# HOW TO USE YOUR PHONE AS A MINICOMPUTER

Milage may vary when it comes to using different Applications and Programs. There may be times that a computer is needed. For instance, Proctorio, the Chrome Canvas exam extension, does not work with phones or tablets.

# **IPHONE/IPAD-IOS**

**Sidenote:** Check to see if your phone uses a Lightning cable or a Usb-C cable for charging, because this will determine the devices you need to complete this set-up.



**USB-C** Connector

**Lightning Connector** 

### **Items needed** (links of where to buy provided):

- External monitor or T.V. with an HDMI plug (All models of T.V.s and External Monitors newer than 2010 will have at least one HDMI plug)- External Monitors
- HDMI Cable (Any HDMI cable will work, but HDMI 2.0 will have the best performance) HDMI 2.0 Cable
- Bluetooth Mouse (Needs to be IOS compatible)- Bluetooth mouse IOS Compatible
- Bluetooth Keyboard (Needs to be IOS compatible)- Bluetooth Keyboard IOS Compatible

- For Lightning devices: Apple Lightning to Digital AV Adapter (There are cheaper adapters available on amazon, but we suggest the one from apple for the best performance)
  Apples Lightning to Digital AV Adapter
- For Usb-C devices: Apple USB-C Digital AV Multiport Adapter(There are cheaper adapters available on amazon, but we suggest the one from apple for the best performance) Apple Usb-C to Digital AV Adapter
- For Lightning devices: Lightning charging cable and wall outlet (The one that comes with
  the device will work fine, but if you need a new one make sure the cable is MFi Certified)MFi Certified Lightning Cable, Foldable Plug
- For Usb-C devices: Usb-C charging cable and wall outlet (The one that comes with the
  device will work fine, but if you need a new one make sure the wall plug is PD Certified)Usb-C Cable, PD Certified Foldable Plug

# **How to Connect to Display:**

- Plug your phone in the Digital AV adapter and the HDMI cable to the adapter.
- Connect the HDMI output to your TV or External Monitor and your screen will mirror to the display.
- Remember to plug the Lightning or Usb-C end of the cable into the Digital AV adapter and the other end to a power source, as it needs to be charged to play.

## **Connecting a Bluetooth Mouse:**

- First, make sure your Bluetooth mouse is nearby and has sufficient charge.
- Now, on your iPad or iPhone: Head to Settings > Accessibility > Touch.
- Choose AssistiveTouch and toggle it on.

- Scroll down to "Pointer Devices" and tap "Devices."
- Tap on "Bluetooth Devices" to start the pairing process.
- Now set your Bluetooth mouse to discoverable, or pairing mode (please refer to the Instruction manual that came with the device if you are unsure of how to do this).
- Tap on its name when it shows up on your iPad or iPhone

# Connecting a Bluetooth Keyboard:

- Make sure the keyboard is turned on, charged, and put into pairing mode (please refer to the Instruction manual that came with the device if you are unsure of how to do this).
- On iPhone or iPad, go to Settings > Bluetooth, then turn on Bluetooth.
- Select the device when it appears in the Other Devices list.
- Follow the instruction on the screen if there are any for pairing the device.

# ANDROID PHONES AND TABLETS

**Sidenote:** Check to see if your phone uses a Micro-Usb cable or a Usb-C cable for charging, because this will determine the devices you need to complete this set-up.



**USB-C Connector** 

Micro-Usb Connector

### **Items needed** (links of where to buy provided):

- External monitor or T.V. with an HDMI plug (All models of T.V.s and External Monitors newer than 2010 will have at least one HDMI plug.)- External Monitors
- HDMI Cable (Any HDMI cable will work, but HDMI 2.0 will have the best performance.
   Not Needed for Micro-Usb Devices.)- HDMI 2.0 Cable
- Bluetooth Mouse- Bluetooth mouse
- Bluetooth Keyboard-Bluetooth Keyboard
- For Micro-Usb devices: Micro- Usb to HDMI Adapter (This adapter will also work for Usb-C devices, but we suggest using the one recommended one for the best Usb-C performance. HDMI cable Not Needed when using this adapter.) Micro-Usb/ Usb-C to HDMI Adapter
- **For Usb-C devices:** (There are cheaper adapters available on amazon, like the one above will support Usb-C, but we suggest the Uni adapter for the best performance. This adapter also works with Usb-C Apple devices too.)- <u>Usb-C to HDMI Adapter</u>
- For Micro-Usb devices: Usb Wall Plug and Micro- Usb cable (The one that comes with the device will work fine, but if you need a new one make sure to get an Adaptive Fast Charge or Quick Charge 3.0 Certified wall plug. The one linked comes with a cable but it is not needed for the Micro-Usb set-up.)- Quick Charge 3.0 Certified wall plug
- For Usb-C devices: Usb-C charging cable and wall outlet (The one that comes with the device will work fine, but if you need a new one make sure to get a PD Certified wall plug for best performance.)- Usb-C Cable, PD Certified Foldable Plug

## **How to Connect to Display for Usb-C Devices:**

• Plug your phone in the HDMI adapter and the HDMI cable to the adapter.

- Connect the HDMI output to your TV or External Monitor and your screen will mirror to the display.
- Remember to plug the Usb-C end of the cable into the adapter and the other end to a power source to achieve the best performance from this device.

# How to Connect to Display for Micro-Usb Devices:

- Plug your phone to the HDMI adapter.
- Connect the HDMI output to your TV or External Monitor and your screen will mirror to the display.
- Remember to plug the Micro-Usb end of the HDMI adapter into the phone or tablet and the other end to a power source, as it needs to be charged to play.

## Connecting a Bluetooth Mouse and Keyboard to an Android device:

- Make sure your device is running Android OS 3.0 or higher (most Android devices are, if your device is not, go to the settings and system update, to update the device).
- Power on the keyboard or mouse and put into pairing mode (please refer to the Instruction manual that came with the device if you are unsure of how to do this).
- Then have a look under "Settings" > "Bluetooth" on your Android device.
- Pair the keyboard and/or mouse like you would any other Bluetooth device.
- Follow the instruction on screen if there are any for pairing the device.

# **Samsung DeX**

**Items needed** (links of where to buy provided):

- External monitor or T.V. with an HDMI plug (All models of T.V.s and External Monitors newer than 2010 will have at least one HDMI plug)- <a href="External Monitors">External Monitors</a>
- HDMI Cable (Any HDMI cable will work, but HDMI 2.0 will have the best performance) HDMI 2.0 Cable
- Bluetooth Mouse- Bluetooth mouse
- Bluetooth Keyboard- Bluetooth Keyboard
- For Usb-C devices: (There are cheaper adapters available on amazon, but we suggest the Uni adapter for the best performance. This adapter also works with Usb-C Apple devices too.)- Usb-C to HDMI Adapter
- For Usb-C devices: Usb-C charging cable and wall outlet (The one that comes with the device will work fine, but if you need a new one make sure to get a PD Certified wall plug for best performance.)- Usb-C Cable, PD Certified Foldable Plug

## **Compatible DeX Devices:**

DeX connectivity works with Samsung S8 or newer flagship handsets, and the Samsung Galaxy Tab S4. However, for S8, Note 8, S9 and S9+, you will need a power cable to charge the phone and an HDMI adapter or dock, HDMI cable, and a T.V. or External Monitor with an HDMI input to use DeX connectivity. The recommended items for the list above will work with this set-up.

Other Samsung devices like the Note 9 and Galaxy Tab S4 or newer models merely require a Type C to HDMI cable to enter DeX mode and DeX desktop mode respectively. However, a charging cable is recommended for long term use of the device while in DeX mode.

#### **How to Use:**

To enter DeX mode connect the USB-C end of the HDMI Adapter to the port on the phone or tablet, connect the HDMI cable to the adapter, and then connect the HDMI end into the External monitor or T.V.s HDMI port.

If needed, unlock your phone. If it's your first time using DeX, a popup message will display on your phone or tablet's Home screen. Tap Continue, and then tap Start to allow access to Full Desktop mode.

To use your device as a touchpad another Samsung DeX popup will appear on the phone or tablet, tap "OK", and then swipe down from the top of the screen to open the Notification panel. Tap the notification that says, "Use your phone as a touchpad." Now you can control the monitor's cursor using your device! Read the instructions on the External monitor or T.V, and then select "OK". To scroll in Windows in DeX mode, touch and hold the touchpad, and then drag the pointer up or down.

If you want to use a keyboard and a mouse in Samsung DeX, you can connect Bluetooth devices directly to the device. Wired accessories are not compatible when using the DeX cable. To connect to a Bluetooth device, go to the Bluetooth setting in your phone. Then power on the Bluetooth device (you may want to refer to the Instruction Manual your device came with)

# **Switch from screen mirroring:**

On some devices, your monitor will automatically start screen mirroring whatever is on your device. To switch to Samsung DeX, open the Notification panel by swiping down from the top of

the screen. Tap the Samsung DeX notification, and then tap Samsung DeX. The monitor will switch to Samsung DeX mode.

#### **Video Sources:**

DeX Tips and Tricks, Getting Started with DeX

### APPS THAT WILL HELP WITH SCHOOL

All these apps will work will both IOS and Android phones and tablets. These apps are also free to download and use. Some of these apps do have subscriptions to unlock more features to them, but subscription is not required for the basic functionality.

#### **Canvas Student:**

Students can access coursework, submit assignments and view grades with Canvas Student. \*For College of the Siskiyou students this is the platform that instructors use for there online classes.

Use your college email account to login to Canvas.

### **Oxford Dictionary:**

The mobile version of the Oxford University Press' Oxford English Dictionary.

#### **Grammarly:**

Compose brilliant essays, effortlessly, with Grammarly's free online writing assistant, and move beyond a basic spell-check to find the perfect tone for any project. Grammarly's Keyboard app works as your personal assistant to correct every email, text and social post before you send.

### Microsoft Office, (Word, PowerPoint, Excel, OneNote, Publisher):

The good news is that Microsoft has made apps for Office's leading lights, and they are available on all the major platforms. It is great to be able to escape your work but, equally, it is a massive

pain when you're out and about and suddenly realize there's something huge that you should (or worse, shouldn't) have included in your essay. The Office apps make this a thing of the past, and if you make sure to save your files to the cloud, you will be able to access them whenever and wherever you are. \*For College of the Siskiyous students use your college email account to login to these apps and they will be free to use.

#### **Office Lens:**

This app from Microsoft takes pictures if documents, whiteboards, blackboards, magazines, receipts, and more and coverts them into editable, sharable text. It can read image events from an angle and cleans up the glare and shadows too.

### **Google Drive:**

Save and store all your documents online so that your work will be safe if your laptop crashes. You can also work offline and collaborate on a document with your classmates.

## **Google Docs:**

Google Docs aims to bring the life back into your document. The student app allows the student and teacher to get more control over their documents. Any user can edit, generate and join forces with others to work as a cohesive unit on a project or document. No need to worry about the loss of work over the app as it saves everything automatically as you type on it. The app only requires Contacts and Storage permission on your Android or IOS device. Work on the said document and anywhere even when you do not have an internet connection.

### **Google Slides:**

Create and edit presentations on the go with Google Slides app. Through this app, any student or teacher can make functional, informative and beautiful slides in a matter of seconds. The school

app comes with a simple user interface that allows multitasking to be fast and problem-free. Rearrange the slides as per your need along with formatting the text as well as shapes present over the presentation. All the work is saved right on your device. Any teacher or student can convert the presentable slides to video calls and schedule meetings with others. The process of sharing the slides is simple and allows more than one person to work in the same presentation.

## **Google Translate:**

Google offers a free translation of the text, handwriting, photos as well as speech through its Translate app. Students can easily use the app to solve their Spanish, French or any other second language homework. The app translates the data given between 103 languages and gets the easy translation with Tap to translate. Through the conversation mode, the students can perform two-way speech translation instantly in 32 languages. This school app learns the characters also through handwriting allowing the user to draw the words to translate them. Save as well as star those translations that you use in daily life to easily access them.

### **Google Handwriting Input:**

Google Handwriting Input allows the user to handwrite text on their phone. The app comes with a support of 97 languages along with printed as well as cursive writing. Any person can write on the app with and without a stylus. Beginning with the aid of hundreds of emojis, you express yourself by drawing your feelings. The app is quite useful for languages that are challenging to type on the standard keyboard. One can also check how good or bad is their handwriting by entering any text or number on the app.

#### **Google Sheets:**

Google Sheets is one of the two biggest competitors in the spreadsheet space on mobile. It attaches to Google Drive, features cross-platform support (via the web), is compatible with Microsoft

Office files, and it has a ton of functionality. We are particularly fond of its collaborative features so multiple people can work on the same spreadsheet at the same time in real time. Additionally, it boasts a ton of functions and customization. We still think Excel is the more powerful spreadsheet app. However, Google Sheets is vastly more accessible and easier to get into for new folks.

## **Brainscape:**

Browse flashcards from leading publishers or make your own with custom content. Study and share on any device.

#### Flashcard Machine:

Flashcard Machine is a bare-bones app that allows you to create flashcards online or via your smartphone. Add photos or media for an interactive learning experience.

### **Quizlet:**

Another flashcard app, Quizlet allows users to create their own decks, which can be shared with other users, as well as the ability to play time-based games to help students with memorization.

### Mathway:

All you have to do is type in your problem and Mathway will solve it for you. If you'd like to know how to get the answer rather than just what it is, Mathway can also give a detailed step-by-step guide to finding the solution.

### WinZip:

Whether you receive a zip file as an email attachment or want to extract and view the contents of a zip file from the web, just "Open with WinZip". Sharing files is safe and simple too, with direct integration with multiple clouds.

### **Science Journal:**

Functioning as a digital science notebook, Science Journal serves as the place where the person can keep their photos and observations. With the device's inbuilt sensors measure light, sound, and motion whenever you want to. You can also capture the data through external sensors via Bluetooth-enabled Arduino and Vernier devices. The student can create automatic triggers for recording the data and taking notes. By the use of sonification hear the movement of the graphs made by you on the app. You can easily digitize all the summaries of the conducted experiments on the world around you with the student app.