

# Florida 4-H Consumer Choices

## Buying a Smartphone



### Goal:

The goal is for youth to make informed, responsible choices when selecting a smartphone.

### Consumer Skill:

Youth will gain knowledge of the key concepts including the key concepts to:

- Selecting a service provider, platform (phone) and plan.

### Life Skill:

- Youth will learn decision making skills as they investigate the 4P's and make a choice.

### Suggested Activities:

- Choosing the Best Smartphone and Plan (worksheet) pg. 7

### Situation

Communicating by phone is so much more than just a voice call. A cellular device, most often referred to these days, as a “cell phone” or just a “phone” has been around for the past 3 decades; however, the functionality of the cell phone has drastically changed. Texting or instant message (IM), gaming, surfing the web, digital calendars, movie streaming, digital books, video chat, photo sharing, email, GPS, taking photos and videos and oh, yes, a means to make a voice call, smartphones provide a new means of communicating, entertaining, and enhancing productivity. Smartphones are evolving fast. There are new features, options, and models consistently being introduced. When it comes to buying a smartphone, it can be extremely overwhelming because there are just so many choices. Selecting the “perfect” smartphone can be intimidating with all of these options – and even more so with the commitment you make financially (buying the phone) and often the commitment you may make when signing a contract (service plan) with your service provider.

This guide will provide hints and tips for making informed decision when selecting a smartphone for your needs and budget.

### Key Concepts to Teach: The 4 P's in selecting a smartphone—Provider, Platform, Plan and Purchase.

- Selecting an available service **P**rovider(s)
- Capability of various smartphone **P**latforms and their major features
- Selecting a **P**lan with your service provider
- Making the **P**urchase

### References and Sources

See Appendix A.



## Selecting a Service Provider

The first thing you will need to consider when choosing a smartphone is what carrier or service provider is available in your area. It used to be that consumers would first have to decide on the platform or type of phone they wanted and then select their carrier based on which provider actually offered their desired smartphone. Now, most major service providers have all platforms available to use within their network. The four major service providers are AT&T, Sprint Nextel, T-Mobile and Verizon Wireless. There are often local carriers available, as well; however, this guide will focus on the four major providers. Go to <http://www.broadbandmap.gov/> and enter your address to see what major carriers are available based on your location. This link will also compare the speed in which communication and data is transferred. Why is this important? Comparing speeds between carriers will help you compare carriers and get the best possible rates when choosing a plan. It is also important to know the capabilities of your carrier's network. This will help you determine if the smartphone is compatible with the network's capabilities. For example, if you decide to purchase a smartphone that is 3G; however, your carrier has 4G capabilities. Based on your purchase, your phone's performance will be based on a 3G speed, not 4G. Smartphones work much more efficiently on a 3G or 4G network. The higher the speed, the better performance you will get from your smartphone.

Once you have identified what providers are available in your area, check each of the providers' street level coverage map. This map is typically found on the provider's website. Check all of the areas you typically travel to and ensure there is coverage and it is at the speed you need to utilize a smartphone. Currently, all four of the major carriers provide a 4G network; however, be sure to check the coverage map as it is not available in all areas.

Read customer reviews online, chat with friends and family about what service provider they use. Here are a few questions you might want to ask:

- What service provider do they use? How long?
- Does their service provider have "dead zones"?
- Can they make calls or use the smartphone features inside a building?
- Have they ever have a call dropped? What area?
- Does their carrier provide tech-support? How reliable is it? Is there a fee?



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## Smartphone Platforms and Features

All of the smartphone platforms provide internet capabilities, calendars, a camera, contacts, email, instant messaging and some type of music player. Typically, most will have all of the convenience of a personal computer, but with portability. Review the specific apps and features that each of the platforms offer to assist you in selecting your smartphone.

### **Android (Google)**

Android supports a variety of smartphone brands including Samsung and HTC to name a few. This platform is very well known for its customization. You can alter your home screen to an open multiple applications at once—great if you like to multi-task. It offers widgets and apps and a variety of options for placement on the home screen, as well as, split screen views with supported apps. The Android platform is also one of the few that still offer a true keyboard. The display or screen size is available up to 5.9 inches. Android smartphones sync with Google products and uses Google play as its store to purchase apps and entertainment. Average talk time is up to 16 hours and 12 hours for video streaming. Some Android smartphones also offer expandable storage.

### **Apple iOS:**

The Apple iOS is based on simplicity and consistency. It solely supports Apple products; therefore, the iPhone is the only choice when it comes to smartphone brands for this platform. Apple iOS is known for the variety and number of apps available to users. New release apps are typically found on Apple's iOS before any other platform. Consumer Reports described Apple iOS as having “hundreds of thousands” of apps and regarding apps, it “is the hands-down winner” (May, 2014). Apple users can make purchases from iTunes, Apple's store for apps and entertainment. Apple iOS is also “regarded as more secure than Android operating systems” (Sahndrow, K.L.). Displays are available up to 5.5 inches. Average talk time is up to 10 hours and 4 hours, 33 minutes for video streaming.

### **BlackBerry OS:**

The Blackberry OS is known for its security and according to Gene Marks with Forbes.com, “is among the best of breed” (2014). Similar to Apple iOS, BlackBerry OS only supports its own devices. Depending upon the smartphone model, BlackBerry offers both touchscreen and physical keyboards and may have a trackpad or trackball (for scrolling) available. Displays are available up to 5 inches. Average talk time is up to 16 hours, 13 minutes and 4 hours, 33 minutes for video streaming. Users will purchase apps and entertainment through BlackBerry's store, BlackBerry World.



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## Windows:

Windows platform is first recognized by the ability to personalize using Live Tiles on the start screen. Its Live Tiles allow users to personalize their smartphone's start screen with a variety of apps, links, games, etc. by pinning individual tiles. Users have the ability to resize the tiles, as well. Windows supports HTC, Huawei, Lumia and some Samsung devices. Users can create and edit Microsoft Office documents in the Windows Hub feature. This platform also has a built in Xbox. Average talk time is up to 16.5 hours and 9 hours for video streaming. Apps and entertainment can be purchased through the Windows Phone store.

### Additional Specs and Features

Again, most platforms offer the basics when it comes to a smartphone. Below is a list of a few additional specs and features not mentioned you may want to compare across platforms and brands when making your smartphone selection.

- 3-D capable
- Available apps
- Bluetooth
- Display— (pixels per square inch (ppi)) The higher the pixels the better the image quality. Retina display provides a high pixel density.
- Fingerprint sensor
- Front and rear cameras—*a must for taking selfies!* Check for a variety of features including zoom, burst mode, panorama, slow-motion and smile detection.
- Gaming capable
- Hearing-aid compatibility
- Hot Spot
- Multi-touch
- Navigation and Maps
- Near Field Communication (NFC) - allows you to send data to other devices within a vicinity
- Processor speed
- Proximity sensor—disables the touch screen
- Keyboard—Qwerty, physical keyboard or touchscreen
- Remote control
- Size and Weight
- Storage
- Syncing options
- Voice command
- Wi-Fi
- Wireless charging



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## Smartphone Plans

There are two costs to consider when purchasing a smartphone. There is the one-time cost of the device itself. Then there is an option to choose between a pre-paid plan and a contract. Either way, be prepared for an additional fee for service.

There are two costs to consider when purchasing a smartphone. There is the one-time cost of the device itself. Then there is an option to choose between a contract and a pre-paid plan. Either way, the consumer should be prepared for an additional fee for service. The service fee may include a voice plan as well as a data plan. Voice plans typically include texting and voice calls. Data plans typically include internet capabilities which are a desired feature when making the most of your smartphone.

### Phone costs

The cost of a smartphone will typically increase with features and capabilities \$50 - \$500+ depending upon if purchased with contract or as an unlocked device. According to wiseGeek.org, “unlocked smartphones have the potential capability to be used on any wireless network, rather than being tied to a specific carrier.” The downside of purchasing this type of phone is it usually means you are going to pay full price for the smartphone which can be costly.

### Contract vs. Prepaid:

**Contract plans** range in commitment time, usage, and costs. Check the service provider websites for the most up to date fees.

When purchasing a smartphone and signing a contract, the cost of the device is much lower than the full retail price. Be aware when signing a contract offers you a “free phone”. These contracts may include additional monthly fees which ultimately cover the full retail cost of the phone and sometimes even more.

**Prepaid plans** allow a consumer to use a provider’s network without a contract. The consumer pays for the service before they use it. The initial cost of the phone itself is more expensive with this type of plan and the consumer may have limited choices of smartphones available. In addition, some prepaid smartphones are connected to the service provider’s network. If you decide you want to move your service to another provider, there may be a fee to unlock the phone, allowing it to function on another provider’s network.

Regardless of the plan you select, review and thoroughly understand the plan. Read the fine print.



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## Smartphone Purchase

Purchasing a smartphone and service plan takes a little time and research. Know how much you have to spend, how you plan to use your phone, how much data you will need and understand all of the costs associated with the purchase. Compare prepaid plans as well as contracts. Identify the advantages and disadvantages of each of the plans.

When making your final smartphone selection, you may find it helpful to use a chart similar to the one below to help you make your final decision.

Platform/ Phone	Talk time and video streaming capabilities	Display size in inches	Does it have the all of your desired features?	Your budget	Monthly Cost	Phone cost and one time activation fees (if any)

After filling in the column, Platform/Phone, fill in the remainder of the chart and include any additional features or specs you hope to have in your new smartphone. Find the best fit for you and your budget. See page 7 for a practice activity.



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## Activity: Choosing the Best Smartphone and Plan

Sam would like to purchase a smartphone that he can use for the last two years in high school. He wants to use it mostly for gaming. He really enjoys playing the X-box game, Madden NFL. He also plans to use the phone for voice calls and texting, and a little web browsing. Sam makes about \$200 per week from his part-time job. He usually spends about \$30 each weekend on the movies and snacks which leaves him \$170 per week. He currently has \$200 in his savings. Which would be the best plan for Sam and why?

Plan 1	Plan 2	Plan 3	Plan 4
Unlimited talk, text and 4G data	Unlimited Talk, Text & Unlimited 4G Data (pre-paid)	Unlimited talk, text and 4G data	Unlimited talk, text and data and includes international text & 5G data features
Samsung Galaxy (Android) Phone cost: \$99.99 with a 2-year contract.	iPhone 5s (Apple iOS) cost: \$589.84	BlackBerry Z10 (BlackBerry) cost: \$529.99 with a 2-year contract	Nokia Lumia Icon (Windows) cost: \$99.99 with a 2-year contract
One time activation fee: \$30		One time activation fee: \$36	One time activation fee: \$30
\$80/ month	\$70/month	\$60/month	\$110 / month

### Answer Key: Plan 1, 3, 4, 2

Plan 1 would be the best choice for Sam. In 24-months, the total cost would be \$2049.99. The Android Phone is also a great platform for Sam's X-box gaming.	Plan 2 is the most expensive of the four plans presented at \$2775.99 for 24-months. This phone does not have the X-Box gaming capabilities as he hoped to have and it also includes features Sam does not require, such as, international calling.	Plan 3 is the most cost effective at \$2005.99 for 24-months; however, the BlackBerry platform does not have the X-box gaming capabilities, nor does he currently have the upfront cost available to purchase the phone.	When comparing Plan 4 to the other plans assuming 24 months pre-paid, the total cost is \$2269.84. This phone does not have the X-box gaming capabilities. In addition, Sam does not have the upfront cost available to purchase the phone.
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1.

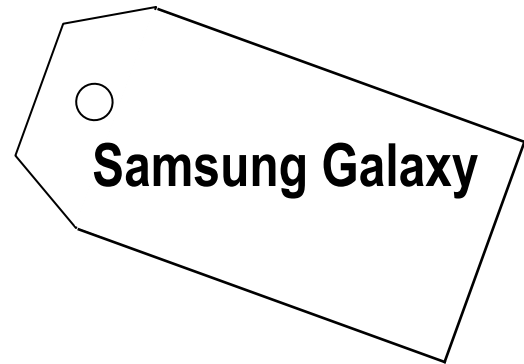


Photo credit: <http://www.androidcentral.com/samsung-galaxy-tab-s-stub>



2.

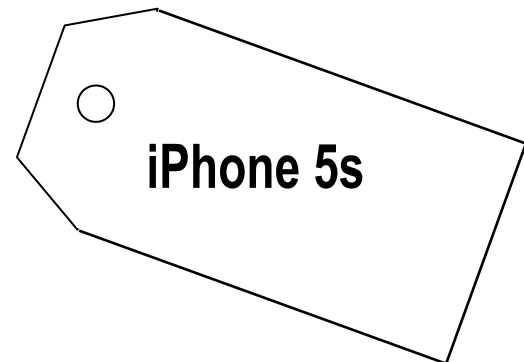


Photo credit: <http://www.apple.com/iphone-5s/specs/>



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3.

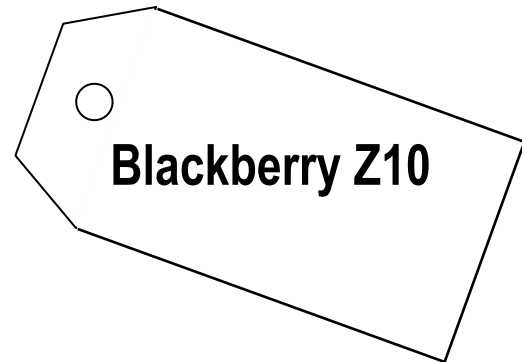


Photo credit: [http://us.blackberry.com/smartphones/blackberry-z10.html?](http://us.blackberry.com/smartphones/blackberry-z10.html?LID=us:bb:devices:blackberryz10&LPOS=us:bb:devices)  
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4.

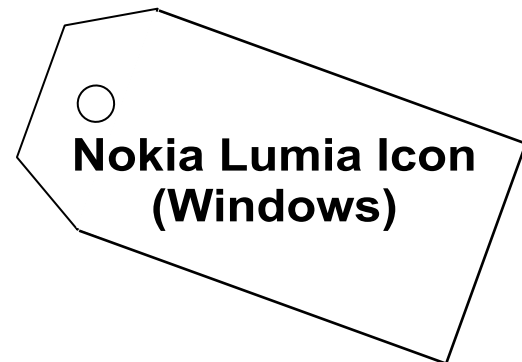


Photo credit: <http://cell-phones.toptenreviews.com/smartphones/nokia/nokia-lumia-details.html>



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## Key Terms

- **Apps:** “an application, typically a small, specialized program downloaded on-to mobile devices” (<http://dictionary.reference.com/browse/app>).
- **Bluetooth:** “the name for a short-range radio frequency technology that operates at 2.4 GHz and is capable of transmitting voice and data” (<http://mobileinfo.com/Bluetooth/FAQ.htm#g1>)
- **Data:** “a voice plan and text messaging service with an additional Web access plan, also known as a data plan. The smartphone data plan allows the user to access email, browse the Internet, access global positioning satellite service and more” (<http://www.wisegeek.com/what-is-a-smartphone-data-plan.htm>)
- **Hot spot:** “any location where Wi-Fi network access (usually Internet access) is made publicly available” ([http://compnetworking.about.com/cs/wireless/g/bldef\\_hotspot.htm](http://compnetworking.about.com/cs/wireless/g/bldef_hotspot.htm))
- **Live Tiles:** “animated app icons that can display real-time updates from social network feeds, news, appointments, and other sources” found within the Windows platform (<http://www.consumerreports.org/cro/cell-phones-services/buying-guide.htm>).
- **Network speed:** “the amount of data that passes through a network connection over time as measured in bits per second (bps)” (<http://compnetworking.about.com/od/speedtests/a/network-speed.htm>).
- **Qwerty Keyboard:** “keyboard layout in the U.S for most keyboards. QWERTY is named as such because "Q.W.E.R.T.Y" are the first 6 letters on the keyboard” ( <http://www.urbandictionary.com/define.php?term=QWERTY>).
- **Syncing:** “to download files, especially music or video files, from a PC to a portable device or to upload files from the device to a PC” (<http://dictionary.reference.com/browse/synchronization>)
- **Tethering:** “the use of your cell phone (or other mobile device that's connected to the internet) as a modem for another device (<http://mobileoffice.about.com/od/phonesformobileworkers/f/what-is-tethering.htm>). Often referred to as a hot-spot.
- **Trackpad / Trackball:** “a computer input device for controlling the pointer on a display screen by sliding the finger along a touch-sensitive surface: used chiefly in laptop computers.” Also referred to as a touch pad (<http://dictionary.reference.com/browse/touchpad>).
- **Unlocked smartphone:** “smartphones that have the potential capability to be used on any wireless network, rather than being tied to a specific carrier” (<http://www.wisegeek.org/what-are-unlocked-smartphones.htm>).



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## Key Terms

- **Video streaming:** “content sent in compressed form over the Internet and displayed by the viewer in real time” (<http://searchunifiedcommunications.techtarget.com/definition/streaming-video>)
- **Widget:** “generic term for a bit of self-contained code that displays a program, or a piece of a program, that is also (usually) a shortcut to a larger application” (<http://www.androidcentral.com/what-is-a-widget>).
- **Wi-Fi:** “a type of wireless networking protocol that allows devices to communicate without cords or cables” (<http://mobileoffice.about.com/od/glossary/g/wi-fi.htm>)



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## Appendix A

### Resources

*10 Top Ten Reviews*. 2014 Best Smartphone Reviews and Comparisons. Web, August 5, 2014.

*Consumer Reports*. Cell phones & services buying guide. May 2014. Web, July 29, 2014. <http://www.consumerreports.org/cro/cell-phones-services/buying-guide.htm>

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