

iPhone Most Useful Secrets Class Handout

Hidden Features Every User Should Know

Copyright © 2019 Jake Jacobs

You may print of an individual copy for personal use. Reproduction, distribution, transmission, or sale by anyone other than the copyright owner is strictly prohibited.
iPhone Tips 90.docx - Last revision: March 25, 2019

JakeAir99@gmail.com
JakeAir.weebly.com

Assumes iPhone 6s or newer, and software updated to iOS 12.

iPhone X, XR, XS differences noted as [iP X]

Button basics



Turn on the iPhone when completely off: hold the side button for a few seconds until you see the Apple logo.

Wake up the iPhone: press the side button, or press the Home button, or raise to wake [iP X you may also tap the display, or open leather folio].

Turn off the screen (sleep mode) but still receive calls or play music: momentarily press the **side button** (aka sleep/wake or power) button—on the upper right side on the iPhone.

Completely turn off the iPhone: **hold** the **side button** [iP X and either volume button] for a few seconds, and swipe the *slide to power off* slider right. Or *Settings* → *General* → *Shut Down*.

Ring/Silent switch - turns off the ringer and most sounds from the speaker, but the iPhone will still vibrate. It will silence *Calendar* alerts but **does not silence alarms or the timer**.

Volume Up/Down buttons - on the left side control ringer, music and phone audio volume, depending on what the iPhone is currently doing.

Press the **Home button** one or more times [iP X swipe up from the Home indicator] to return to the home screen. Use Touch ID [iP X Face ID] to unlock the phone, to validate iTunes and App Store purchases, and to unlock some apps.

Phone basics, incoming calls



Answer a call while using iPhone earbuds:

press the **earbud center button** once. Press it again to end the call.



- **Answer an incoming** call when the iPhone is locked: slide the *slide to answer* button to the right.
- *Accept* button to answer when iPhone is unlocked.
- *Decline* button to directly send the call to voicemail.
- Press the side button **once to silence an incoming** call (the call silently continues incoming).
- Press side button **twice** to decline a call and send it **directly to voicemail**.
- Tap *Message* button to reply with a preset or custom text message. (Create up to three custom messages in *Settings* → *Phone* → *Respond with Text*.)
- Tap *Remind Me* button to create a reminder one hour from now from the *Reminders* app.

If the *Remind Me* or *Message* button is not displayed, the caller's phone is not providing caller ID.

Phone basics, outgoing calls

Tap green call button on keypad to **redial** last call.

Open other apps when on a call: press Home and open another app. Sprint, Verizon, US Cellular (CDMA) iPhones cannot make calls and access Internet simultaneously.

Make an outgoing call: Tap an icon in *Favorites*, *Recents*, or enter a number on the *Keypad*, or in *Mail*, *Messages*, *Notes*, or a Web page, tap number underlined in color: [949 555-1212](tel:9495551212).

In *Contacts* tap the round **call** button or tap a phone number.



Voicemail

Share button  AKA

- *Send to*
- *Do something with this*

Listen to a voicemail message in the *Phone* app: tap *Voicemail*. **Read messages rather than listen:** *Voicemail* will automatically transcribe voicemail messages into text for you to read.

 Share voicemail messages to *Messages*, *Mail*, *Notes*, *Dropbox*, *Files*, and *Voice Memos*.

Lock your iPhone

Settings icon 



Passcode-lock your iPhone! If someone takes your iPhone, they won't be able to use it or change any of your settings. *Settings* → *Touch ID [iP X Face ID] & Passcode* → *Turn Passcode On*. Set a more secure 6 digit passcode to foil thieves.

Touch ID — Face ID



Touch ID [iP X Face ID] allows using a finger or thumb [iP X your face] to unlock your iPhone, rather than typing in a passcode (which is seldom needed, except once each time the iPhone restarts, thanks to Touch ID [iP X Face ID]).

Settings → *Touch ID [iP X Face ID] & Passcode* → *USE TOUCH ID [iP X FACE ID] FOR:* *iPhone Unlock*, *Apple Pay*, making *iTunes and App Store* purchases, and many third party apps.

Register up to five fingers. Register your most used finger more than once to improve Touch ID's accuracy and speed. As shown here, my right thumb has been registered twice.

Allow family members to unlock your iPhone using their fingerprint: have each of them register a finger as one of the five.

Label which finger and person has been registered in each of the five available fingerprint "slots" in case it is necessary to reregister a particular finger. To verify to which finger each slot is assigned, place a registered finger on the Home button and look for the label that changes color from white to **gray**.

Enabling Touch ID [iP X Face ID] is required if using Apple Pay.

[iP X two] faces can be registered in Face ID. *Settings* → *iP X Face ID & Passcode* → *Set Up an Alternative Appearance*.]

3D Touch

3D Touch is a pressure sensitive technology available on the iPhone 6s, 7, 8, X, and Xs.

• Most app icons have 3D Touch features: *Settings*, *Notes*, *Camera*, *Mail*, *Calendar*, *Weather*, *Messages*, and *Music*. Share any app by 3D Touching the app icon. Rename a folder in a home screen, 3D Touch an app folder. May be replaced by Haptic Touch on all iPhones in the future.

QR code scanning with Camera

Jake's Website



Point your camera at a QR (Quick Response) code. A notification box will pop up allowing you act on the QR code.

If a QR code has a URL, the website will open; contact information, will ask if you want to add it to your *Contacts*.

Enable in *Settings* → *Camera* → *Scan QR Codes* → *On*.

Keyboard and Editing

Intelligent keyboard

The keyboard is used for *Mail, Messages, Contacts, Calendar, Notes, Reminders, Search, Safari*, and any app requiring text entry.

- *Cut, Copy, and Paste* are similar to these operations on a PC or Mac.
- Selected text can be formatted in some apps such as *Mail* and *Notes*. Tap the **B/U** button to **bold, italicize, underline** or **strikethrough**.

Swipe left or right on the pop-up bar to select more options



- Key labels show current UPPER and lower case shift. Disable in *Settings* if desired.
- Caps lock: double-tap the caps key and it will underline the up arrow, indicating caps lock is on. Tap again to turn it off.
- Hold the backspace key to rapidly delete text. Hold or 3D Touch to delete faster.
- iPad swipe down on keys to type a number or special character as shown on each key.

- Tap the **space bar twice** at the end of a word, to place a period. The keyboard automatically inserts apostrophes in contractions.
- **Hold** the *123* key and slide your finger to enter a digit or symbol. Lift the finger and the *ABC* keyboard will return.

Selecting text for editing:

- place cursor | at a word → **tap the word**. Tap again: pop-up.

Select | Select All | Paste | B/U | Indent Right

- place cursor | within a word → **hold on a word**; position cursor → **rock or roll**—don't slide—your finger left, right, up or down until the cursor is in the desired place.

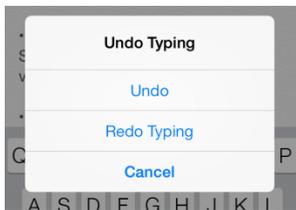
Cut | Copy | Paste | Replace... | B/U | Look Up | Share ▶

- select a **word** → **double tap word** to see pop-up

- custom selection → **drag** the selection handles.

- **Drag and Drop:** select and touch and hold the selection until it appears in a white bubble, then drag it to another location.
- **Trackpad:** hold the **spacebar** or 3D Touch **firmly on the keyboard**; the keyboard will turn into a trackpad. Drag the cursor to the exact spot desired. 3D Touch again to highlight text, tap selected text to cut, copy, paste as required.
- **Predictive Typing** — personalized to your writing style — automatically suggests words as they are typed. Tap one of three boxes in the prediction bar to insert the word into the text. If the boxes are not visible, enable Predictive: hold the emoji or globe icon on the keyboard → *Keyboard Settings ...* → *Predictive* → *On* (or go to *Settings* → *General* → *Keyboard* → ...).

Where is the Undo key?



How to undo a mistake when typing:

- Hold the iPhone firmly in one hand and **shake it** once.
- Tap the blue **Undo** button to undo the last operation performed.
- Tap the **Redo** button to restore the last undo.

There can be multiple levels of *Undo* and *Redo*. May be disabled in *Settings* → *General* → *Accessibility* → *Shake to Undo* → *Off*.

Some keyboard “hidden” characters

- degrees → zero 0
- § section → ampersand &
- ... ellipses → period .
- « » „ “ ” → quotes “
- - - • → hyphen -

Hold a letter or other character to reveal a list of special characters.

For example hold the letter **a** to see and select from **a à á ä æ ã** or hold **\$** to see and select from **₹ ¥ € \$ ¢ £ ₩**. Slide your finger to the desired character.

Text Replacement



Create **personal text replacements** for often used words or phrases. Hold your finger on the keyboard selection icon located between the 123 and microphone icons → *Keyboard Settings ...* → *Text Replacement* → + button and add a new phrase and assign a short abbreviation to it. Create text replacements for any words, names, numbers, or phrases used often. (Or *Settings* → *General* → *Keyboard* → *Text Replacement*.)

For example when I type...

- tyv → thank you very much
- bc → because
- addr → 100 Main Street, Irvine, CA 92612
- oc → Orange County
- eml → JakeAir99@gmail.com
- jp → 949 555-1212
- cdm → Corona del Mar
- plm → please let me know
- tjs → 🛒 Do you want anything from Trader Joe's?

When the keyboard displays a suggested word or phrase, to **accept** it into the text, merely **tap the spacebar** or predictive typing box. To accept what you typed verbatim, tap your typed text shown in the left-most predictive text box.

If an incorrectly spelled word is typed, the word will be underlined in red. Tap the underlined word to see a list of possible spellings. Tap the correct word if it appears in the list.

Dictation



Any time the keyboard pops up, optionally you may **dictate** rather than type.

Tap (don't hold) the **microphone** icon to the left of the spacebar and after the beep, dictate in any app where the keyboard is present. Speak just about anything that can be entered by typing. Tap the gray area at the bottom to stop the dictation. Then if necessary, edit the text using the keyboard. Switch between dictation and typing at any time.

Say:

- smiley* → to insert :-)
- frowny* → to insert :-(
- winky* → to insert ;-)
- cap* → capitalize the next Word
- caps on ... caps off* → Capitalize First Character of Each Word
- all caps* → types the next word all UPPERCASE

- To dictate punctuation, say...
- quote ... end quote* → “ ”
- new paragraph*
- new line*
- period*
- comma*
- question mark*
- exclamation mark*

Look up others in the iPhone User Guide.

Built-in Notes app – introduction



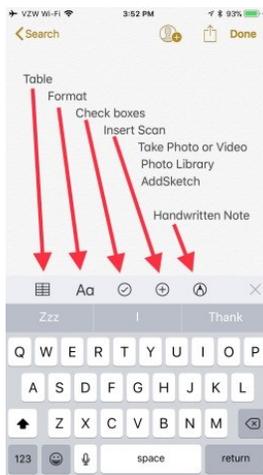
When editing a note, the *Done* button merely dismisses the keyboard; doesn't close the note.

Select sort method for notes list in *Settings* → *Notes* → *Sort Notes By* → *Date Edited*, *Date Created*, or *Title*.



- **Create Folders** to organize your notes: tap < to get to the *Folders* page → *New Folder* (bottom, right) to add a folder.
- **Move** a note: in note list view, tap *Edit* and select the note(s) → *Move To ...* → select destination folder.
- **Create** a new note: tap the compose icon.
- **View or edit** a note: in a folder's notes list, tap the note's title.
- **Search** for a word or string at the top of any list of notes.
- **Share** from a note to *Messages*, *Mail*, *Print*, *Find in Note*, *Create PDF*, etc.
- **Share to** a note directly **from** others apps. For example, to save a map, link, photo, Voicemail, and so on, directly to a note, tap share from in that app → *Add to Notes*.
- There is no *save* button; a note is saved when closed.

Formatting, sketching in Notes app



* The **Lasso tool** requires some explanation. It allows you to draw a closed path on your drawing. Any lines or shapes that penetrate that closed path may be moved as a group when you drag your finger across the screen. Any lines or shapes not penetrating the closed path will not move.

Tap  above the keyboard to see the **Format bar**.

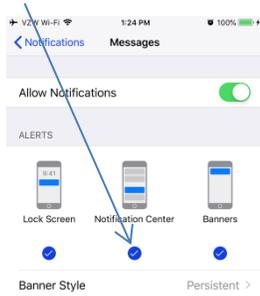
-  Insert a table. Resize using the table handles.
- **Aa** formatting: *Title, Heading, Body, Monospaced, Strikethrough*, change indent. • *Bulleted List, - Dashed List, 1. Numbered list* in text mode
-  Check Boxes.
-  Insert...
 - *Scan Documents*, crop (but no OCR)
 - *Take Photo or Video*
 - *Photo Library*
 - *Add Sketch*. Pen, Marker, Pencil, Ruler, Eraser, Color. Press harder with 3D Touch to make strokes thicker. Two-finger left or right swipe gesture switches between sketches.
- **Handwritten Note**. Change background for handwriting to ruled or grid. *Settings* → *Note* → *Lines & Grids*. Handwritten notes are searchable. Lasso tool.*
- New swipe options: in Notes list, swipe left-to-right to pin notes to the top of the Notes list. Swipe right-to-left to lock or unlock, move, or delete a note.

General

Notification Center

Customize what apps appear in the Notification Center when your iPhone is locked. *Settings* → *Notifications* → [select an app] →

Notification Center



Here you can also select whether the notification appears in the *Lock Screen*, a *Banner (Temporary or Persistent)*

The **Notification Center** displays a list of messages, email, phone calls, *Calendar* events, and more. Swipe down ↓ **from above the top of any screen** [iP X from notch area] to see a list of notifications. If music is playing, it is shown at the top of the Notification Center and in the Lock Screen.

To quickly respond to a notification, tap on the stack to see the individual notifications. Tap one to view it. Swipe right-to-left ← to *Manage, View* or *Clear* it. Clear an entire stack by tapping the . Hold or 3D Touch to view and respond to it. Tap it or swipe left-to-right → to *Open* it.

Swipe up from below the screen to dismiss Notification Center.

Today Widgets



See the **Today Widgets** by swiping left-to-right → in the lock screen, primary home screen, or the Notification Center, and see an overview of your day, which may include any widgets you wish to place there. For example, *Siri App Suggestions, Favorites, Calendar, Weather, Maps Nearby, Batteries, Google Traffic, Up Next, Screen Time, and News.*

Scroll to the bottom of the *Today Widgets*, tap *Edit* to add, remove, or reorder your *Today Widgets*.

Control Center



Customizable Control Center. The following controls can be added or hidden, and organized in *Settings*:

- Accessibility Shortcuts
- Alarm
- Apple TV Remote
- Calculator
- Camera
- DND While Driving
- Flashlight
- Guided Access
- Home (HomeKit)
- Low Power Mode
- Magnifier
- Notes
- Screen Recording
- Stopwatch
- Scan QR Code
- Text Size
- Timer
- Voice Memos
- Wallet

Control Center provides the most useful settings in one place.

Swipe up from below any screen to access these settings [iP X swipe down from upper right corner]. More options by holding or 3D Touching, such as Flashlight intensity.

These controls are defaults and cannot be hidden or customized.

Customize in *Settings* → *Control Center* → *Customize Controls* → Tap – to remove a control, tap + to add a control,

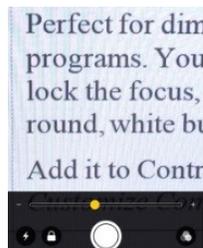
slide ≡ up and down to reorder the controls.



Hold or 3D touch the “connections” quad for *AirDrop* and *Personal Hotspot*. Hold 3D or touch any of the following icons to access larger brightness (and *Night Shift*), volume, Timer, Flashlight sliders.

Try Holding or 3D Touching other controls to see what is there.

Magnifier



Access the *Magnifier* from the Control Center. (Add the magnifier to the Control Center, as described above.)

Perfect for dimly lighted restaurants, tiny type on packages, and theater programs. You can zoom in (telescope), turn on the flashlight, lock the focus, tweak the contrast, and add a filter. Tap the round, white button to freeze the image.

Airdrop

AirDrop is a method of sending information between iPhones located within about 30 feet of each other. When *AirDrop* is selected, the iPhone will quickly sense which iOS devices in the immediate vicinity have *AirDrop* enabled, ready to communicate.

Enable both Wi-Fi and Bluetooth. Neither a Wi-Fi hotspot nor Internet access is required.

The receiving user's iPhone will display an alert with a preview of the content that you are requesting to share, and they can either *Accept* or *Decline*. If the receiving user accepts, they'll get the content in the app from which it was sent. For example, photos will appear in the *Photos* app and websites will open in *Safari*.

First, **give your iPhone a meaningful user name**: *Settings* → *General* → *About* → *Name*. Tap on the current name and edit it as necessary, e.g., *Jake's iPhone 7*. This allows others to select to which devices to *AirDrop*.

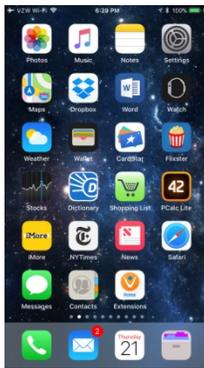
Turn on AirDrop: Open the Control Center and hold or 3D Touch on the communications quad to access *AirDrop*. Choose one of these options:

- *Receiving Off*: Turns off receiving *AirDrop* requests.
- *Contacts Only*: Only those iOS devices in your *Contacts* can *AirDrop* to you.
- *Everyone*: All nearby iOS devices can *AirDrop* to you.

Share content

- 📎 Share content from apps such as *Photos*, *Safari*, *Contacts*, and more. Tap the content to be shared → the share button → the user name of a nearby *AirDrop* enabled iOS device. You can always identify and send to other iOS devices regardless of your *AirDrop* receiving setting.

Organize your apps



Fill the slots in the **first home screen** with all the apps that are used very frequently. Place the most used apps towards the bottom. In the **second and third home screens** (not shown) place the apps that are used the next most frequently.

Choose the **four apps** that are used the most. Place those four app icons into the **dock area** at the bottom of the home screen.

Arrange folders and icons: hold your finger on any icon until they all start to jiggle. While they are jiggling you may ...

- **Create a folder:** drag one app icon on top of another app icon. Tap the new folder name field to rename it.
- **Rename a folder:** tap in the name field, type the new name. Or 3D Touch an existing folder icon, tap *Rename*, type the new name.
- **Relocate** icons by dragging the icon to a different location or dragging an icon into or out of a folder. Hold the icon with one finger and swipe left or right with another finger to select the page. Or you can move many icons by slightly moving one icon and then tapping each addition icon to gather them together. Then move them all.
- **Delete a folder:** drag all the icons out of it.
- **Delete an app** by tapping the circle  on the app icon.
- **Stop the jiggling:** tap Home button or wait 30 seconds. **[iP X** tap *Done* in upper right corner or swipe up from bottom of the screen.]

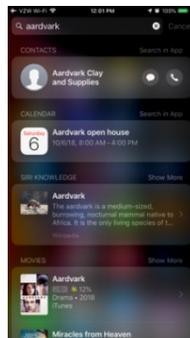
If the dock or a page is full, create a vacancy by moving an app icon out before inserting a new one. Dock icons not labeled.

Tiny, white dot indicates which home page is currently displayed.



Spotlight Search

Dictionary and thesaurus access is available in *Spotlight Search*. *Settings* → *General* → *Dictionary* → select the dictionary and thesaurus of your choice.



Invoke *Spotlight Search* screen by swiping down from **within** any Home screen, or from the *Today Widgets*, tap the in *Search* window. Search the iPhone's *Contacts*, *News*, *Wikipedia*, Internet, nearby places, *iTunes Store*, *App Store*, *Apple Books* Store, suggested Websites, and *Photos*. Type "southwest flight 1123" and see details about the flight. Tap on the > to see more.

Find an app on the iPhone by name. Spotlight Search also displays in which folder each found app is located.

Lock Screen

Rather than press the Home button a second time to unlock your iPhone, simply rest your finger on the Home button. Enable this in *Settings* → *General* → *Accessibility* → *Home Button* → *Rest Finger to Open*.

To disable Control Center access in the lock screen: *Settings* → *Touch ID* **[iP X** *Face ID*] & *Passcode* → [Enter your passcode] → *ALLOW ACCESS WHEN LOCKED* → *Control Center* → *Off*.

[iP X lock screen has a flashlight and camera icon]

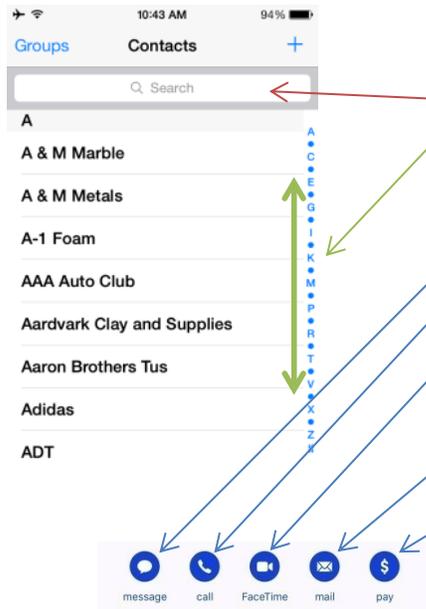
Unlock the iPhone from the lock screen by pressing the Home button and using Touch ID tap **[iP X** *Face ID*, swipe up to rescan face] or enter your password.

From the lock screen, home screen and apps:

- Swipe down ↓ from **above the screen** to open the Notification Center. Swipe up ↑ from **below the screen** to dismiss.
- Swipe up ↑ from **below the screen** **[iP X** swipe down ↓ from upper right corner] to open Control Center. **Disable Control Center access from lock screen for security reasons.**
- Swipe left-to-right → to go to the Today Widgets and Spotlight Search (from lock screen and home screen only).
- Swipe right-to-left ← to open the *Camera* (from lock screen).

Contacts

Contacts



Contacts app contains address book information. Addresses, phone numbers, email addresses, URLs, notes, are stored for use by the phone, *Mail*, *Messages*, *FaceTime*, and *Twitter* apps.

In the list view, use the **Search** feature, or scroll through the list by **sliding or rolling your finger** on alphabet on the right edge.

Select a *Contact* entry ...

- Tap on **message** icon to send a text message.
- Tap on **call** icon or a **phone number** [949 555-1212](tel:949-555-1212) to call it.
- Tap the **FaceTime** or  icon to make a free video or audio call to another iPhone or iOS device. Group FaceTime up to 32 people simultaneously.
- Tap on the **mail** icon or an **email address** to go to a new blank email form ready to fill out.
- Tap **pay** to send money through Apple Pay.
- Tap on an **address** to display the location in *Maps*. In *Maps* tap on the *Directions* button for turn-by-turn navigation.
- Hold on any field to **Copy** that field to the clipboard for pasting elsewhere.

Enter into the *Search* field **Roberts Plumber** and search will find all the records with both Roberts and Plumber somewhere in the entry.

Add + a new contact or **Edit** an existing contact within Edit (where you can **Delete Contact** by scrolling to the bottom of the form).

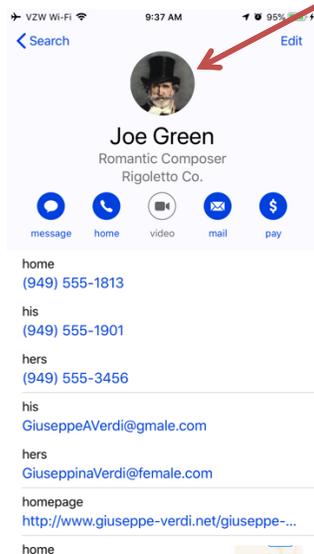
Scroll to the bottom of the contact for additional choices:

- *Send Message* - send a text message to the contact.
- *Share Contact* - send a contact with another, via VCF file.
- *Add to Favorites* - adds to your *Phone* app *Favorites* list.

High speed access to top of list

There is an easy way to **scroll up to the top** of any long list: **tap the top row of the screen**. It will scroll to the beginning instantly. This works for any app that has a list in portrait orientation.

Picture a contact



Attach a photo to any entry in *Contacts*. Thereafter, any time a call is received from that person, their picture will show up on the screen when the iPhone is ringing, in *Messages* list, and *Phone Favorites*.

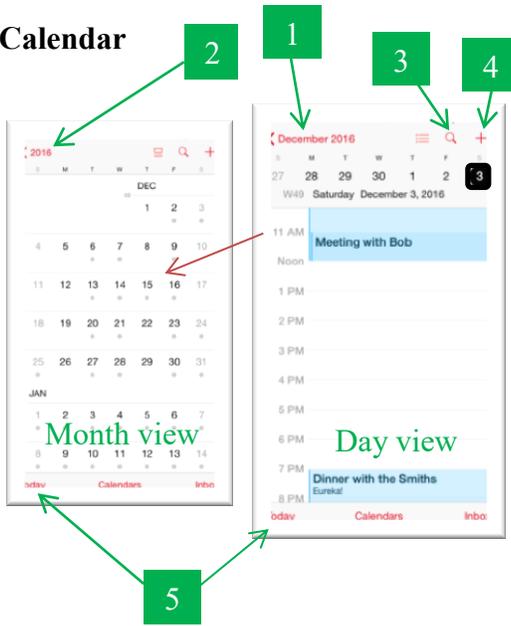
Here is how to attach a picture to a contact:

- Select the contact and tap *Edit* in the upper right corner.
- Tap the *add photo* circle at the upper left.
- Or tap the *edit* button under an existing photo to modify.
- Select *Take Photo* or *Choose Photo*.

Take their picture using the *Camera*. Or use a picture already in the *Photos* app, possibly from the *Camera*, an email, text message, Webpage, or Facebook page from a screenshot.

Calendar

Calendar



Day View (shown here in right panel): See the week's dates on the top ribbon. If you are viewing today's date, it is in a red rectangle, otherwise in a black rectangle. The day view is below the ribbon.

1. Month View (shown here in left panel): in day view, tap the **< Month** in the upper left corner to go to the month view. Tap a date to get back to the day view.

2. Year View (not shown here): in month view, tap the **< year**. Scroll years up or down in the year view. Scroll to the desired year and tap the tiny month calendar to see it in the month view.

3. Search the entire Calendar by tapping the magnifying glass icon.

Week View (not shown here): from any view, rotate  the iPhone to landscape orientation.

4. Add an event: in any view, tap **+** (or in the Day view, hold your finger at the approximate time of the new event and drag it to the exact time). Enter the event *Title*, *Location*, *Starts* date, time, time zone (or *All-day*), *Ends* date, time, time zone, *Repeat*, *Travel Time*, and *Alert*.

5. Today: return to the present day by tapping the **Today** button once or twice.

Delete an event: tap the event and tap **Delete Event** at the bottom.

Edit an event: tap the event and tap **Edit**, at the upper right corner.

Set an event that spans many contiguous days: set the end date of a single event to the last day, rather than setting a daily repeat.

In the day or week view, **change an event's time, date or duration** by holding the event until the color intensifies. Drag the event to a new time, new day, or drag a handle on the top or bottom to change the duration.

Other views:

Day view  ↔  List view



Month view  ↔  Months & day's events.



More Calendar features

- Show more or fewer hours in day view by pinching in or out.
- Create custom repeats such as third Tuesday, or last weekday of the month, etc. In *Edit* → *Repeat* → *Custom*.
- Week numbers: *Settings* → *Calendars* → *CALENDARS* → *Week Numbers* → *On*.
- Start and End times can be set to different time zones, such as for an airline flight across time zones.

How to manage birthdays in Calendar

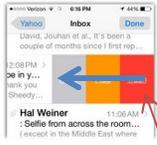


Enter a person's birthday in **Contacts** (rather than setting up a repeating event in the *Calendar*). This automatically will put it into the *Calendar* every year next to a little gift-wrapped box icon. *Contacts* → *Edit* → *add birthday* and enter the date.

Selectively turn on or off displaying birthdays, tap *Calendars*.

Mail and Text Messages

Mail



Delete an email by **swiping completely from right-to-left** on the email list, or **partially swipe** to do more or flag an email, or tap the trash can icon at the bottom of the email text.

Customize these options in *Settings* → *Mail* → *Swipe Options*.



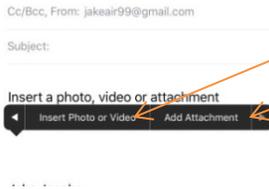
Compose a new email: Tap the compose icon in the lower right corner and

- start typing the **message body first**, to avoid prematurely tapping *Send* before you've completely composed the message.
- then type the *Subject*,
- finally enter the recipients (*To.*, *Cc/Bcc.*)

Reply icon for *Reply*, *Reply All*, or *Forward*.

Dismiss the keyboard by swiping down from above the keyboard.

Add photos or attachments to email



Insert pictures and videos in line in text when composing an email. Hold your finger anywhere in the text. See the pop-up and swipe ← (or tap the little triangle on the right) to find ...

- *Insert Photo or Video*.
- *Add Attachment* to be taken to the *Files* app. Select a file from the *Files* app: Tap *Locations* → *OneDrive*, *Dropbox*, or other cloud storage. Attach any type of file that can be stored in the cloud: *Word*, *Excel*, *Access*, *Power Point*, PDF, etc.

Draft emails

Hold on



Save a draft of an email in progress: tap *Cancel* → *Save Draft*.

Quickly access a saved email Draft: **hold the Compose** button in the lower right corner. It will open a list of saved Drafts; resume composing unfinished or unsent emails.

While composing an email, **swipe down** on the subject header to temporarily remove it from screen so that the inbox and other emails are visible. **Tap the subject bar** at the bottom to resume editing the email.

iMessage, SMS

Blue Send  button free iMessage.

Green Send  button SMS message. SMS can be avoided:

Settings → *Messages* → *Send As SMS* → *Off*.

Hold on a received picture and tap *Save* to put it into the *Camera Roll*.

Type *I'm at* and tap *Current Location* to send a map of where you are.



• Tap bubble icon of a contact for *audio* call, *FaceTime*, or tap the  *Info* button to *Send* or *Share* your location, or see all past pictures that person has sent you.

• **Copy a message bubble:** hold on the message bubble, and tap *Copy* in the pop-up at the bottom.

• **Delete a message bubble:** hold on the message bubble or attachment. Tap *More...*, select the message bubbles to be deleted, and tap the trash can icon.

• **Delete a message thread:** in *Messages* list, slide the message label to the left and tap *Delete*.

• **Search** for key words at the top of the *Messages* list.

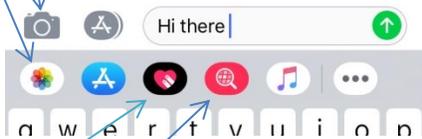
• **Attach pictures:** tap the *Camera* icon, or the *Photos* icon for recent pictures.

• Security codes sent via *Messages* can now autofill in *Safari*.

iMessage fun

Recent Photos

Open Camera



Images – select an animation

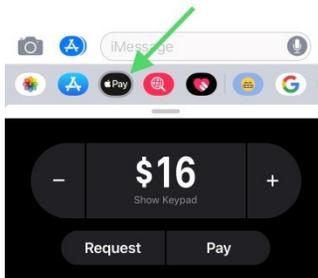
• **Sketch** - tap *Digital Touch* (heart with fingers touching it) and draw a sketch in the canvas provided. Recipient will see the drawing sketched in time.

Handwritten message - rotate to landscape mode. Tap a previously sent message or write out a new one. Tap *Done*. Add any text if desired.



- See **time stamp**: drag left on a message bubble to see the arrival times of all messages.
- **Emoji** - enter up to three emoji, 3 times larger.
- **Send a Tap** - tap *Digital Touch*. Tap pattern on screen.
- **Emojify a message** - type a message. Tap emoji button on the keyboard. Tap on each orange highlighted word to replace it with its corresponding emoji.
- **Animations** - send *Bubble* and full *Screen* animations. Type a message, and hold or 3D Touch the send button .
Choose from *Bubble*: effects: *SLAM*, *LOUD*, *GENTLE*, or *INVISIBLE INK*. Or tap *Screen* and swipe to select *ECHO*, *SPOTLIGHT*, *SEND WITH BALLOONS*, *CONFETTI*, *LOVE*, *LASERS*, *FIREWORKS*, *SHOOTING STAR*, or *CELEBRATION*.
- **Audio message** – tap microphone icon in *Message* field.
- **Stickers** – tap the blue  icon on the dock, to add stickers. Swipe ribbon to find stickers in the magnifying glass icon.
- **Send a message to a group** – tap the compose button in the upper right corner and enter multiple recipients.
- **Respond with emoji Tapback icon** – hold a received iMessage bubble. Tap the desired Tapback icon to send it from the pop-up.
- **Business Chat** – Communicate with companies to ask questions, schedule appointments, and make purchases via Messages.

Person-to-Person payments



Person-to-Person payment within the Messages app. Now, you can send payments directly to your friends—your share of the restaurant bill, for example—right from within the Messages app. (This works only between iOS devices.)

Tap the *Apple Pay* icon in the App Picker. Then enter the amount using the – and + buttons and tap the *Pay* button.

When money comes to you, it accrues into a new, virtual Apple Pay Cash Card. From there, you can send it to your bank, buy things with it, or send it on to other people.

Siri

“Hey, Siri”

Available on iPhone SE, 6s, and newer.

Disable on lock screen for security: *Settings* → *Siri* → *Access When Locked* → *Off*.



QR to Shortcuts Guide

Invoke Siri without having to hold down the Home button. Just say “**Hey, Siri**” to get her attention—and say a command.

Enable *Hey, Siri*: *Settings* → *Siri & Search* → *Allow “Hey Siri”* → *On*. (You will be prompted to perform a one-time voice training exercise.)

New *Shortcuts* app that lets you create multi-step processes that will run with a single command. “Heading home” could open Maps, play favorite music, and text your spouse.

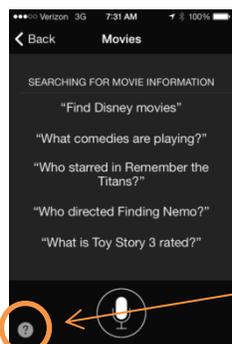
Ask Siri

Scroll up the page to see previous Siri conversations.

- If and when dictating something that Siri doesn't understand, scroll back up and find the dictated text.

- Tap on the chat bubble and **edit** what Siri heard. Make corrections accordingly.
- Tap the blue *Done* button.

Siri translates from English into Chinese, French, German, Italian, or Spanish. For example, you can say, "How do you say 'Where's the bathroom?' in French?"



Hold the Home button while asking Siri. [iP X hold side button.] Ask Siri about sports, restaurants, movies, making reservations, or launch an app. Tell Siri "Listen to this song" and she'll name that tune. The opportunity to purchase the song from the *iTunes* Store will be offered. Type your request, rather than speak. Enable at *Settings* → *General* → *Accessibility* → *Siri* → *Type to Siri* → *On*.

On the Siri screen, tap the little circle (?) on the lower left, Siri will list all the apps for which she can offer help. Or ask Siri, "**What can I ask you?**" Tap on a topic to see a list of examples, such as "Show me photos from Yosemite last June." Composing an email and decide to phone instead? Say "Call her." Ask Siri to change some settings such as turn the brightness up or down.

Siri understands follow-up questions. ("Who won the World Series in 1980?" "The *"Phillies."* "Who was their coach?")

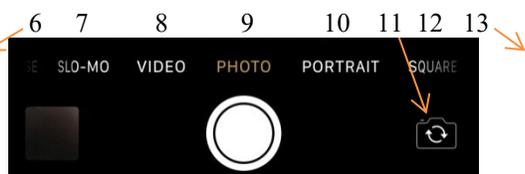
Camera

Camera basics

Separately **adjust focus and exposure** by tapping any subject on the screen. A yellow rectangle will appear on the subject. The camera will identify what appear to be faces. Slide the sun icon up or down to adjust the exposure.

Lock the exposure and focus by holding your finger on the screen until **AE/AF LOCK** is on.

Tap the preview image to the left of the shutter button to see the newly captured photos. Swipe down on image to return to Camera.



Dual lens iPhones now provide 2x optical telephoto zoom.

Taking photo with iPhone flat (screen parallel to the floor) invokes spirit level crosshairs.

Take a picture: tap the on screen **shutter button** or press **either volume button**. Pictures are placed into the *Photos* app *Camera Roll* or *All Photos* album (if *iCloud Photo Library* is on).

Burst mode: **Hold down** the shutter release or a volume button.

1. **Flash:** *Auto, On or Off*. When should the iPhone's flash be used? Answer: almost never! Only for close-up fill.
2. **HDR:** tap to turn on or off **High Dynamic Range**, which takes three quick shots at high, normal and low exposures and blends them into a single, optimal photo. iPhone 8, X has Auto HDR. Turn off in *Settings* to see HDR icon.
3. **Live Photos:** *On or Off*. A snippet of animation is captured in each photo. To keep it off: *Settings* → *Camera* → *Preserve Settings* → *Live Photo* → *On*.
4. **Self-timer:** set 3 or 10 seconds. Takes a short burst.
5. **Filters** (can be removed or changed in the *Photos* app).

Tap or slide the labels above the shutter to select ...

6. **TIME-LAPSE** - the camera automatically selects the best frame rate.
7. **SLO-MO** - select 120 or 240 fps in *Settings*.
8. **VIDEO** - record HD video, tap the record button or a volume button. Tap again to stop recording. Turn the "flash fill light" on and off any time during the capturing of a video.
9. **PHOTO** - rectangular format pictures.
10. **PORTRAIT** - bokeh blur effect (dual lens iPhones only). Lighting effects (iPhone 8 plus and iPhone X).
11. Toggle between **rear** and **front** (selfie) cameras.
12. **SQUARE** - format pictures (for Facebook and Instagram).

Panoramic mode

Pan left-to-right, keeping the arrow centered on the horizontal line. If panning too fast, the prompt will warn to slow down.



13. **PANO** - Hold the iPhone in the **vertical orientation**. Tap the shutter release or a volume button and pan left-to-right. The iPhone will automatically create a panoramic picture.



Here is an example of a 180° panorama taken at the LACMA rock

Tap the arrow ⇨ to change the pan direction ⇨ right-to-left.

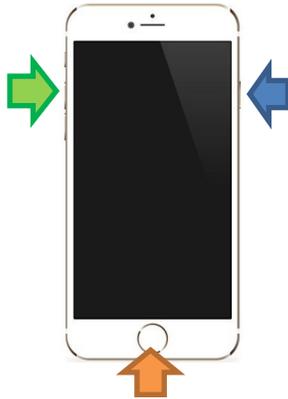
Quick *Camera* access

quickest access

- **Swipe right-to-left** ← on the lock screen to immediately open the *Camera*.
- Open the *Camera* in **Control Center** from within any app.
- Say, “**Hey Siri, open the camera.**”
- Spotlight Search, type “**camera**” → tap icon
- Find and tap the **Camera icon** on the home screen

slowest access

Take a screenshot of your iPhone screen



The screenshot feature allows taking a snapshot of anything on the iPhone screen and save the screen image to the *Camera Roll*.

Quickly tap and release the **side** and **Home** buttons [iP X **side** and **volume up** buttons] at the **same time**. Treat it like any other picture: edit, crop, email, or upload to a computer. Tap preview, lower left corner of the screen to immediately view and edit.

Some example uses of the **screenshot** feature:

- capture a store coupon
- capture a Map image
- capture a YouTube, Safari, or Facebook screen image
- capture an image of an error message to text to someone who can help diagnose it.

Video screen recording. Enable from Control Center.

Mark up a screenshot, tap preview icon, lower left.

Remote control shutter release



Use the headphone cable’s volume-up or volume-down button as a shutter release. Great for taking “selfies” or setting the camera down and standing away from it.

Photos

Photos app

Tap **Photos** icon on the lower left to see groups of your photos by year or by location and date ranges. It will also go to Apple *Maps* to show where pictures were taken, and see only those pictures: **Albums** (as before), **Year** 2011, 2012, 2013, **Collections** by dates, locations, **Moments**.

Search by date, location or name or use smart suggestions. Ask Siri to “show me my photos taken in 2007 in Iceland,” for example.

While editing, hold on an image to see the original.

Pinch zoom while watching a video.

Photos has object and face recognition and natural language photo search. In the search bar type “beach” or “mountains” or “water” for example, and see all the photos taken at those locations. Do the same for your dog or your best friend. It can scan your photos, see that this one person is in 67 photos and put them in a folder together. You can then manually add a name to the face.

Tap For You: tap an image in *Memories*. The iPhone will have automatically generated movies and slideshows from collections.

Create a memory: tap the *Photos* button and tap the date range shown for the photos. You will see a thumbnail of one of the photos in the album with a play ► icon on it. Tap it to create and play a memory from all the photos in the current album. It takes only a few seconds. You must tap the thumbnail for the memory to be created. Scroll down to the bottom of the album and tap the *Add to Memories* option. Use the share button to create and email an .MOV file.

Edit a Memory: Select the memory and play it. Pause it (bottom button) and tap *Edit* at the top right. Change the title, title image, music selection, duration, add or remove photos.

Edit a **burst** by tapping *Select...* → tap on each image you want to keep → *Done* → *Keep Everything* or *Keep Only xx Favorites*.

Edit **Slo-Mo** to select full speed and slo-mo segments of the video [full – slo-mo – full].

Tap **Albums** at the bottom of the screen to see **Albums** ...

- **My Albums** for folders containing your *Camera Roll* or *All Photos* and any other albums you have created on the iPhone.
- **Shared Albums** from others who have shared their photos.
- **People & Places**, photos organized by people in the image, or by geographical location where the picture was captured.
- **From My Mac**, albums with photos synced from your Mac or PC to your iPhone.
- **Media Types:** *Videos, Selfies, Live Photos, Portrait, Long Exposure, Panoramas, Time-Lapse, Slo-Mo, Bursts, Screenshots, and Animated.*
- **Other Albums:** *Imports, Hidden, and Recently Deleted.*

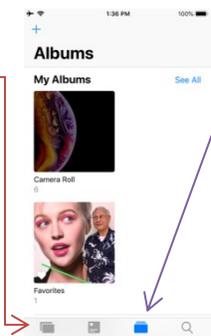
Modify a photo: view a photo and tap the *Edit* button:

- Magic Wand (upper right corner) for automatic enhancement.
- Crop and rotate through any size and angle (crop L’s icon).
Optionally tap the multi-rectangle icon at bottom to lock the aspect ratio to *Original, Square, 3:2, 5:3, 4:3, 5:4, 7:5, 16:9.*
- Apply filters (three circles icon) *Original, Vivid, Vivid Warm, Vivid Cool, Dramatic, Dramatic Warm, Dramatic Cool, Mono, Silvertone, or Noir.*
- Light, Color, B&W (dial knob icon) tap ≡ for adjusting...
 - **Light:** *Brilliance, Exposure, Highlights, Shadows, Brightness, Contrast, Black Point.*
 - **Color:** *Saturation, Contrast, Cast.*
 - **B&W:** *Intensity, Neutrals, Tone, Grain.*

- In an album, tap *Select*. Then select multiple pictures by tapping pictures individually or dragging your finger across other images to include them. Tap *Add To* to add pictures to albums.
- Tap  to email up to 15 images, *Save PDF to Books, Message, Copy, Print, Duplicate, Assign to Contact, Use as Wallpaper, AirDrop, Hide*, and more.
- Tap the trashcan to delete.

View **Live photo** motion by holding or 3D Touching the screen. Edit a Live Photo: you can trim it, shorten it, or mute its audio. Change the Live Photo effect by swiping up on the photo and selecting *Loop, Bounce, or Long Exposure*. *Loop* repeats the sequence over and over as if you put a loop of film in a projector. *Bounce* goes back and forth as if you continuously toggled the projector from forward to reverse. *Long Exposure* blurs a moving object such as a babbling brook or airplane moving across the sky. Extract a **single frame from a Live Photo** by tapping the Share button → *Duplicate* → *Duplicate as Still Photo*.

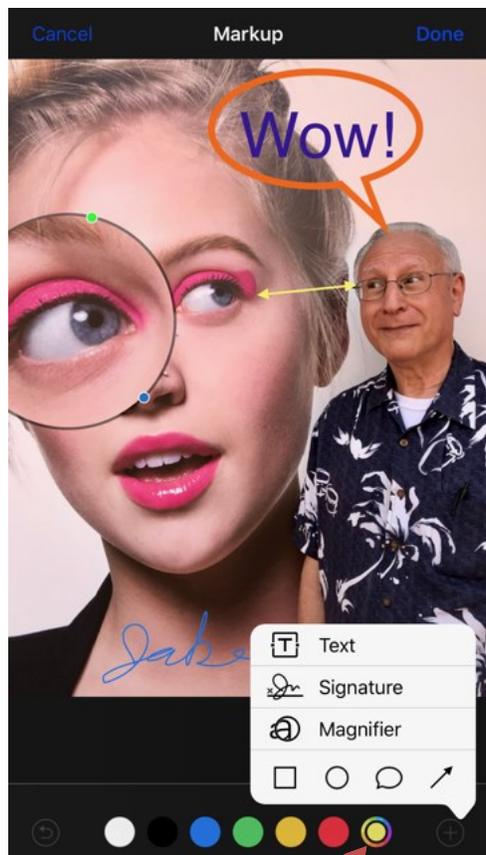
Portrait: tap *Edit* → **PORTRAIT** button to switch the image between portrait and normal. Tap *Done* to save.



Markup Editor in Photos

Make a copy of the image to avoid modifying the original: tap  → Duplicate.

In *Edit* mode you have the option to **Revert** the photo to the original.



Now with a larger color pallet. Tap a drawing tool to select stroke thickness and opacity options.

Add text, a signature, a callout magnifier, and shapes, onto any photo using *Markup* in the *Photos* app. Tap the *Edit* button (top right) to modify a photo, tap the More button (•••) → *Markup*.

- Select a drawing tool (pen, marker, pencil, eraser, and draw freehand strokes on the image. Tap the color circle to change the color. Hold on a tool to change it characteristics. See “Formatting, sketching in *Notes* app” to read about the lasso tool.
- Tap the blue + in the lower right corner to see the other shapes available.
 - **Text:** tap the [T] Text icon. Tap the text box that appears, tap *Edit*. Type the text to add to the image. Tap the blue circle-over-square icon to change the font, size and justification of the text.
 - **Signature:** tap the Signature icon and tap an existing signature or tap *Add or Remove a Signature*. Drag and resize the signature on the image.
 - **Magnifier:** tap the *Magnifier* button. Drag it to highlight a feature in the image.
 - Adjust the size of the circle by dragging the blue dot in and out from the center of the circle.
 - Adjust the magnification by dragging the green dot along the circle between “north” to “east”.
 - Adjust the color of the callout by tapping a color.
 - Tap the blue circle-over-square icon to select callout outline thickness.
 - **Shapes:** select rectangle, oval, callout or arrow to insert a shape into image. Drag the adjustment handles to reshape; drag the shape to reposition it. Tap the blue circle-over-square icon at the bottom to modify the shapes.

Tap *Done* in the upper right corner when finished with markup.

Tap the *Done* button lower right corner when finished with all editing and to save your modified image.

Safari

Safari Internet browser



Navigate between pages by tapping < or > or swiping the screen left or right.

Enter or paste the name of a Website and tap the **Go** key on the keyboard.

Hold or 3D Touch an image →  → *Save Image* or *Copy*. Rotate the iPhone horizontally to see the Website in widescreen.

Type “define ubiquitous” and see the definition.

Access your browsing session history

- Tap the tab button  to scroll between multiple tabs (i.e., sessions) or open a new tab (tap +).
- Swipe left to delete a tab.
- Hold + to see recently closed tabs.



Tap share button; hold on bookmarks button to add a bookmark or add to reading list.

See your complete browsing history: tap Bookmarks (book icon) → History (clock icon).

View your browsing history in *Safari*: **hold the back arrow** < at the bottom of the screen and the browsing history list for that tab will be displayed on the screen. Return directly to any one of the listed Webpages by merely tapping an item in the list. Or swipe left-to-right on the screen to return to the previous page (works for *Mail* and *Messages* too).

Each *Safari* tab will have its own **browsing history**. There is no limit on the number of tabs that can be open.

To close all of the open *Safari* tabs in one step, **hold** the tabs icon in the lower-right corner of the screen. You will get a prompt with an option for *Close All n Tabs*, *Close This Tab*, *New Private Tab*, *New Tab*, or *Cancel*.

Quick access to a favorite Website

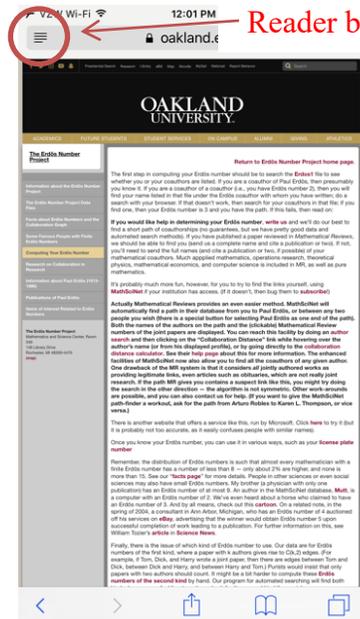


In this screen capture, the AlaskaAir icon on the left is the app. The AlaskaAir icon on the right is a link to their Website.

Add a **shortcut icon to a Website** on any home screen page. It will look just like any app icon. Tap on the icon to be taken directly to the Website in *Safari*.

In the Website in *Safari* →  → *Add to Home Screen*. Accept the default label text, but it often is too long, so edit it, or enter different text.

Easy read Web pages



Reader button

Compare readability

Often Web pages are not easy to read on the iPhone because the font is too small and the page is cluttered with links and sidebars.

Compute your Erdős number - The Erdős Number Project - Oakland University

Return to Erdős Number Project home page.

The first step in computing your Erdős number should be to search the **Erdos1** file to see whether you or your coauthors are listed. If you are a coauthor of Paul Erdős, then presumably you know it. If you are a coauthor of a coauthor (i.e., you have Erdős number 2), then you will find your name listed in that file under the Erdős coauthor with whom you have written; do a search with your browser. If

Tap the *Reader* ≡ button, and the body text of the Web page will be transformed into an easy to read, large text view. *Safari* momentarily flashes *Reader View Available* in the address bar of **some** websites. Notice that to the left of the URL entry field at the top of the Web page there **may** appear a small *Reader* ≡ button. Hold Reader button for more options.

Tap the AA button (top right) to specify the background color, font size, and typeface.

Tap  again to return to normal.

Search within a Web page

 → *Find on Page* search. Or enter search string in *Search or enter website name* and scroll to the down to the bottom and tap *On This Page*. Tap \wedge or \vee to find previous or next occurrence.

Music

iTunes Store, Music, Apple Music

Apple Music service allows subscribing to unlimited music streaming and downloads for \$9.99/month. But if you terminate your subscription, the downloads will all disappear from your iPhone.

Search for a song with known lyrics:

tap the search magnifying glass icon → *Apple Music* → type lyrics and see list of songs with those lyrics.



Play your songs with the built in *Music* app.

Add music that you have ripped from your CDs using *iTunes* on your PC or Mac and then sync the songs to your iPhone.

Access *iTunes* on your iPhone by opening the *iTunes Store* app. Search the store for music, movies, TV shows, music videos, and more. Browse, purchase, and download from the store directly to your iPhone. Tap any item to hear or see a preview.

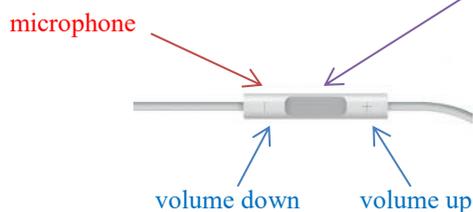
When playing music, the music controls are available in the *Music* app, on the Lock Screen, and in the Control Center. Tap the play bar in the *Music* app to see the album cover and more music controls.

In Library display by *Artists, Albums, Songs, Genres, Composers* or *Compilation*. Tap *Edit* to customize this list.

Create playlists: your songs in any order. Songs can be placed in more than one playlist.

Three useful buttons

on the iPhone earbuds cable pod



If the phone rings while you're listening to music, the **middle button** will mute the music and **answer the phone**. Later, it will hang up the phone and resume playing the music.

Hold middle button to invoke **Siri**.

When listening to music on iPhone earbuds,

- **single tap** the **middle button** of the control pod cable from the right-ear **pauses or plays** the music.
- **double tap** the middle button to skip to the **next song**.
- **triple tap** to listen to the **previous song**.
- **triple tap** and hold last tap to **rewind** to the beginning of the currently playing song.

Volume buttons are on the top and bottom of the pod.

Microphone for hands-free calls is on the pod.

AirPods can be used as a hearing device to transmit from your iPhone. Place the iPhone on a podium or near the person talking.

Compass

To see location, latitude, longitude and elevation, *Compass* must access location: *Settings* → *Privacy* → *Location Services* → *On*. Set *Compass* → *While Using*.



The built in *Compass* shows directions based on either magnetic north or true north (change in *Settings* → *Compass* → *Use True North* → *On/Off*). It also shows the iPhone's location, latitude/longitude and elevation. The *Compass* has a red **deviation indicator**.

Tap anywhere on the compass rose to enable the display of deviation arc from the selected heading as a red colored segment. Tap again to cancel.

Maps



While navigating, swipe up to view: nearby *Gas Stations, Breakfast, Lunch, Dinner, Coffee* stops (tap one to add it to your route), *Overview* of entire route, *Details* turn-by-turn list, *Audio* voice volume.

In the lower right corner of the map screen is the temperature at the depicted location. Hold or 3D Touch to see 6 hour temperature forecast. Press harder to go to the *Weather* app.

Double-tap and hold to zoom the map with one finger: up for zooming in, down for zooming out.

Be sure to turn off navigation — in the app switcher — when arriving at your destination, or else the GPS may quickly drain the battery.

Maps features turn-by-turn GPS navigation. Receive *Drive, Walk, Transit* directions, (including locations of stops and exits) or *Ride*. The *Ride* option will open Uber and immediately display prices and waiting times. See traffic delays.

Tapping on the search bar in *Maps* reveals nearby suggestion options such as *Food, Drinks, Shopping, Travel, Services, Fun, Health, and Transport*. Shows you floor plans for some malls and many airports. Shows lane guidance and speed limits.

Maps can automatically remember where you parked your Bluetooth equipped car. Look below the *Search* field, choose *Parked Car* from the suggestions list. Or type “parked car.” For this to work properly, turn on:

- *Settings* → *Maps* → *Show Parked Location* → *On*
- *Settings* → *Privacy* → *Location Services* → *On*. Set *Maps* → *While Using*
- *Settings* → *Privacy* → *Location Services* → *System Services* → *Significant Locations* → *On*.

In *CarPlay* you can select navigation other than Apple *Maps*, such as *Google Maps, Here WeGo, Waze*.

Books

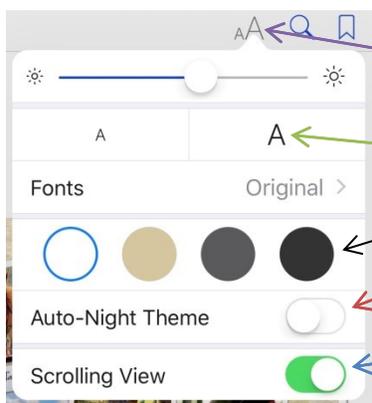
“iPhone User Guide for iOS 12”



A very complete **User Guide** is available for a free download into *Apple Books*. In the *Camera*, aim at the QR code and tap the popup. (Or go to *Books*, tap *Search* at the bottom, and type "iPhone user guide" in the *Search* field.)

Tap *Get* to download and it will be placed into your *Books* library for future reading; once they are downloaded to *Books* no Internet access is required to access your books or PDFs.

Books – Viewing Options



Copy - select and copy text to be pasted into *Mail, Notes*, or other app such as *MSWord* or *Apple Pages*.

Select the screen options: click on the **AA** icon at the top of the screen.

• Select **font** size by tapping the **A** or **A**. Select font type.

• Select background and foreground **colors**.

• **Auto-Night Theme** enables the display that is appropriate for dark-room reading.

• **Scrolling View** - *Off*: turn pages by swiping left or right or *On*: continuous scrolling up-and-down.

Find word definitions easily

Disable everything but definitions: *Settings* → *Siri & Search* → *Suggestions in Look Up* → *Off*.

Access the built-in dictionary and thesaurus: double tap a word — in an email, Web page, *Books*, and so on—and see a pop-up option for *Look Up*. Also, type a word into Spotlight Search to invoke the dictionary.

Save *Websites* or PDFs in *Books*

In *Books* you can markup the PDF by tapping on the pen-in-circle icon at the top of the screen. You have available all the markup tools that were described in *Markup Editor in Photos* above. The keyboard will pop up. Edit the title. Tap *Done*.

Save Websites or PDF attachments into *Books*. Then access and view them within *Books*, without Internet access.

Simply tap the top of the PDF page in *Safari* or tap the share button, and see the option to *Copy to Books* or *Save PDF to Books*. Tap it and the Webpage or PDF will be imported into, and be available to view in, *Books* from then on. See *Books*, below.

Rename a PDF file in *Books*: in the PDFs folder, tap ... → *Rename ...* → Edit the name → *Rename*.

Scientific *Calculator*



Access the built-in *Calculator* from the Control Center.

In the built-in *Calculator* app access the **scientific functions** by rotating the iPhone to landscape orientation.

Switch between the basic calculator and the scientific calculator without reentering the intermediate value shown on the display. When using the basic *Calculator* app, there is an occasional need for a scientific function. Switch to scientific orientation, execute the function, and return to the basic calculator to complete the calculations. The 2^{nd} button changes some buttons to other functions or inverses.

Copy the result of a calculation to paste it into another app.

Paste a number into the calculator to do a calculation on it.

Swipe ← or → across the display to delete last digit entered.

Measure distances and *spirit level*



You can also tap on the dimension bubble of one of the measurements to get a pop up with the current readings that you can copy and paste into another app like *Messages* or *Notes*.

For some rectangular objects that the *Measure* app detects, the detection of the dimensions will be automatic. To get an automatic measurement, choose a square or rectangular object and hold the iPhone in front of it.

If it's going to take an automatic measurement, you'll see a yellow square appear, which you can then tap to get dimensions. If it's not going to do automatic detection, you're going to need to use the tap method to draw individual lines.

In the *Measure* app follow the on-screen instructions and move your iPhone left and right and around the room so that it can gather dimensions of various objects. Once calibrated — denoted by a white dot in a circle — you're ready to start measuring.

Take a measurement - line the white dot up with a corner of an object and then press the "+" button to create an anchor point.

From the anchor point, point the iPhone over to another part of the object. Press the "+" button again to get the final measurement of the line. Continue using this method to get the full dimensions of different objects in your room, with the ability to set multiple anchor points if desired.

You will feel little haptic taps whenever you set an anchor point, for physical feedback. Haptic taps are also included whenever the app detects an obvious stopping point for a measurement, such as the end of a wall.

To clear your anchor points and start over at any time, tap the *Clear* button. To undo the last point tap the back ↶ button.

Once all of your measurements are in place, tap the white shutter button to take a photo that displays all of the measurements overlaid on a photo of the object you're measuring.

The *Measure* app also includes the spirit level feature.

News

Swipe an article icon right or left in the *Today* list and have the options to *Dislike Story*, *Report*, *Love Story*, *Share*, or *Save*.



News app consolidates all the stories you want to read, from top news sources, based on topics you're most interested in.

- *Today - Top Stories, For You*, and your favorite channels.
- *Morning Digest* or *Evening Digest* - Apple News editors' daily selections.
- *Channels* - your customized list of news sources. Search here for other channels, topics and stories.

Wallet & Apple Pay



Wallet can store retail store discount cards, credit cards and boarding passes.

Open the built-in *Wallet* app and enter your credit card information only once. Use the camera to enter credit card info in *Settings* → *Wallet & Apple Pay* → *Add Credit or Debit Card*. Also choose a Default Card in *Settings*.

You may select a different card as the default card in the *Wallet* app by holding that card and sliding it to the top of the stack.

Apple Pay is a system that lets you pay for items in stores by holding your iPhone near a special terminal at the cash register. When at the checkout counter of a participating store (look for the Apple Pay or NFC symbol), the contactless terminal will identify the presence of the iPhone. Confirm your identity by placing (not pressing) your finger on the Home button. [iP X double-press side button and glance at the screen.] The iPhone haptic taps **when** the transaction successfully completes. To use *Apple Pay*, Touch ID [iP X Face ID] must be enabled (*Settings* → *Touch ID* [iP X Face ID] & *Passcode* → *Apple Pay* → *On*).

Use Apple Pay to send money to friends from within the *Messages* app.

Podcasts

Download and listen to many available, often free, podcasts offline while you walk or drive. Select the ones you want to automatically download when the latest is available. Customize *Forward* and *Back* skip buttons to 10, 15, 30, 45, 60 seconds.

Stocks

Tap ≡ to customize the list to securities in your portfolio. Slide the ≡ icons up or down to sort. Tap the + button to add securities.



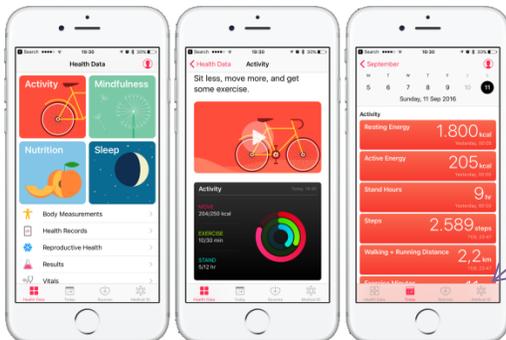
Follow all of your stocks, bonds, indexes, and mutual funds at any time. Across the top see a moving ticker-tape of your portfolio. Select a security to see a chart spanning 1 day up to 5 years, daily statistics, and articles from *Apple News* for selected security.

Health

The *Health* app works in landscape, showing, for example, a wider graph of your health data.

Health Records keeps track of info from multiple sources. Add your account info from participating networks and hospitals.

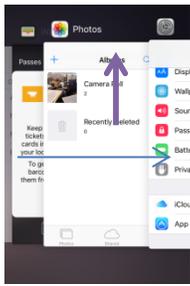
From the first day you owned your iPhone, the *Health* app has been automatically tracking how many steps you've taken and how many flights of stairs you've climbed. Display these measurements graphically in the *Health* app. Tap *Activity* and select the activity of interest.



Add a *Medical ID*, accessible from the lock screen. Customize your *Medical ID* in *Health* → *Medical ID* → *Edit*.

More Tips and Features

Switch to a recently used app



Don't quit apps unless they are malfunctioning or to insure the GPS is turned off. Apple's official *iPhone User Guide for iOS 12* says "Typically there is no reason to quit an app; quitting it doesn't save battery power, for example."

Do Not Disturb

Use Control Center to turn on *Do Not Disturb*. A "crescent moon" icon will appear in the status bar.

With the Ring/Silent switch in the **silent** position, the iPhone won't generate incoming call or message or email alerts which would disturb **others**. It **will** vibrate. (Think: quieting a fidgeting child in a movie theatre.)

Do Not Disturb makes sure the phone doesn't disturb **you from external sources**. An incoming call or message will **not ring, vibrate or light** the screen.

Emergency bypass for particular important contacts: To set it, open *Contacts*; find the important person's entry; tap *Edit* → *Ringtone* → *Emergency Bypass* → *On*.

Hold or 3D Touch DND in Control Center to turn on DND for *1 hour*, *Until tomorrow morning*, or *Until I leave this location*. Also *Schedule*.

"Smart" phone numbers

Use this technique for entering, international phone card numbers, log-on codes and passwords. But be mindful of security when syncing on the iCloud.

Return to the previously used app: After jumping into one app by tapping a notification or a link, jump back into the first app by tapping the  [app name] button in the upper left corner.

To open the App Switcher screen **quickly press the Home button twice** or **3D Touch the left margin** of the screen.

[iP X swipe up from the Home indicator (or bottom of screen) and pause about half way up. From any open app, swipe left or right along bottom of the screen to switch apps.]

The most recently used apps are on the top of the stack. Scroll horizontally and tap an app image to **switch to that recently used app**.

Quit a misbehaving app: **swipe up the app's screen image**. Then restart it from the Home screen. Quitting **does not delete** the app from the iPhone, it merely terminates it.

Use the *Do Not Disturb* setting to silence **external** calls, alerts, and notifications, when the iPhone is locked. It will not ring, vibrate, nor light the screen. The *Do Not Disturb* function sends calls immediately to voicemail. **Alarms and the Timer will not be silenced**, but *Calendar* alerts will.

Customize *Do Not Disturb*: *Settings* → *Do Not Disturb* → These are the available options:

- *Scheduled*: Automatically enable *Do Not Disturb* daily between the hours that you specify. (I set 11 pm to 8 am.)
- *SILENCE* → *Always* or *Only while iPhone is locked*. Select whether *DND* is always silent or silent only while the phone is locked.
- *PHONE* → *Allow calls from* → *Everyone*, *No One*, *Favorites*, or a specific *Contact* group stored on your device.
- *Repeated Calls*: If enabled, when someone calls twice within three minutes, the call will not be silenced.
- *DO NOT DISTURB WHILE DRIVING*. *Activate* → *Automatically*, *When Connected to a Car Bluetooth*, or *Manually*. Customize an auto-reply message.

In *Contacts*, combine a phone number and the local extension:

714 555-1234;**222**

Tap the number to call it. Upon hearing the prompt to enter the extension number, tap the *Dial* "**222**" label and the iPhone will tone dial the local extension number.

To **enter a semicolon** in a phone number in *Contacts*, on the telephone pad → **+ * #** button → *wait*.

Help finding a lost iPhone



To passcode-lock your iPhone: *Settings* → *Touch ID [iP X Face ID] & Passcode* → *Turn Passcode On*.

Losing your iPhone can be a traumatic experience. But circumstances needn't be so dire with the help of iCloud and the iPhone's built-in GPS — if preparations have been made:

After setting up iCloud: *Settings* → [your identifier] *Apple ID, iCloud, iTunes & App Store* → *iCloud* → *Find My iPhone* → *Find My iPhone* → *On*. Once signed up, track your iPhone (on another device) on a map. From there, remotely force the phone to play a loud sound, lock down the phone, have it display an alert message, or even wipe its memory.

Turn on *Send Last Location* in *Settings* → [your identifier] *Apple ID, iCloud, iTunes & App Store* → *iCloud* → *Find My iPhone* → *Send Last Location* → *On*

Sharing calendars

Set up personal calendars in each iPhone *Calendar* app: tap *Calendars* at the bottom of the screen. Tap *Edit* to add a personal calendar and tap *Add Calendar...* to create a new one. Tap the little red circle (i). Under SHARED WITH tap *Add Person...*, and select a person in the family. Decide whether they can edit the entry or not, under SHARED WITH, tap the person's name → *Allow Editing* → *On/Off*.

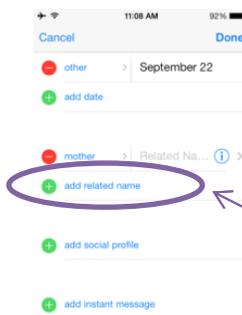
Enabling Family Sharing in all iPhones and iPads in the family creates a new **Family** calendar in everybody's *Calendar* app. Each member of the family can **see, create, edit, and delete** the events in the Family Calendar (*Settings* → [your identifier] → *Family Sharing*). Each family member may still have their own personal calendar for events that pertain only to themselves. These can be shared with other family members and set to **allow only the owner to create, edit, and delete** the events.

Tell Siri who you are and your relationships

In order to ask Siri to *call my wife* or *call my brother-in-law*, she must be told **who you are** and how people in your *Contacts* are **related to you**.

First, create an entry in your *Contacts* list for yourself. This is where all of your relationships are going to be stored. For example call it “Siri info,” entered into the *Company* field.

Once you've entered yourself as a contact, **tell Siri who you are:** *Settings* → *Siri & Search* → *My Information* or *Settings* → *Contacts* → *My Info* and select your “Siri info” entry in *Contacts*. To associate various contacts with yourself, **tell Siri**, for example, “Sally Jones is my wife” or “Randy Smith is my brother-in-law.” Or enter this information **manually** in your “Siri info” *Contact* entry: tap *Edit* and tap *add related name*. Tap the label shown and select a new label from the list or create a new label, and the name from *Contacts*.



Safari: hold on links for URL and options



When faced with opening a questionable link, instead of simply clicking through the link, lightly **hold your finger down on the link**. See the **actual link** and five or six options: *Open*, *Open in New Tab*, *Add to Reading List*, *Save Image* (only if it's an image link), *Copy*, and *Share*. Click on *Open in New Tab* and the Webpage will be opened in a separate tab allowing continuation from the previous tab. This feature is smart, so that if a link was tapped in an app in the *App Store* it will present yet a different set of options: *Open in App Store*, *Save Image* and *Copy*.

Battery usage and % charge

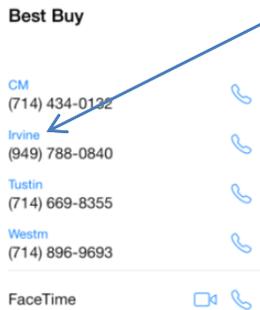


Display the **percentage of remaining battery life** next to the battery icon on the upper right corner of the iPhone screen (e.g., 45%). Tap *Settings* → *Battery* → *Battery Percentage* → *On*.

Display BATTERY LEVEL and ACTIVITY. Which apps are power hogs. This can be helpful to manage app use. See the *Last 24 Hours* or *Last 7 Days* of battery usage.

Determine your battery capacity and performance capability: *Settings* → *Battery* → *Battery Health*.

Custom Contact labels



In *Contacts* **create custom labels** for phone numbers, email addresses and some other fields. And once created, these custom labels are available to use for *any* other contacts.

Here is a sample of custom labels created for Best Buy. I created labels for local cities.

Here is how to create a custom label in a contact: tap *Edit*, and tap on the blue **label field**. Scroll to the section of the list where it says *Add Custom Label*. The label list cannot be sorted, however. Create labels such as *His*, *Hers*, *Brother-in-law*, *Mother*, *iPhone*, *Service*, *Emergency*, *Summer Home*, etc.

iCloud and iCloud Backup

(iCloud.com shown here on my PC screen)



iCloud stores your music, photos, apps, *Calendars*, *Contacts*, documents, and more. It's seamlessly integrated into your apps and wirelessly pushes your content to all your devices.

Manage your iPhone built-in apps on all of your devices: PC, iPhone, and iPad. Any changes made in one device will be updated in the other(s).

Download and install the *iCloud Control Center* onto your PC.

<http://support.apple.com/kb/DL1455>

On the iPhone *Settings* → *[your identifier]* → *iCloud* to turn on those apps that will share data with your PC and other devices on iCloud, choosing from: *Mail*, *Contacts*, *Calendars*, *Reminders*, *Notes*, *Safari*, *News*, *Home*, *Wallet*, *Game Center*, *Keychain*, *Find My iPhone*, *iCloud Backup*, *Files*, etc.

iCloud backup: Turn on iCloud backup: *Settings* → *[your identifier]* → *iCloud* → *iCloud Backup* → *On*.

When initially signing up for iCloud, 5 GB of storage is provided of free storage. Your iCloud storage is used for iCloud Backup, app data and documents stored in iCloud, and iCloud Mail (your @icloud.com email account).

There is important, personal information on your iPhone, iPad, and iPod touch. iCloud automatically backs up your device over Wi-Fi every day while it's turned on, locked, and connected to a charger. With your device information backed up in iCloud, it is easy to set up a new device or restore information onto an existing device, if necessary.

Here's what *iCloud Backup* normally backs up:

- Purchase history for music, movies, TV shows, apps, and books
- Photos and videos in your *Camera Roll* folder
- Device settings
- App data
- Home screen and app organization
- iMessages and text messages
- Ringtones
- Visual Voicemail
- Safari Bookmarks and Reading List.

It doesn't backup credit card data in Apple Pay, finger prints in Touch ID, Face ID data, nor Wi-Fi passwords for visited hotspots.

Appendix: More than 50 Extra Tips not covered in this class

Use iOS Users Guide, or Google, Bing, Yahoo, or YouTube to find out more information about these tips and features.

Accessibility	Check out <i>Settings</i> → <i>General</i> → <i>Accessibility</i> → for many features for vision, motion, hearing, and learning impaired iPhone users.
Accessibility Shortcut	Triple-click Home button [iP X triple-click side button].
Airplay	Wirelessly mirror you iPhone screen, music, videos to your Apple TV.
App Store	Select from over 2 million apps in the App Store app. Many are free, and others cost only \$0.99. Cancel auto subscriptions: <i>Settings</i> → [your name at the top] <i>Apple ID, iCloud, iTunes & App Store</i> → <i>iTunes & App Store</i> → <i>Apple ID [your Apple ID email]</i> → [your iPhone password or use touch ID] → <i>View Apple ID</i> → <i>Subscriptions (or Purchase History if you have no Subscriptions)</i> → choose Subscription you wish to cancel.
Calendar time increments: 1 or 5 minutes	Double tap the time selector to select 5 minute steps (...20 25 30 35 40...) or 1 minute steps (...28 29 30 31 32...).
Calendar travel time	Take into account travel time for event alerts. In <i>Edit</i> → <i>Travel Time</i> . Combine with <i>Alert</i> times to create additional reminder times (e.g., 5 <i>Travel</i> + 15 <i>Alert</i> = 20 minutes).
Calendar: Alternate Calendars: Chinese, Hebrew, and Islamic.	<i>Settings</i> → <i>Calendars</i> → <i>CALENDARS</i> → <i>Alternate Calendars</i> → [Off, Chinese, Hebrew, Islamic].
Calendar: Create a Calendar event from email	Tap on date and time. Tap the <i>Create Event</i> button
Camera: Preserve your Camera settings	Each time you open the Camera, some settings can be preserved from the previous camera use. <i>Settings</i> → <i>Camera</i> → <i>Preserve Settings</i> → toggle the switches to preserve the following settings: <i>Camera Mode, Filter, Live Photo</i> .
Charging, quietly	When you attach the Lighting cable, your iPhone makes a chime noise. Turning on the silent switch causes your iPhone to vibrate which also may make a sound. This can be prevented. Activate the Camera, THEN plug in the Lightning cable; press the Home button to go back to your lock screen. No sound, no vibrate.
Clock app	Clock app is accessed via the Alarm, Timer, or Stopwatch icon in Control Center or Clock icon on home screen. Four apps in one: World Clock, multiple time zones; Alarm, multiple; Bedtime, sleep time, wake up alarms; Stopwatch; Timer can be set to seconds.
Color blindness filters	<i>Settings</i> → <i>General</i> → <i>Accessibility</i> → <i>Display Accommodations</i> → <i>Color Filters</i> → <i>On</i> , and select the kind of color-blindness you have (e.g., Protanopia, red/green).
Contacts: Assign Contacts to multiple groups	Create a number of Groups in <i>Contacts</i> using iCloud.com, or other contacts app on your computer, then assign each contact to one or more groups. Or use <i>Groups</i> app.
Contacts: Create a new contact from an email	Hold an address in the email text, and tap <i>Add to Contacts</i> .
Dark Mode	Enable Dark Mode by triple-pressing the Home button. <i>Settings</i> → <i>General</i> → <i>Accessibility</i> → <i>Accessibility Shortcut</i> → <i>Smart Invert</i> .
Data management, cellular	<i>Settings</i> → <i>Cellular</i> and disable cellular data usage for any installed apps that you are willing to use only when you have Wi-Fi Internet access.
Do Not Disturb while driving option	Prevents receiving or sending texts or email while driving. Turn on or off in <i>Control Center</i> . <i>Settings</i> → <i>Do Not Disturb</i> → <i>DO NOT DISTURB WHILE DRIVING</i> → <i>Activate</i> → <i>Automatically, Car Bluetooth, Manually</i> .
Emergency Auto Call	Calls 911 when you press the side button quickly 5 times. Enable in <i>Settings</i> → <i>Emergency SOS</i> → <i>Auto Call</i> → <i>On</i> . When pressed 5 times disables Touch or Face ID.
Files app	<i>Files</i> app is new, with drag and drop capabilities: <i>Settings</i> → [your Apple ID] → <i>iCloud</i> → <i>iCloud Drive</i> → <i>On</i> .
Guided Access dedicates the iPhone to a single app. You control which app features are enabled.	<i>Settings</i> → <i>Accessibility</i> → <i>Guided Access</i> → <i>On</i> → <i>Passcode Settings</i> . Tap <i>Set Guided Access Passcode</i> and enter a passcode that you will remember.
HomeKit app built into iPhone	Control lights, thermostats, shades, garage doors, fans, locks, sensors in your home.
Keyboard: Disable keyboard Character Preview	<i>Settings</i> → <i>General</i> → <i>Keyboards</i> → <i>Character Preview</i> → <i>Off</i> .
Keyboard: One-handed	Keyboard that moves closer to one side, for easier one-handed typing. Hold emoji key.

Lock, Auto-Lock time before automatically locking	<i>Settings → Display & Brightness → Auto-Lock → [30 Seconds ... 5 Minutes, Never]</i>
Mail: Add a Mail account	<i>Settings → Mail → Add Account.</i>
Mail: Add a New Mailbox	In <i>Mail</i> app, <i>Mailboxes → Edit → New Mailbox → [enter name of new mailbox and MAILBOX LOCATION] → Save.</i>
Mail: Custom “signatures” for each Mail account	<i>Settings → Mail → Signature → Per Account.</i> Create custom signature for each account.
Mail: Drag and drop email addresses	Hold your finger on one of the addresses until it turns into a blue bubble, and drag to another field. For example, drag from the To: field to the Cc: or Bcc: field.
Mail: Filter mailbox list	 On the email preview list, at the bottom left corner is the filter button. The default is set to <i>Unread</i> . Customize to include <i>Flagged</i> , <i>Only Mail with Attachments</i> , and others.
Mail: Group or batch email	In <i>Contacts</i> create a group in iCloud.com. Enter the group name into the To: field.
Mail: Load remote images: turn it off to conserve airtime	<i>Settings → Mail, Contacts, Calendars → Calendars → MAIL → Load Remote Images → Off.</i>
Mail: Mark addresses in Mail going outside your company’s server, shown in red: To: bob@mycompany.com, ed@otherfirm.com	<i>Settings → Mail → Mark Addresses.</i> Enter the name of the safe email address (just the part after the @ – i.e. <u>mycompany.com</u>).
Mail: Show a Mailbox in the Mailboxes list.	In <i>Mail</i> app, <i>Mailboxes → Edit → Add Mailbox.</i>
Mail: Show Related messages in Mail	Swipe left on an email, tap ●● More → Show Related Messages.
Memory: Running out of memory?	<i>Settings → General → iPhone Storage → Offload Unused Apps → Enable</i> , Optimize Photos, Review Large Attachments. Also shows when apps were last used, to help you select those to delete.
Messages: Enabling SMS text messaging on a non-cellular iPad on same Wi-Fi	<i>Settings → Messages → Text Message Forwarding → On.</i>
Music: Sleep timer for music	Set the <i>Music</i> app to stop playing after a desired period of time. In <i>Clock → Timer → When Timer Ends → scroll down to and tap Stop Playing.</i>
Music: Wake up to your favorite song	Wake up to a song of your choice in your music library. <i>Clock → Alarms → Edit → [select an alarm] → Sound → SONGS → Pick a Song → [select song from your Music app].</i>
Night Shift	Display-based setting that "warms up" an iPhone or iPad's screen at night to cut down on blue light exposure. <i>Settings → Display & Brightness → Night Shift → Scheduled → On, From To → Custom Schedule</i> to set the times <i>Night Shift</i> will turn on and off.
Password Manager	<i>Settings → Accounts & Passwords → App & Website Passwords.</i> Stores the passwords of all accounts used on your device.
Password, Require	<i>Settings → Touch [iP X Face] ID & Passcode → Require Passcode → [select time].</i> Immediately is the only option with Touch ID or Apply Pay enabled.
Phone: Block known unwanted callers from phoning, FaceTime or texting you.	<i>Settings → Phone → Call Blocking & Identification → BLOCKED CONTACTS.</i> Or in Messages or Phone app tap (i) → phone number or email address → Block this caller.
Phone: Fix a poor cellular or Wi-Fi signal	Turn <i>Airplane Mode ON</i> and <i>OFF</i> again. If that doesn’t work, turn the iPhone completely off and then on.
Print from your iPhone or save as PDF file	Requires an <i>AirPrint</i> enabled printer. From an app select text, tap  → Print.
Raise to wake	<i>Settings → Display & Brightness → Raise to Wake → On</i>
Reachability brings the top of the screen into reach	Double-tap (don’t press) the Home button [iP X swipe down on the Home indicator] to bring the top of the screen into reach. <i>Settings → General → Accessibility → Reachability → On.</i> Tap tab on top to dismiss.
Restart, forced	Hold Home and side buttons simultaneously. iPhone 7 and 8 hold volume down and side buttons. [iP X press and release volume up, volume down; then hold side button.]
Restrictions	Restrict explicit music, disallow changes to certain settings, prevent the use of certain apps, the installation of new apps, or changes to accounts or the volume limit. <i>Settings → General → Restrictions → Enable Restrictions.</i>

Ringtones, Custom	<i>Settings</i> → <i>Sounds & Haptics</i> → <i>SOUNDS AND VIBRATION PATTERNS</i> → [select app] → [select or purchase new tone]
Screen Time	New setting shows how much time you spend on the phone, on each app, number of times you wake the phone, and so on. Also set <i>Downtime</i> periods and <i>App Limits</i> .
Settings: Search Settings	Searching within Settings is available at the top of the main Settings page.
Settings: Access an App's Settings Using Siri	In any app, invoke Siri and say, “settings.” You will be taken directly to the app’s settings page.
SIM, dual	The iPhones XS and XR have dual SIM cards with a built in eSIM: to separate numbers, and carriers, for one iPhone.
Siri will control third party apps	For example, “Hey Siri, send Joe Smith a message in WhatsApp.”
Siri: Change Siri’s voice	Change Siri from a she to a he. <i>Settings</i> → <i>Siri & Search</i> → <i>Siri Voice</i> → <i>Male/Female</i> . Also, select a different pronunciation dialect from the listening dialect.
Siri: Correct how Siri pronounces a name	“That’s not how you say Greselda.”
Siri: See a history list of all the songs Siri has identified	Open the <i>iTunes</i> app on your iPhone and click on the  button on the top right. Tap on the <i>Siri</i> tab in one of the boxes at the top.
Speak Screen	Swipe down with two fingers from the top of the screen to hear the content of the screen. <i>Settings</i> → <i>General</i> → <i>Accessibility</i> → <i>Speech</i> → <i>Speak Screen</i> → <i>On</i> .
Student ID cards	Electronic college ID cards for dorm access, dining halls, campus events in <i>Wallet</i> app.
Text: Want larger text? Bold text?	<i>Settings</i> → <i>Display & Brightness</i> → <i>Text Size</i> or <i>Bold Text</i> (Bold invokes a reset).
Tips app	Open the <i>Tips</i> app to read a set of tips that tell about great iPhone features. Now organized by collections of tips. <i>Tips</i> .
Unused apps, offload	Automatically remove unused apps, but keep their documents and data. Reinstalling the app will restore your data, if the app is still available from the <i>App Store</i> . Disabled by default, enable in <i>Settings</i> → <i>iTunes & App Stores</i> → <i>Offload Unused Apps</i> → <i>On</i> .
Vibrate	<i>Settings</i> → <i>Sounds & Haptics</i> → <i>VIBRATE</i> → <i>Vibrate on Ring</i> → <i>On/Off</i> . <i>Settings</i> → <i>Sounds & Haptics</i> → <i>VIBRATE</i> → <i>Vibrate on Silent</i> → <i>On/Off</i> .
Voice Memos app	Record audio in digital format just like a tape recorder. After recording you can tap ... to <i>Edit</i> , <i>Duplicate</i> or <i>Share</i> . Uses about 300 MB per hour.
Wi-Fi: Calling	Make calls through Wi-Fi instead of cellular, available from most cellular providers. <i>Settings</i> → <i>Cellular</i> → <i>Wi-Fi Calling</i> → <i>On</i> .
Wi-Fi: Personal Wi-Fi hotspot	Use the iPhone’s cellular data Internet access ability to create a personal Wi-Fi hotspot for an iPad or other phone. <i>Settings</i> → <i>Personal Hotspot</i> → <i>Personal Hotspot</i> → <i>On</i> .
Wi-Fi: Send password	When asked for a Wi-Fi password, bring your iPhone near any iPhone, iPad, or Mac which has connected to the network, and has you in their <i>Contacts</i> .