

NC TOOLKIT for
Digital Readiness

Session 2 Instructor Guide

Computer Basics - Combined Group

OVERVIEW

Session 2 - Computer Basics

Session Time

(1 hour and 45 minutes)

Description

In this session, we will start at the very beginning. If you are not familiar with computers or want a refresher on the basics, this is a great way to start the program. We will go over computer terminology, how to use the mouse and keyboard, basic troubleshooting, and some common computer programs that you can use to get on the internet, write a document, etc.

Objectives

Adults will be able to:

- Define basic hardware and software terminology
- Identify the basic parts of a computer
- Operate the mouse or trackpad of their device
- Open, close, and navigate the windows of installed programs
- Create, type in, and save a document

Students will be able to (ISTE Standards 1d, 6a):

- Identify basic hardware and software and explain their functions
- Match programs and websites to tasks
- Identify and perform common troubleshooting tasks
- Appropriately share their devices with their adults



Preparation

- Test the Kahoot quiz: *Computer Words* (<https://bit.ly/wordskahoot>).
- Print handouts:
 - What Do Computer Words Mean? (one per student)
 - What Can You Do on Your Computer? (one per family)
 - Adult Handout (one per adult)
- Collect drawing supplies for students.
- Customize slides with any relevant announcements (e.g. Wi-Fi password).
- *Optional:* create a few extra practice Google accounts.

Just Before Session

- Open slideshow on presentation computer.
- Open Kahoot on presentation computer.
- Place sign-in sheet near entrance.
- Talk with assisting facilitators about how you would like them to roam among participants and field individual questions. Answer any questions they have about the session.



OUTLINE

Session 2 - Computer Basics

Arrival | 10 Minutes

All participants sign in. Each family should sit together and share a computer. Use this time to make sure each family brought their device, they can sign into their device, it is charged or connected to an outlet and connected to Wi-Fi. Also, ask if adults have a Google account. If so, make sure they have their password. If not, help them make an account if time allows.

Introduction & Icebreaker | 5 minutes

Introduce facilitators present. Set expectations for communication during session. Explain how families will share devices. Outline session schedule and goals.

- Discussion Question: What would you like to use a computer to do?

Computer Terminology Quiz | 7 minutes

HANDS ON: Students on computers

- Kahoot Quiz: Computer Words (<https://bit.ly/wordskahoot>)

Get to Know Your Hardware | 5 minutes

(Slideshow Overview)

HANDS ON: Adults on computer

- Handouts: Pass out Adult Handout to adults and “What Do Computer Words Mean” handout to students.
- Activity: Students to complete worksheet during the next two sections until break. With adults, label hardware on image of the desktop and then on the learner’s devices
- Key Terms: *computer, screen, keyboard, mouse*



Introduction to Chromebook Basics | 10 minutes

(Slideshow Overview & Group Tutorial)

HANDS ON: Adults on computers. Students continue worksheet during this section.

Cursors, the Shelf, and hovering

- Demo: Moving cursor with trackpad and hovering over an icon on the shelf.
- Key Terms: *Chrome OS, homescreen, cursor (arrow, i-cursor, hand), Chrome OS Shelf, hover*

Launcher and right-clicking

- Demo: Open Chrome Launcher, expand Launcher to show all apps, right-click, and pin the Files icon to the Shelf
- Key Terms: *Chrome Launcher, click, icon, right-click*

Chrome, tabs, windows, and click-and-drag

- Demo: Open Chrome browser and then Google Docs using icons on the shelf. Switch between tabs. Rearrange tabs. Open files. Minimize and close windows.
- Key Terms: *Chrome browser, tabs, windows, minimize vs. close*

Address Bar & URLs

- Demo: In the first tab, type the URL thisissand.com into the address bar of Chrome to visit a website.
- Key Terms: *address bar, URL*

Pause for Questions, Practice, and Google Account | 10 minutes

Pause, review, take a break, Google Accounts

- Demo: In Google Docs, show both students and adults how to switch Google accounts/sign in to a Google account.
 - » Those who have Google accounts, login to their account. Those that don't, either create an account or ask to borrow a practice account.
- Activity: While that is happening, practice skills learned so far, optionally on



the website *This is Sand*. Ask for one-on-one help if needed. Take a short break.

Share Student Work | 3 minutes

Allow students to share work. Tell them it is time for them to start working together with their adults, but it's not quite time for them to use the computer yet.

Introduction to Making a Document | 5 minutes

(Demonstration & Group Tutorial)

HANDS ON: Adults on computers. Students DO NOT touch computers at all during this section.

Creating a new document and recognizing the hand cursor and I cursor

- Discussion Question: Adults, talk to your student about Google Docs and Microsoft Word. Ask if they have used either and what they used them for.
- Demo: Open Google Docs. Hover over Blank Doc option to see hand cursor. Create a new blank document. Hover over new blank doc to see the I-cursor. Click to see the flashing insertion point.
- Key Terms: *word processors, Google Docs, template, hand cursor, I-cursor, insertion point*

Highlighting with click-and-drag

- Demo: Click on document name twice to see insertion point. Type letters at insertion point. Click and drag to highlight name and type "Practice."
- Key Terms: *file name, highlight*
- Discussion Question: What kind of name would not be useful for helping us find this document again later? (ex: untitled document, document 1, your name without any more information)

Introduction to Typing | 10 minutes

(Slideshow Overview & Group Activity)

HANDS ON: Students and adults share computer.

- Activity: Students type their name in the document
- Discussion Question: How many fingers did you all use to type "Practice" or your name? (Explain that typing efficiently using all fingers is a very important computer skill)



- Activity: With adults and students sharing a computer, the person on the left place their left hand on the keyboard and the other person, place their right hand on the right side. Place pointer fingers on F and J, feeling the ridges, then place each other finger on the next key to find home row. Together, type student's name again while leaving fingers on home row and using the closet comfortable finger.
- Key Terms: *home row*
- Discussion Question: Were there any keys that were difficult to type or to decide who would type them? (i.e. B or space bar) Did you capitalize any letters? If so, who pushed shift?
- Say: For good typing form, you should keep your fingers on the home row, and then use whichever finger is closest and most comfortable to push each key.
- Activity: Take turns typing "The quick brown fox jumps over the lazy dog."

Formatting in Google Docs | 7 minutes

(Self-paced activity with one-on-one help)

HANDS ON: Students and adults share computer

- Demo: Quickly highlight your name and use the toolbar to change the font.
- Key Terms: *toolbar, font, format*
- Activity: Take turns testing out some of the formatting options.

File Management on Google Drive | 5 minutes

(Slideshow Overview and Group Tutorial)

HANDS ON: Adults on computers

- Demo: Check if document is saved and close Google Docs. In Chrome, go to Google Drive (drive.google.com). Create a new folder. Rename folder and drag "Practice" file into it. Double-click to open folder.
- Key Terms: *cloud storage, folders, double-click*

Troubleshooting Common Issues | 8 minutes

(Group Discussion)

- Activity: Present the potential computer problems and guide participants in a discussion of possible causes and solutions. Some example solutions follow each problem in the script section.



- » Computer won't come on.
 - » Computer is frozen. You can't even move your cursor.
 - » Can't hear anything.
 - » Typing doesn't work.
 - » Computer is being slow.
- Discussion Question: What are some themes or common solutions?

Exploring Your Chromebook, Learning Independently, Exit Surveys

| 20 minutes

(Self-Paced Activity with One-On-One Help)

- Handouts: "What Can You Do on Your Computer?" activity sheet and direct attention to "Websites for Continued Learning" on adult handout
- Activities: Complete "What Can You Do on Your Computer?" worksheet, visit at least two websites for continued learning, and take exit survey. Then families are free to leave.



SCRIPT

Session 2 - Computer Basics


Italicized words are instructions and notes to you, not to be read aloud.

Highlighted text indicates that participants should complete those instructions.

Arrival | 10 minutes

- *Allow some time for participants to arrive and get settled so everyone can start together.*
- *Each participant who arrives needs to sign in (both the adult and the student).*
- *Families should sit together so they can share their computer and work together on activities.*
- *As they arrive, ask if the adult has a Google account. If yes, make sure they have their username and password handy. If not, they can use this time to make an account.*
- *Before beginning make sure each participant family has a charged device (or access to an outlet), logs in to their device, and is connected to the WiFi.*

Introduction and Icebreaker | 5 minutes

- *Introduce facilitators present.*
- If someone has a question or needs help, raise a hand. One of the facilitators will come to you to help and they will let the session leader know if they need to stop.
- We want adults and students to work together for most of this session but there will be times when we ask that a specific one of you operate the Chromebook.
-  Discussion Question: Introduce yourself and tell us, what would you like to use a computer to do?
 - *Give an example by saying your first name and one thing you like to use the computer for (like communicating with family or looking up recipes)*
- *Outline session and goals:*



- In this session we will walk you through the basics of how to use this Chromebook, talk about some computer terminology, and go over a few things that could go wrong with your computer and how to fix them.
- At the end of this session, you will be able to identify the parts of a computer, login to your account on the computer and use it on your own, and understand how to use the specific computer apps for specific purposes.

Computer Terminology Quiz | 7 minutes

HANDS ON: Students on computers

- Today we are going to go over some computer terms, so let's start by letting the students show off what they already know with a Kahoot Quiz! Some of the words are hard ones, so it's okay if you don't get them.
- *Encourage families to discuss their answers. Elaborate on each answer before continuing to next question.*
- Kahoot Quiz: *Computer Words* <https://bit.ly/wordskahoot>
 - Hardware – physical components of a computer. Anything you can touch is hardware.
 - Software – programs that are installed and run on the computer. These programs or apps help us communicate with and give instructions to computer hardware. For example, anything installed from the app store is software.
 - Operating system – main software that allows other software to work. They are the basic, foundational software that runs a computer. Examples include Microsoft Windows and Apple iOS. All other software uses the operating system, which is why the same app might look different on an Apple laptop and a Windows computer.
 - Browser – a software that accesses the internet. Other software might use the internet, but a browser is the software you use to get to any website directly.
 - URL – a web address. This is what is typed in the bar at the top of the browser to reach a website.

Get to Know Your Hardware | 5 minutes


(Slideshow Overview)



HANDS ON: Students on computers

Give out “What Do Computer Words Mean” handout to students and “Adult Handout” to adults.

- Students, as we go over computer terms for a few minutes, draw pictures on this handout that represent or explain what each word means.
- Adults, we are going to start with hardware: the physical components of a computer.
- Examples in the slides are of a desktop computer. People call these pieces of hardware many different names, so I’ve included some alternatives that you might hear.
- **Computer:** the brains of the computer. Everything that makes the computer work is in here. The other pieces of hardware just help you interact with the computer.
- **Screen:** where you see what is happening in the computer.
- **Mouse and keyboard:** how to make the computer do things.

 Discussion Question: Can you identify these parts on the device in front of you?

- Screen and keyboard are nearly the same.
- Mouse is a trackpad instead and may not have buttons.
- Computer is harder to find. Typically, the heaviest part is the computer. Probably under the keyboard but it is sometimes behind the screen.


Introduction to Chromebook Basics | 12 minutes

(Slideshow Overview & Group Tutorial)

HANDS ON: Adults on computers. Students DO NOT continue worksheet during this section.

Cursors, the shelf, and hovering

- **Chrome OS** is the operating system used on Chromebooks. This means almost everything we do in this class will work on any computer in the Google Chrome browser.
- The background of the computer, which you should be looking at now, is called the desktop or the **homescreen**.

 Try dragging your finger across the trackpad and you will see the arrow move across your screen.



- That arrow is called your **cursor**. Cursors are the visual representation of your mouse on the screen.
 - The cursor will change depending on what it can do. Typically, the arrow is the default. We will see the i-cursor [*pronounced eye*] in places where we can type letters. Sometimes the cursor turns into a hand, which means you can either click on a link or move something, depending on the program.
 - On a Chromebook, the bar at the bottom of the screen is used to open different apps. Your favorites are saved to the **shelf** in the middle. Each **icon** represents a different app.
- ☑ Move your cursor down to these icons.
 - ☑ If you leave your cursor on one of these icons, the name of the app will be displayed.
 - Placing the cursor on an icon without clicking on it is called **hovering**. Usually when you hover over something, it will give you more information.

Launcher and Right-Clicking

- ☑ Now we are going to open the app **launcher**. Move your cursor to hover over the circle in the lower left corner of the screen. Then push down on the lower half of the trackpad and release to **click**.
- ☑ Try clicking that circle a few more times, using different parts of the track pad so you can get a sense of what it feels like to click. Remember to push once and release quickly.
- ☑ Everyone click the circle so that Launcher is open. Here you can search for files or apps.
- ☑ To see an entire list of apps on your Chromebook, click on the arrow above the search bar.
- ☑ Let's add another icon to our shortcuts at the bottom of the screen. Hover over the "files" icon. Put two fingers on the trackpad and click. When you do, a short list of options should appear.
- This is called **right-clicking**. On trackpads and mouses with two buttons, you would use the right button. On Chromebooks there is only one button, so you use two fingers to right click, which usually brings up a small menu of options.
- ☑ With one finger, click on "Pin to shelf" to add a shortcut to this application at the bottom of your screen.



Chrome, tabs, windows, and click-and-drag

- Now let's look at the browser **Google Chrome**. On your Chromebooks, many apps will open in the Chrome browser.
- 🕒 Click on the Chrome icon either at the bottom of the screen or in the app launcher. This opens the Google search page, from which you can search the internet.
- 🕒 Let's open another app. Click on the blue piece of paper on the shelf. It is the icon for **Google Docs**. If you don't have that icon, type in the URL docs.google.com.
- 🕒 Notice how this has added a tab at the top of the browser. You can switch between different pages open on Google Chrome by clicking on the different tabs. Try clicking on the first tab we opened and then back to the Google Docs tab.
- 🕒 Now we're going to rearrange those tabs. Hover over the left tab at the top. Push down on the trackpad like you normally do but this time, don't release. While you're still pushing down, drag your finger to the right. When the tab moves to the right, release the button.
- Sometimes it is easier to use one finger to click and another to drag. If you accidentally drag it somewhere else, you can just keep your finger pushed down until you get it where you want it.
- To move things on the computer, we usually **click and drag**.
- 🕒 Let's try opening something else. Click on the Files shortcut on the shelf.
- 🕒 Files has opened in a smaller window. Move this window to a different part of the screen by clicking on the dark blue bar at the top of the window and dragging it to a new place.
- 🕒 To hide this window, minimize it by clicking on the short line at the top right corner of the window.
- 🕒 Look at the files icon on the shelf. See the short white line under it? That means that app is open in a window. Click on the files icon to see the window again.
- 🕒 Close the window using the X in the top right corner. Notice that there is no line under the icon on the shelf.

Address Bar and URLs

- Let's look back at the Chrome Browser. The bar you can type in at the top is called the **address bar**.



- If you know the address of a website, you can type it here. The address of the website is also called the **URL**.

🔍 Try typing this URL into the address bar of a new tab and press enter:
thisissand.com

Pause for Questions, Practice and Google Accounts | 10 minutes

(Self-Paced Practice)

- That is a crash course in using the trackpad and the Chrome operating system
- Now we are going to take a 10 minute break and do a couple things during that break.
- You can use this website This is Sand to practice using the trackpad.
- Before you do that, make sure you have access to a Google account. If you do not, we can give you one to borrow or help you create one.
- 🔍 To sign into your Google Account, go to the Google Docs.
- 🔍 If you see a sign-in screen, use it.
- 🔍 If you see a line of rectangles across the top, you need to switch accounts. Click on the circle in the top right corner of the window (below the address bar) and choose "Add another account."
- During this time, all the facilitators will be walking around to help you if you need help getting the hang of something or if you have any questions.
- *Note: This is a good time to make sure everyone is caught up. It is likely that there will be a variety of skill levels at this session, so some people may feel it is moving slowly while others are falling behind.*

Share Student Work | 3 minutes

Give a moment for students to share their worksheets if they would like, either with the group or with their adult. Then tell them it is time for them to start working together with their adults, but it's not quite time for them to use the computer yet.

Introduction to Making a Document | 5 minutes


(Demonstration and Group Tutorial)

HANDS ON: adults on computers. Students DO NOT touch computers at all during this section.





Creating a new document and recognizing the hand cursor and i-cursor


- Now let's all get back to the same place. Open Google Docs and make sure you're on the page that says "Start a new document" at the top.

 Discussion Question: Adults-ask your student if they have ever used Google Docs or Microsoft Word before and what they have used it for.

- Google Docs and Microsoft Word are both word processors, which are versatile apps that are used to create a variety of documents. You can see across the screen some examples of the kinds of documents you could make.


 We're going to start with a blank document, so hover on the rectangle above "Blank".


 Notice when you hover there, your cursor turns into a hand, which means clicking will cause an action. In this case, when you click it will open another page. Go ahead and click.

 Now hover over the middle of the page and notice that your mouse turns into an I cursor.


- The i-cursor means if you click here, there is a place to type. The flashing line means you are ready to type and your letters will appear there.

Highlighting with click-and-drag


 Hover over "Untitled Document" near the top left corner of the page. When you see the i-cursor, click.

 The blue around these letters means they are **highlighted**. If you start typing now, it will erase those letters. Instead of doing that, click again and notice the flashing line where you've clicked. Type a couple letters somewhere in the middle of those words.

- Now let's erase all of that and give our document a name.

 Click at the end of that title and drag your cursor across all those letters from right to left. They should all be highlighted in blue.

- You've just used click-and-drag to highlight this text.

 Now without clicking again, type "Practice" and then press Enter.

- Great! Now we all have a document called practice that we can use to practice using Docs and we can find it again because we gave it a good and meaningful name.
- *Question:* What kind of name would not be useful for helping us find this document again later? (ex: untitled document, document 1, your name without any more information)



- It is important to give files names that tell us what they are.

Introduction to Typing | 10 minutes

(Slideshow Overview and Group Tutorial)

HANDS ON: students and adults share computer.

✓ Now, students type your name in the document.

? Discussion Question: How many fingers did you use to type “Practice” or your name?

- Typing is one of the most important skills for using a computer effectively. There are many people who do not type well and are still able to use computers but typing well (with all your fingers) can help you do things more quickly and open job opportunities.
- We’re going to go over the basics about the best way to type, but it really takes a lot of practice. At the end of today, I will give you some websites you can use to practice.
- The most important thing is to put your fingers in the right place to start with.

✓ We are going to do this together, so put the computer between the adult and the student on the table. The person on the left side will be the left hand and the person on the right side will be the right hand.

✓ If you are the left hand, put your pointer finger on F. If you are the right hand, put your pointer finger on J.

- Do you feel a bump? That bump tells your pointer finger where it should always be when it’s waiting to type.

✓ Put the rest of your fingers where you think they should go based on this first key.

✓ Check the slide to see if you are correct.

- This is your **home row**. Any time your fingers aren’t pressing a key, they should be resting on the home row.

✓ Now try typing your student’s name together. Whoever is closest to the key, choose whichever finger you think is most comfortable to press it. There is a keyboard on the screen to help you see the letters.

? Discussion Questions: Were there any keys that were difficult to type or to decide who would type them? (i.e. B or space bar) Did you capitalize any letters? If so, who pushed shift?



- For good typing form, you should keep your fingers on the home row, and then use whichever finger is closest and most comfortable to press each key.

Formatting in Google Docs | 7 minutes

(Self-paced activity with one-on-one help)

HANDS ON: students and adults take turns computer

- The line of icons just above your document is the toolbar. It displays options for changing what the text looks like.
- 🔍 Take turns typing your own name into this practice document and test out some of the formatting options to change the way it looks.
- There is a list of things you might do on the slide, but feel free to do whatever you want to it. If you want help doing any of those or have any questions, one of us will be glad to help you.

File management in Google Drive | 5 minutes

(Slideshow Overview and Group Tutorial)

HANDS ON: adults on computers.

- Google Docs automatically saves. Before we leave this document, make sure it says “All changes saved in Drive” in the middle at the top.
- 🔍 When you are sure your document is saved, close this tab.
- 🔍 In any tab, type drive.google.com into the address bar.
- Here you can see all the files in Google Drive cloud storage account.
- **Cloud storage** means you can access those files from any computer connected to the internet.
- We are going to create a folder to organize our files.
- 🔍 Right click in the white space near the bottom of the window. This opens a menu of options.
- 🔍 Choose “New Folder”
- 🔍 Type a name that will help you find this file later. Something like “Computer Class Files” and press Enter.
- 🔍 Click and drag your “Practice” file onto that folder.
- 🔍 Double click on your folder.



- **Double-clicking** is the last mouse function of today. Sometimes to open something, you need to double click on it by clicking twice without a pause between.
- Now your file is organized. It is a good idea to name your files something that will help you remember what is in the file and to organize them in folders with similar files so you can find them later.

Troubleshooting Common Issues | 8 minutes

(Group discussion)

Present the potential computer problems and guide participants in a discussion of possible causes and solutions. Some example solutions follow each problem in case the discussion needs help.

- When things go wrong with your computer, it's good to know some simple ways to get them working again. We're going to talk about some things that might go wrong and brainstorm some possible solutions.
- Remember, always start with the simplest solution you can think of and work your way to more complicated things. Try not to do anything you can't undo.




Discussion Questions: What are some possible solutions to these problems?

- Computer won't come on.
 - » Battery may be dead. Try plugging it in.
- Computer is frozen. You can't even move your cursor.
 - » Maybe you've tried to do too many things too quickly. Wait a few minutes and see if it starts working again after "catching up."
 - » Sometimes you just have to turn your computer off. Hold down the power button until it goes off, but only if you have to.
- Can't hear anything.
 - » Did you accidentally leave headphones plugged in? Then the sound will be going through them instead of the computer speakers.
 - » Is the volume turned up on your computer?
 - » Is the sound turned on on the video you are trying to watch? They usually have their own volume controls.
- Typing doesn't work.
 - » Something might be holding down a key (like the corner of a book that is laying on the edge of the keyboard) which could prevent you from typing.



- » Try restarting the computer.
- Computer is being slow.
 - » There may be too many things running. Try closing some windows and tabs.
 - » The computer might need an update. Try restarting it.

 Discussion Question: What are some themes or common solutions?

- Check the physical parts of the computer and the surroundings.
- Give it time/wait.
- Try restarting the computer.
- Google it but don't do anything drastic (like take it apart).

Exploring Your Chromebook and Learning Independently | 20 minutes

(Self-paced activity with one-on-one help)

- Pass out *"What Can You Do on Your Computer?"* handout.
- There are three things to do on the slideshow.
- The first is this worksheet. It has a list of tasks you can do with your Chromebook and a list of apps and websites you might use. Do that matching activity with your partner.
- Then look at the list of *Websites for Continued Learning* on the adult handout. This list of websites can help you continue learning about computers and practice the skills we talked about today. Check out at least two of them on your computer.
- Last, take the exit surveys at this URL. There is one for adults and one for students.
- When you finish all three, you are free to go.
- We are here to help you with any part of those tasks or to review anything else we covered today. Feel free to stay and practice a few minutes and ask for help. We want you to be able to access the internet and your Google account once you get home.

