USING YOUR SMARTPHONE - <u>SMARTLY</u>

TO TAKE PICTURES

FOR

SONS OF NORWAY

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They say the best camera is the one you have with you, but that doesn't mean it'll always give you the best-looking pictures. If you have a great shot in sight, but don't have the time to grab your DSLR or point-and-shoot, you'll have to make do with your phone's camera. Depending on your cameraphone and the lighting conditions, the results are often dull, ugly photos that are barely worth looking at later on. You can do better, though; you can take most cameraphone shots from forgetful to interesting with just a few tweaks.

All phones and cameras are different, so your mileage may vary with any given tip. While most phone cameras suffer from similar weaknesses (most notably the inability to take good pictures in low light), each has its own idiosyncrasies as well. That said, most of these tips can apply to your phone and favorite camera app pretty easily.

Don't Forget Basic Photography Rules

After doing lots of research and asking around, some of the best tips I got were the most obvious (yet rarely heeded) rules of photography. When you use your phone's camera, make sure you aren't forgetting about the basics.

Use Your Light

It's important with all cameras to make sure your subject is facing the light source and you're not, but it's even more important with phone cameras (Unless, of course, you *want* to take a silhouette—like all rules, this can be bent). As I mentioned above, your phone's biggest weakness is its inability to take good pictures in low light, which means you generally will want to get as much light as you possibly can on your subject. This may require a bit more thought and a bit more moving around than it might with a point-and-shoot camera, but you'll thank yourself in the end.

Clean Your Lens

It may seem silly, but give your lens a wipe down before you start snapping photos with your phone. While most people are pretty good about keeping their grubby fingers away from camera lenses, it's not as easily done with cameraphones. If you have a dirty lens, none of the other tips in this article will make your photo look less like crap, so keep it in mind.

Avoid Digital Zoom

You've probably heard this one a million times, but we can't overstate how useless this feature is. If you need to get closer to a subject, you're much better off <u>stepping closer to them</u>. If you can't, you can always crop the picture later on, which is all digital zoom really does. Remember, you can always crop down, but you can't crop up.

Nowadays, we can do so much photo editing after the fact that we often don't realize what a difference framing makes. Despite what you may think, stepping forward will probably be better than cropping later (or digital zoom) when taking photos.

Helen Bradley explains on her Pro Photo Blog:

If there is one technique most digital camera users can use today to instantly improve their photos it is to stand at least two or three steps closer to their subject. Most photographers stand too far away from their subjects so the subject ends up being very small relative to the rest of the photo. When you move closer to your subject you make them larger in the viewfinder so they fill the photograph.

When you're taking a picture of an actual object, like a person, a tighter photo is far more interesting and dramatic than one with lots of background. In the age of digital cameras many of us less seasoned professionals often think that we can just crop and zoom after the fact, but that isn't necessarily so—cropping and digital zooming do *not* achieve the same effect as actually getting the lens closer to the subject (note that optical zooming does work, in this case—most cameras have both, so if you have to use the zoom, make sure you're using the right one). Got any other tips for more interesting photos? Share them in the comments!

Pay Attention to Your Flash

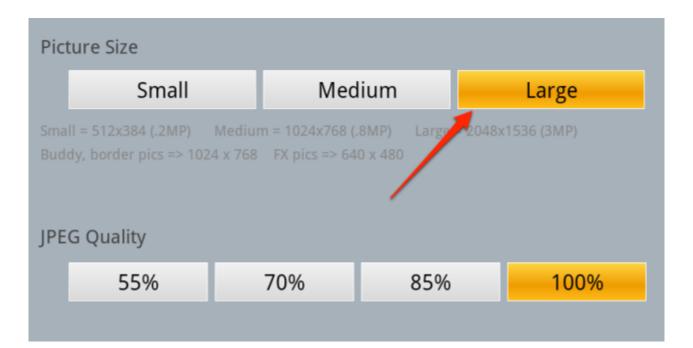
LED flashes have been hyped up a lot, but they're not always all they're cracked up to be. If you don't have enough light to work with, they can at least ensure that you get a picture, but left on "auto," a lot of phones will use it more often than necessary. And that white LED light can be really harsh. You may find, even in some lower light situations, that turning off the flash will give you a better result, so snap one with and one without if you're ever in doubt. You can always tweak them further in post-processing (which we'll talk about in a moment), so you have nothing to lose by giving yourself options.

If you find that you still need the flash, you can also soften it by placing a thin white sticker over it, like a small piece of tissue or white label. You'll still have some light from the flash, but the sticker will take away a bit of the harshness that tends to make people look ghostly.

Tweak Your Camera App's Settings

Depending on your particular phone and the camera app that comes with it, you may have a few settings you can adjust before taking a picture. In almost every case, though, you can do better by grabbing a more advanced camera app, like <u>CameraZOOM FX for Android</u> or <u>Camera+ for the iPhone</u>. There are a ton out there, so shop around, but those are our two favorites.

Check Your Resolution



Most camera apps have a setting that allows you to take pictures at differing resolutions. Low resolutions are nice if you're just sending a quick photo via MMS, and they'll save to your phone faster, but if you're taking a photo you want to keep around, you're better off taking it at a higher resolution. It's a simple and obvious tweak, but something you definitely want to check before you start snapping—there's nothing worse than taking a bunch of really cool pictures, only to find out once you put them on your PC that they're just 640x480. (Also worth noting, some phones will resize images when you email them—make sure you send them at full resolution if quality matters.)

Turn On the Stable Shot Setting



Phones are difficult to keep stable while you're getting your shutterbug on, and sometimes it's hard to detect the blur of a shaky photo on a small screen. While you can always rest your elbows on something solid and <u>breathe like a sniper</u>, enabling a stable shot setting in your camera app will help a great deal. This setting will use your phone's accelerometer to measure how much you're shaking the camera, and won't snap the picture until your hand has been steady for a certain amount of time (usually about one or two seconds). Some apps may even let you set the sensitivity of the stable shot, so your phone will wait until you're barely moving to take the photo.

Adjust Your White Balance



Usually, cameraphones are pretty good at detecting the white balance, but when you get into low light they can have trouble. The first thing you can do is give the camera a second to adjust itself—if you just open up the camera app and snap away, you might get a remarkably orange picture. Give it about 5 seconds to get acclimated, and you may get a better-looking shot. You also might try pointing your phone at a different light source, which will adjust your phone to a different balance, then popping back.

However, if you've given your phone a minute to acclimate and the picture still looks off, try adjusting the white balance yourself. You can usually set it to one of a few different light settings, like "daylight", "fluorescent", or "cloudy". You may find that choosing one manually gives you a better result than the auto setting does.

Fix Your Exposure



As the biggest problem with cameraphones is their inability to make up for low light, the exposure is one of the best settings to play with in dimmer situations. Setting the exposure higher lets more light into the lens, which means kicking it up a notch will likely get you a brighter, more vibrant photo. I've found that exposure tweaks often produce the biggest immediate improvement in my phone's photos.

Again, not every one of these tips is applicable in every situation or with every camera. It'll take a little bit of experimentation on your part to find what works best for you, but these should help point you in the direction of better pictures.

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For the most part, <u>taking great photos</u> with your smartphone requires the same thing as taking great photos with any camera—an eye for creating a scene, good lighting, and an <u>understanding of</u> <u>photographic depth</u>. But there are a few tips that are especially useful when you're taking shots with your phone.

Here are a **few tips** that should help take your phone pictures from "blah" to "fantastic" in no time!

• Take an Extra Second

When cell phone cameras first came out, they offered the chance to take pictures really fast, without getting out your <u>camera</u> or lining up a shot. And they weren't good for much more than that because the quality of the pictures was all but guaranteed to be very low. But now that smartphone cameras can take pictures that are just as clear and crisp and a regular camera, there's no excuse for hastily snapped, bad pictures.

So take an extra second—make sure your composition is good, include interesting subjects, see if you can improve the lighting or the angle, and figure out where your viewer is going to be looking. A lot of these are **basic checks for good photography**, but many people aren't used to applying them to smartphone pictures. It only takes a few seconds to drastically improve your photos.

• Use Principles of Composition

A lot of the things that come intuitively when you're trying to compose a scene actually don't make for great photographs. Putting the horizon in the middle of a scene, for example, creates a strangely unbalanced photo, where the viewer isn't sure whether to look at the ground or the sky first. Learning a few basic rules of composition can make a huge difference in your photography.

1. The Rule of Thirds

For a lot of photographers, the Rule of Thirds is the <u>first piece of photography theory that they learn</u>. If you already know this one, feel free to skip ahead to the next section. If you haven't heard of it, pay attention — this is the most valuable rule you'll learn.

The first time you picked up a camera, you probably felt compelled to center the subject. After all, attention should be on the subject, and attention is most drawn in the center, right? It works sometimes, but often this results in a photo that feels off somehow.

A perfectly centered image, in most cases, loses its sense of balance. It sounds contradictory, but it's true. If a person's head is smack in the center, then their body is below and empty air is above... and that's unbalanced. The Rule of Thirds is one way to resolve this.

Imagine splitting a photo into a 3×3 grid and looking at the four corners of the center section. These are the intersection points of the "thirds" — a third from the top, a third from the bottom, from the left, and from the right. When shooting, place the subject in one of these four spots.



<u>Stock photography experts do this a lot</u> because it's an easy way to make photos more compelling. Remember that the Rule of Thirds isn't enough to produce spectacular photos — but it's definitely an important ingredient.

2. The Golden Ratio

The Golden Ratio is similar to the Rule of Thirds, but slightly more advanced. It's based on a mathematical concept that we can find all throughout nature, and this concept theoretically explains why we find certain things to be aesthetically pleasing

In some sense, the Golden Ratio explains the relationship of balance between empty space and filled space. In other words, for every 1 bit of filled space, you need about 1.6 bits of empty space to balance it out.

Simply put, the Golden Ratio describes a relationship:

In mathematics, two quantities are in the golden ratio if their ratio is the same as the ratio of their sum to the larger of the two quantities.

This ratio can be illustrated by <u>the Golden Rectangle and the Golden Spiral</u>, a design that's commonly found in plants, animals, and other forms of nature. The bottom line, however, is that this ratio can be simplified as **1 to 1.6**.



Seems like an ordinary photo, right? But a lot of people are praising the photo for its "Renaissance painting-like" quality. As it turns out, the photo adheres to the Golden Ratio perfectly, so no wonder why it looks so darn good.

3. The Principles of Gestalt

In the late 1800s, a concept called **Gestalt psychology** came into prominence, and this theory tried to explain how humans can acquire meaningful perceptions in an apparently chaotic world. In short, how does the mind organize individual bits into a cohesive whole?



Decades later, photographers began applying this theory to their shots — with remarkable results. The actual principles are a bit abstract and vague, but they may prove helpful once they click. Here are the key ones:

- **Figure:** We tend to differentiate objects by contrasting with their surroundings. When composing, position the subject so that they are clearly defined by the space around them which helps viewers to perceive what's meant to be the focus of the photo.
- **Promixity:** We tend to perceive objects that are in close proximity to each other as one group. Grouping things together — either using position or depth — can help when you're trying to create a sense of balance throughout the photo.
- **Similarity:** Within a group of objects, we tend to perceive objects of the same "kind" as part of the same group or pattern. An object's kind can be defined by its color, shape, or overall feel.
- **Closure:** The human brain can follow contours and see patterns even when there are holes and gaps in said contours and patterns. As such, based on how you frame the scene, the viewer may see shapes and patterns that don't really exist and this could produce a more compelling image.
- **Balance:** As described in the Rule of Thirds and the Golden Ratio, balance is an important aspect of aesthetic beauty. This *could* mean symmetry, but more often means that there's a sense of equilibrium in the photo.

Again, the Principles of Gestalt are more like abstract guidelines than straightforward rules. They try to explain why, but don't really give much instruction on how.

4. Leading Lines

One of the most important concepts in **<u>photography</u>** is that you want the photo to "draw" the viewer's eyes somewhere, ideally on a particular path through the photo. Most people start at the top left and move to the center, but this isn't always the case.





The easiest way to pull the viewer's eyes through a photo is to provide them with a direct route — and this is done with **leading lines**. A leading line could be anything: roads, fences, tree branches, walls, natural contours, or even silhouettes. It could even be an implied line, such as a beach or a queue of people.

The shape, direction, and depth of leading lines can create a sense of motion through the photo — and this dynamism can make your photos feel alive and active rather than static and boring. It's this energy that can be the difference between a crappy and a compelling image.

So the next time you position yourself and hold the camera to your eye, make sure you look for all the potential lines in the scenes. Don't be afraid to stop and relocate if it means you can take better advantage of the lines around you.

5. Foreground and Background

For some, the greatest difficulty of **<u>photography</u>** is capturing the beauty and essence of a threedimensional scene in a two-dimensional photo. Often, the result if a flat, static image that has none of the life that made the scene so awesome in the first place.





While there are many ways to trick the brain into thinking a two-dimensional image is threedimensional, one of the easiest methods is to make sure that the photo has a **foreground** and a **background** that both complement the intended subject.

In the above photo, notice how the tree (which is close to the camera) and the mountains (which are far from the camera) work together to create a sense of relative 3D space, and you can tell the mountains are big. Without the tree, you wouldn't know how big those mountains are.

The foreground-background effect can be emphasized even further by manipulating **depth of field**. Using a wider aperture results in a shallower depth of field, which blurs things that are closer to the camera than the subject and farther from the camera than the subject — and this blur helps establish visual depth.

In the above photo, notice how the foreground laptop and the background camera both sandwich the drawing <u>tablet</u>, which gives the photo a greater sense of depth and life. A smaller aperture (no blur) would have resulted in a more boring image.

Which Rules Do You Use Most?

In case you missed it before, I'll repeat it here: **you do not have to use ALL of these Rules in every single photo you take**. In fact, you could potentially take an awesome photo that doesn't involve ANY of the aforementioned rules.

As a general rule of thumb, if you have a photo that doesn't look good, applying one or more of the rules in this article will probably improve it. That's all we're trying to say.

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Smartphone and mobile **photography** are becoming increasingly popular. And no wonder. Every year, mobile and smartphone cameras get better and better, until many people don't feel the need to carry real cameras around anymore. While phone cameras still can't replace good SLRs, they're a very good match for the compact cameras, and since your phone comes everywhere with you anyway, it also becomes your go-to camera.

Just because your phone is your default camera, however, doesn't mean you need to be taking bad photos. While some cameras are better than others, you can take beautiful photos even with a 5MP, 2560pixel X 1920 pixel camera like the one that comes with my old Acer Liquid E. All you have to do is take a few extra seconds to think about what you're doing, and follow the tips below. Happy shooting!

Lighting is Everything



As with any camera, lighting is extremely important, and it's doubly important if you're using a phone camera. While some modern phones come equipped with a very good camera, most smartphone cameras still need all the help they can get to come up with a good enough photo. This is where lighting becomes your best friend.

It's not always possible to control it, but there are two important points you want to keep in mind: 1) you *need* light. 2) you *don't* need direct light. Getting your subject to stand in non-direct sunlight (best) or non-direct artificial light (second best), can make the difference between a bad photo and a good one.

No Zoom For You



Optical zoom is great, but when it comes to phone cameras, you're pretty much stuck with digital zoom. This means the optics of the camera don't actually change, the image doesn't actually come any closer. Rather, digital zoom basically takes the portion of the image you're aiming at, and expands it to fit the entire screen, much like you would zoom in on your computer. When you do this, you get lowresolution images, which are of lower quality than non-zoomed ones. So use your legs and hands instead, and just get closer to your subject. If you must use your zoom to get your subject in sight, you might want to give up on this photo altogether.

Steady Does It



This goes without saying, but it's still important to keep in mind. When using any camera, and especially a somewhat inferior one, you want to keep your hands as steady as possible. Try leaning your elbows or hands on a steady surface while taking your photo, you'll be surprised at the difference this can make.

White Balance

Many phone cameras and apps come with the option to control white balance. Adjusting your white balance makes sure the colors you capture are as accurate as possible, considering the lighting you have available. White balance controls usually include an "auto" option, and other options such as "daylight", "cloudy", "fluorescent", "incandescent", etc. While the "auto" option is sometimes good enough, you can get much better results when adjusting the white balance to match your lighting. So if you know you're going to be taking several pictures indoors under a yellow light bulb, it could pay off to take an extra minute and adjust your white balance, accordingly.

Get Up Close & Personal



This is an extension of the "no zoom" section, but it's more than just not using your zoom. If you want to take a picture of something, *take a picture of it.* This doesn't apply when taking photos of views and such, but when photographing objects, it can make a world of difference. So don't be lazy! Walk up to the object/group and *take a picture of it.* **Do NOT** stand 20 feet away and think you are going to get a nice, clear picture of what you are photographing. You aren't! CROPPING IS NOT THE ANSWER TO A GOOD, CLOSE-UP, CLEAR, PICTURE!

Avoid Flash



Flash is the source of all evil in the world. Well, at least in the world of amateur **photography**. I'm always amazed at how often cameras "tell" you to use flash when it's really unnecessary. True, phone cameras can't always handle low light, but if you can't do it without flash, you might not want to do it at all. Since I don't have hardware flash on my own mobile device, I used a different one which also has a better camera. The example above is somewhat exaggerated, but it's a good demonstration of how flash can ruin a photo, even when the lighting is not the best.

Filters Are Great, But They Don't Make A Photo

Everyone loves filters. Whether you like the really exaggerated ones, the retro ones or the subdued and minimalistic ones, filters and effects can help you bring the most out of your photos. If used wisely. What they usually can't do, is take a bad photograph and turn it into a good one. So don't rely on filters so save your day – take good photos, and *enhance* them with filters. Don't overdo it, or you end up with a bad photo regardless. It's as simple as that.

Bottom Line

The tips above, when followed, can help you create some beautiful photos with your mobile device. Naturally, it still requires creativity and a good eye, but following some technical pointers is always a good start. But is it worth it? Or are you better off just using a real camera?

CREDIT ACKNOWLEDGEMENTS:

How to Compose a Photograph: 5 Essential Rules to Follow, by Joel Lee

10 Simple Tricks to Boost Your Smartphone Photography, by Dann Albright

How to Take Better Pictures with Your Smartphone's Camera, by Whitson Gordon