

NC TOOLKIT for
Digital Readiness

Session 2 Instructor Guide

MacBook Computer Basics - Two Groups

OVERVIEW

Session 2 - Computer Basics & Problem Solving**Session Time**

(2 hours)

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. Adults will go over computer terminology, how to interact with the computer, and some common computer programs that you can use to get on the internet, write a document, etc. Students will have refresher on computer terms, discuss ways to use computer to solve problems, and basic troubleshooting,

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 (STE Standards 2a, 2b, 6a, 7b, 7d):

- 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)
 - Websites for Continued Learning (one per student)
 - Adult Handout (one per adult)
- Customize slides with any relevant announcements (e.g. Wi-Fi password)

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. 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, make an account if there is time.

Introduction & Agenda | 5 minutes

Introduce facilitators present. Set expectation for communication during session. Explain where adults and students will be during workshop and how switching locations will work. Outline session schedule and goals. Send students to their location.

ADULT TRAINING**Computer Basics | 50 Minutes****Introductions & Icebreaker | 5 minutes**

Have each participant introduce themselves and answer the discussion question as they do.

- Discussion Question: What would you like to use a computer to do?
- Handout: Pass out *Adult Handout*

Get to Know Your Hardware | 3 minutes

(Slideshow Overview)

Label hardware on image of the desktop and then on the participant's devices.

- Key Terms: computer, screen, keyboard, mouse

Introduction to MacBook Basics | 7 minutes

(Slideshow Overview & Group Tutorial)



Cursors, the dock, and hovering

- Demo: Moving cursor with trackpad and hovering over an icon on the dock.
- Key Terms: *software, MacOS, desktop, cursor (arrow, i-cursor, hand), dock, hover*

Finder and right-clicking

- Demo: If Chrome is on the dock, right click and remove it. Open Finder choose applications, right-click Chrome, and add its icon to the Dock.
- Key Terms: *finder, click, icon, right-click*

Chrome, windows, and click-and-drag

- Demo: Open Chrome and type the URL docs.google.com. Move Chrome window around screen. Open a new tab and type URL thisissand.com. Switch between tabs. Open Finder. Minimize Finder. Close Chrome. Quit Chrome.
- Key Terms: *Chrome, address bar, URL, tab, window, menu bar, minimize, quit*

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

Pause, review, take a break, Google Accounts

- Demo: 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.

Introduction to Making a Document | 5 minutes

(Demonstration & Group Tutorial)

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

- Demo: Open Google Docs (docs.google.com). 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 | 5 minutes

(Slideshow Overview & Group Activity)

- Discussion Question: How many fingers did you all use to type your file name? (explain that typing efficiently using all fingers is a very important computer skill)
- Activity: Place pointer fingers on F and J, feeling the ridges, then place each finger on the next key to find home row. Type "*The quick brown fox jumped over the lazy dog*".
- Key Terms: *home row*
- Discussion Question: Were there any keys that were difficult to type or to decide which finger would press them?
- 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.

File Management in Google Drive | 5 minutes

(Slideshow Overview and Group Tutorial)

- 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*

Wrap-Up | 10 minutes

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

- Activity: Open one of the practice websites from today's handout. Take today's exit ticket survey. Practice skills and ask any questions you have.



Switch Locations | 10 minutes

STUDENT TRAINING

Problem Solving with a Computer | 45 Minutes

Introductions and Icebreaker | 7 minutes

Have each participant introduce themselves and answer the discussion question as they do.

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

Computer Terminology Quiz | 8 minutes

- Kahoot Quiz: Computer words <https://bit.ly/wordskahoot>

What Can Your MacBook Do | 5 minutes

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

- Handouts: “What Can You Do on Your Computer?” activity sheet
- Activities: Complete “What Can You Do on Your Computer?” worksheet in pairs. Go over some answers together.
- (*More Interactive Option: Instead of worksheet, use Google Jam Board or other interactive tool to brainstorm apps and websites to match given tasks.)
- Discussion Questions: Did anyone learn about a new app or website? Did anyone add one that isn’t on this sheet? What would you do if you had something you needed to do, but you didn’t know of an app or website you could use for that task?

Troubleshooting Common Issues | 10 minutes

(Group Discussion)

- Activity: Present the potential computer problems and guide participants in a discussion of possible causes and solutions. Some example solutions are available in the script section.
- [*Alternate Option: Groups of students work on one problem and share solutions.]
 - » 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?

Introduction to Typing | 8 minutes

(Slideshow Overview and Group Activity)

- Activity: Open Google Docs, create a blank document, and type *The quick brown fox jumped over the lazy dog*.
- Discussion Question: How many fingers did you all use to type? (explain that typing efficiently using all fingers is a very important computer skill)
- Key Terms: *home row*
- Activity: Place pointer fingers on F and J, feeling the ridges, then place each finger on the next key to find home row. Type *The quick brown fox jumped over the lazy dog*.
- Discussion Question: How do you think typing faster could help you?

Wrap-up | 7 minutes

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

- Handouts: "Websites for Continued Learning"
- Activity: Open one of the practice websites from today's handout. Take today's exit ticket survey. Practice skills and ask any questions you have.
- Key Terms: *URL*



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 on their devices along with your demonstration.

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).*
- *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 should 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 & Agenda | 5 minutes

- *Introduce facilitators present.*
- *Explain schedule and where the students will be while adults are training.*
- During the adult session, we will go over basic computer terminology and how to get started using one. The students will get a refresher on these things and talk about how to problem-solve with the computer.
- Students can now move to the other room.

ADULT TRAINING

Computer Basics | 50 Minutes

Introductions & Icebreaker | 5 minutes



- Before we get started, let's all introduce ourselves and as you do, answer this question:



Discussion Question: 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).

- Handout: Pass out *Adult Handout*

Get to Know Your Hardware | 3 minutes

(Slideshow Overview)

- Hardware is the physical components of a computer. It is any part of the computer you can hold or touch.
- Examples in the slides are of a desktop computer. People call these pieces of hardware many different names, so you will see 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**: we use them 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 or some of both.

Introduction to Macbook Basics | 10 minutes

(Slideshow Overview and Group Tutorial)

Cursors, the dock, and hovering

- Anything that is not hardware is software. Software are the programs and apps installed on your device.
- The foundational software that is used for basic computer functions is



called the **operating system**. Both Microsoft Windows and iOS are operating systems.

- 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 MacBook, the bar at the bottom of the screen is called the **dock**. It holds shortcuts to apps that are open or that you choose to add there. 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.

Finder, right-clicking, and click-and-drag

🕒 Move your cursor to empty space in the middle of the screen.

🕒 Push down on the lower half of the trackpad and release to **click**.

- When we say click, we mean click once with one finger. This often selects something, but there's nothing to select where we're clicking here. We're just practicing.

🕒 Try clicking a few more times, using different parts of the trackpad so you can get a sense of what it feels like to click. Remember to push once and release quickly.

🕒 If you have the Google Chrome icon on the dock and hover over it.

🕒 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 mice with two buttons, you would use the right button. On Macbooks 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, hover over “Options” to see additional options.
- 🕒 If you did have a Chrome icon, choose “Remove from Dock” from the list. If not, just click in the empty space to close the menu.
- Now let’s find how to open apps that aren’t on the dock.
- 🕒 Choose **Finder** from the dock. Here you can search for files or apps.
- 🕒 Choose **Applications** on the left side.
- 🕒 Find the Chrome icon. You could open Google Chrome from here.
- 🕒 Let’s put it back on the dock. **Click-and-drag** that icon to the dock.
- To click-and-drag, click on the icon and without releasing, slide your finger across the trackpad. To move things on the computer, we usually **click and drag**.

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

- Now let’s look at the browser **Google Chrome**.
- 🕒 Click on the Chrome icon on the dock. This opens to the Google search page, from which you can search the internet.
- It opened in a window, which is a part of the screen showing a single app.
- 🕒 Let’s move this window to a different part of the screen. Hover over dark gray bar at the top of the window. Click-and-drag the window to another part of the screen.
- 🕒 Click anywhere on the Finder window. Notice that the window you click on most recently comes to the front and the other application remains open behind it.
- 🕒 Return to Google Chrome.
- 🕒 Let’s open another tab. Click the small plus sign in the top right corner of the window.
- 🕒 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 second.
- 🕒 To hide this window, minimize it by clicking on the short line at the top right



corner of the window.

- Notice the dot under the Chrome icon on the Dock. This means the application is still running, even though you can't see a window.
- 🕒 Click on the icon. It will open Chrome in the same place you left it. Click "Chrome" in the top left corner and then choose "Quit Google Chrome" from the list of options.
- There is no dot below the icon, so you can see that the app is closed.

Address Bar and URLs

- 🕒 Let's open Chrome one more time. The bar 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 iOS 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 for our next activity. 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.

Introduction to Making a Document | 7 minutes

(Demonstration and Group Tutorial)

- Now we are going to look at how to create documents with Google Docs.
- Google Docs is a word processor, which is a versatile app that is used to create a variety of documents. You may have used other word processors like Microsoft Word. Since you access through a browser, you can use it on any device.
- 🕒 In Google Chrome, type [google.docs.com](https://docs.google.com) in the address bar.
- Make sure you're on the page that says "Start a new document" at the top.
- 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.

❓ 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)

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

Introduction to Typing | 5 minutes

(Slideshow Overview and Group Tutorial)

❓ Discussion Question: How many fingers did you use to type “Practice”?

- 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.

👉 Place your pointer fingers on F and 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 this sentence, because it has all the letters in it: “The quick brown fox jumped over the lazy dog.” Use whichever finger is closest to each key. Remember to keep the rest of your fingers on home row when you aren’t using them.

❓ Discussion Questions: Were there any keys that were difficult to type or to decide which finger would press them? (i.e. B or space bar) Did you capitalize any letters? If so, which shift key did you use?



- 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.

File Management in Google Drive | 5 minutes

(Slideshow Overview and Group Tutorial)

- The last thing we are going to do is look at where this file is saved so you can close it and then find it again.
- 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.
- 🕒 Click on the "New" button on the left side and choose "Folder".
- A folder on a computer is like a folder in real life. It keeps individual files and documents together in a group.
- 🕒 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.

Wrap-up | 10 minutes

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

- 🕒 Now you have a few minutes on your own before we switch with the students. Use that time to [complete this checklist](#):



- Open and explore one of the practice websites from today's handout.
- Take today's exit ticket survey. It's just a few questions long.
- Practice skills and ask any questions you have. Let us know if you want us to walk through anything we've gone over today.


Switch Locations | 10 minutes

STUDENT TRAINING

Problem Solving with a Computer | 45 Minutes

Introductions & Icebreaker | 7 minutes

Have each participant introduce themselves and answer the discussion question as they do.

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

Computer Terminology Quiz | 8 minutes

- Today we are going to go over some computer terms, so let's start seeing what you already know with a Kahoot Quiz!
- Kahoot Quiz: Computer Words <https://bit.ly/wordskahoot> *Elaborate on each answer before moving to the next question.*
 - Hardware – physical components of a computer. Anything you can touch is hardware.
 - Software – programs that are installed 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.



What Can Your Computer Do | 5 minutes

(Pair and share)

- Pass out "What Can You Do on Your Computer?" activity sheet.
- (*MORE INTERACTIVE OPTION: Instead of the activity worksheet, use Google Jam Board or other software to brainstorm apps and websites to match given tasks.)
- 🔍 Find a partner and complete this activity together. If there is an app or website you don't know, use your computer to check it out. If you know of a different app or website you could use, add it.
- ❓ Discussion Questions: Did anyone learn about a new app or website? Did anyone add one that isn't on this sheet? What would you do if you had something you needed to do, but you didn't know of an app or website you could use for that task? (Possible answers: ask friends or teachers for suggestions, Google the task to find a tool, etc.)

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.

- » Have you checked **all** the places with 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).

Switching Google Accounts | 3 minutes

(Slideshow Overview and Group Tutorial)

- Let's look at your computers now. The adult that came with you tonight may have signed into a Google account on your Chromebook.



Discussion Question: Do you know how to switch to your Google account?



Go to [google.com](https://www.google.com).



If the top right corner has a "Sign in" button, then no one is signed in. If it has a picture or letter in a circle, [click on it and then either choose your email address from the list or add it with "Add another account"](#).

- Always make sure you're using your account now that your adults may be using them, too.

Introduction to Typing | 5 minutes

(Slideshow Overview and Group Activity)



Now that you're sure you are in the right account, go to [Google Docs](#) and [create a blank document](#).

- Let's see who can type this the fastest. When you are finished, raise both your



hands.

✓ Type this sentence *The quick brown fox jumped over the lazy dog.*

? Discussion Question: How many fingers did you all use to type?

- Typing with all your fingers is the most efficient way and is an important computer skill for many things from getting a job to chatting with friends.

✓ Now we're going to type it again, but this time everyone place your fingers on **home row** by putting your pointer fingers on F and 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.

- So leave your fingers on the **home row** when you're not using them and use whichever finger is closest to each key.

✓ So type the sentence again when I say go. Ready, set, go!

? Discussion Questions:

- Do you type faster when you use all your fingers? If not, maybe you would after some practice.
- How could typing faster help you?
- Great job! Remember, typing is one of those skills you can keep improving over time.

Wrap-up | 10 minutes

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

- Pass out the handout "Websites for Continued Learning".

✓ Now you have a few minutes left. Use that time to complete this checklist:

- Open and explore one of the practice websites from today's handout.
- Take today's exit ticket survey. It's just a few questions long.
- Ask any questions you have.

