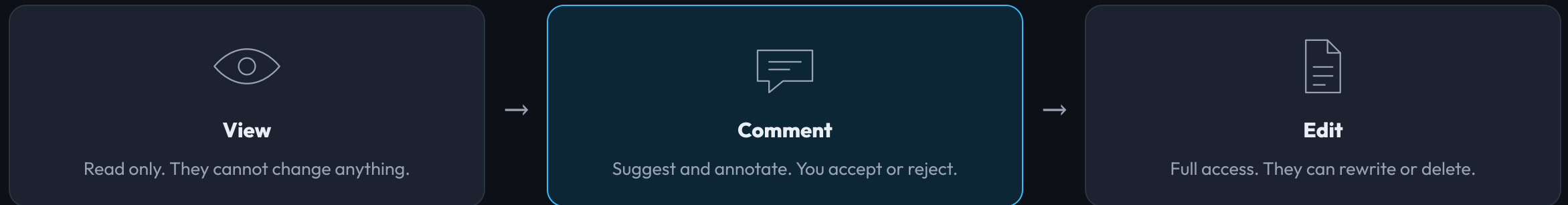
Three Levels of Access

Choosing is a real judgment



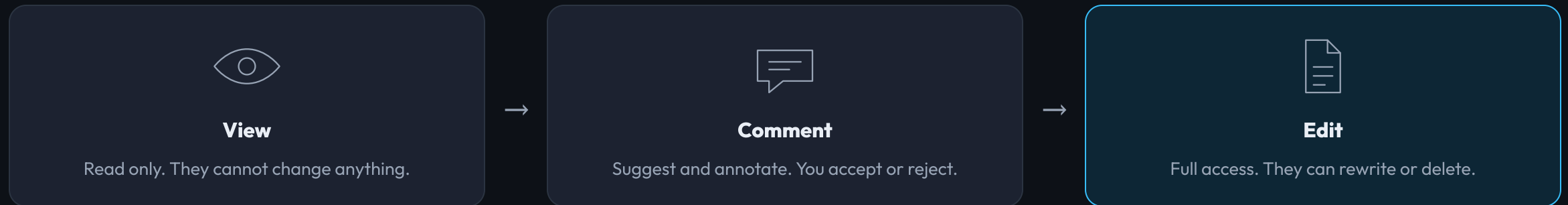
Three Levels of Access

Choosing is a real judgment



Three Levels of Access

Choosing is a real judgment



The Safety Net



Version history

The cloud keeps past versions — what changed, when, and who did it.



You can restore any of them

Someone deleted three paragraphs the night before it is due? Roll it back.



Comments and suggestion mode

The backbone of group projects and of getting feedback that you control.

Words to Know

Say them, use them, own them

email

Electronic mail — the standard way to send written messages, documents, and formal communication online, used by schools, jobs, and organizations.

video call

A live audio-and-video conversation over the internet, using apps like Zoom, Google Meet, FaceTime, or Microsoft Teams — used for classes, meetings, and telehealth.

spreadsheet

A grid of cells (rows and columns) used to organize numbers and information, do calculations, and make charts — such as Microsoft Excel or Google Sheets.

presentation software

Tools like Microsoft PowerPoint and Google Slides used to make slideshows that combine text, images, and media to present information to an audience.

The Communicator's Toolkit

Your turn — work through each part

1**Write a Professional Email**

Write a complete email to a teacher or employer with a subject, greeting, body and closing. List three etiquette rules you followed.

2**Video-Call Ready**

Describe your ideal setup and list four controls you would need instantly. Note what you would change for a telehealth call.

3**Create Something**

Build a real artifact — a formatted document, a budget with a formula, or a short slideshow. Note three features you used.

4**Share Wisely**

Explain View, Comment and Edit, give an example of when each is right, and describe when you would use version history.

You've Got This

Tick every box you can do on your own

- | | |
|---|--|
| ☐ I can write a professional email with a subject, greeting, body, and closing | ☐ I can explain CC, BCC, Reply All, and email etiquette |
| ☐ I can use the core controls of a video call: mute, video, chat, and screen share | ☐ I can set up a good, private space for a video call or telehealth visit |
| ☐ I can troubleshoot common video-call problems | ☐ I can create, format, save, and print a document |
| ☐ I can explain what a spreadsheet is and write a simple formula | ☐ I can build a slideshow and apply presentation etiquette |
| ☐ I can choose the right sharing level: View, Comment, or Edit | ☐ I can use comments, suggestions, and version history to collaborate |



DIGITAL LITERACY · GRADES 9–12

Staying Safe and Smart Online

Protecting Your Accounts, Your Privacy, and Your Reputation

Protect accounts with strong passwords and MFA, recognize AI-powered scams, manage your digital footprint, and use social media wisely.

Chapter 5

Your Foundation for a Connected World

5 sections

38 slides

What You'll Learn

The big ideas in this chapter

IN THIS CHAPTER

Protect accounts with strong passwords and MFA, recognize AI-powered scams, manage your digital footprint, and use social media wisely.

Protecting Your Accounts, Your Privacy, and Your Reputation

1 5.1 Cybersecurity Starts with Passwords

2 5.2 Recognizing Scams and Phishing

3 5.3 Protecting Devices and Data

4 5.4 Your Digital Footprint

5 5.5 Social Media, Smartly

Cybersecurity Starts with Passwords

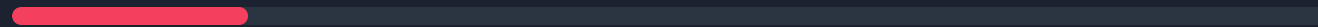
Every account has a front door.

Cybersecurity is protecting your devices, accounts and information from digital threats — and it starts there.

Length Beats Complexity

Three passwords, and one surprise

soccer12



Short, and built on a dictionary word. Guessing software tries this shape first.

Length Beats Complexity

Three passwords, and one surprise

soccer12



Short, and built on a dictionary word. Guessing software tries this shape first.

S0cc3r12!

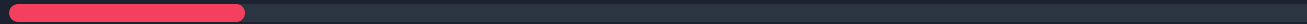


Character substitutions feel clever. Attackers have automated them for decades.

Length Beats Complexity

Three passwords, and one surprise

soccer12



Short, and built on a dictionary word. Guessing software tries this shape first.

S0cc3r12!



Character substitutions feel clever. Attackers have automated them for decades.

PurpleTiger-Runs-Fast



Long, memorable, and genuinely hard. Length beats complexity.

Two Things That Solve the Rest



A password manager

Creates, stores and fills in a strong unique password for every account. You remember one.



Passkeys

Sign in with your device's fingerprint or face instead — there is no password to steal.

Add a Second Lock

Multi-factor authentication



Something you know

Your password



Something you have

A code on your phone



Only then, in

A stolen password alone is not enough

Add a Second Lock

Multi-factor authentication



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Your password



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Only then, in

A stolen password alone is not enough

Think About It

**You use one password on ten sites. One of those ten is breached.
How many of your accounts are at risk?**

Pause the video and think it through.

Think About It

You use one password on ten sites. One of those ten is breached. How many of your accounts are at risk?

All ten.

Attackers take leaked email-and-password pairs and try them automatically across hundreds of services. It is called credential stuffing, and it turns somebody else's security failure into yours.

Recognizing Scams and Phishing

Modern scams are *AI-powered* — and they write perfectly.

They can even clone voices. So spotting bad grammar is no longer the skill.

Four Warning Signs



Urgency and fear

“Your account will be closed in 24 hours.” Panic makes people click without thinking.

Four Warning Signs



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Unexpected links or attachments

Don't click or download from messages you didn't expect.

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Requests for passwords, codes or payment

Real organizations don't ask. No one legitimate needs your MFA code.

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Slightly-wrong details

Odd web addresses, misspellings, a “bank” emailing from a Gmail account.

Think About It

You get a call. It is your parent's voice, upset, asking you to send money urgently. What do you do?

Pause the video and think it through.

Think About It

You get a call. It is your parent's voice, upset, asking you to send money urgently. What do you do?

Hang up and call them back on the number you already have.

AI voice cloning needs only seconds of audio, and social media supplies it. A real emergency survives a call-back; a scam does not. Verify through a channel you chose, never one they chose.

Protecting Devices and Data

The digital version of locking your door.

Five habits. None are difficult, and together they close most of the easy ways in.

Five Habits



Lock your devices

A strong PIN, password or biometrics — so a lost phone doesn't hand over your whole life.

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Keep software updated

Updates patch security holes attackers already know about.

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Use protection tools

Anti-malware, and download only from official stores.

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Use protection tools

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Back up your data

So ransomware, loss or a broken device doesn't erase your work.

Your Digital Footprint

Permanent, visible, and consequential.

Colleges and employers do look. But that cuts in both directions, and the second half usually gets left out.

Four Things to Understand



The internet is permanent

Deleting a post doesn't guarantee it's gone. Screenshots and caches persist.

Four Things to Understand



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Two sources

What you actively post, and what's collected about you as you browse and shop.

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What you actively post, and what's collected about you as you browse and shop.



It cuts both ways

A thoughtless post can cost you an opportunity. A thoughtful presence can create one.

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Two sources

What you actively post, and what's collected about you as you browse and shop.



It cuts both ways

A thoughtless post can cost you an opportunity. A thoughtful presence can create one.



Manage it on purpose

Review settings, think before posting, and periodically search yourself.

Social Media, Smartly

Social media is not the enemy.

But sharing wisely is your responsibility, and the defaults are configured for engagement rather than for you.

Five Things



Public vs. private

A DM is not a public post — but even private content can be screenshotted. Nothing online is guaranteed private.

Five Things



Public vs. private

A DM is not a public post — but even private content can be screenshotted. Nothing online is guaranteed private.



Guard personal information

Address, school schedule and real-time location are the most useful to someone who means harm.

Five Things



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Actually set your privacy settings

Who can see your posts, tag you, or message you.

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Account-linking risks

Logging into other sites with a social account, or accepting every request, expands your exposure.

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Account-linking risks

Logging into other sites with a social account, or accepting every request, expands your exposure.



Remember consequences

Likes, comments and shares are public actions that reflect on you, and they last.

Words to Know

Say them, use them, own them

cybersecurity

Protecting your devices, accounts, and personal information from digital threats like hackers, scams, and malware.

passkey

A modern, passwordless way to sign in using your device's fingerprint or face scan instead of a typed password, making accounts much harder to steal.

phishing

A scam where an attacker pretends to be a trusted person or company (in an email, text, or message) to trick you into revealing passwords, money, or personal information.

password manager

A secure app that creates, stores, and fills in strong, unique passwords for all your accounts, so you only have to remember one master password.

multi-factor authentication (MFA)

A security method that requires a second proof of identity beyond your password — such as a code from your phone — so a stolen password alone isn't enough to break in.

digital footprint

The trail of data you leave online through your posts, searches, purchases, and activity — much of it permanent and visible to others, including colleges and employers.

Your Personal Security Audit

Your turn — work through each part

1**Password Check-Up**

Without writing any real password, assess reuse, length and where MFA is on. Plan two specific changes.

2**Spot the Scam**

Find or construct a phishing message. Identify three warning signs and state what you would do instead of clicking.

3**Footprint Search**

Search your name or a public username. Note what is findable, whether it is the impression you want, and one thing to change.

4**Settings in Action**

Open privacy settings on one account, review who can see your content, change one setting to be safer, and explain why.

You've Got This

Tick every box you can do on your own

- | | |
|---|---|
| ☐ I can create long, unique passwords and explain why reuse is dangerous | ☐ I can explain what a password manager and passkeys are |
| ☐ I can explain multi-factor authentication and why it's so effective | ☐ I can recognize the warning signs of phishing and scams, including AI-powered ones |
| ☐ I know the right steps to take if I'm targeted by a scam | ☐ I can list ways to protect my devices and back up my data |
| ☐ I can define my digital footprint and explain why it's permanent and consequential | ☐ I can explain how a digital footprint can both hurt and help me |
| ☐ I can distinguish public from private spaces on social media | ☐ I can manage privacy settings and share personal information wisely |