

## Your Camera

In this lesson, we'll be taking a look at **Your Camera**.

*Estimated Completion Time: **13 minutes**.*



## Your Camera

***Digital Camera Types.*** Broadly speaking, there are four types of serious digital still cameras.



## Your Camera

**Compacts.** Compact digital cameras are generally small enough to fit in your pocket. The capabilities of these cameras differ quite markedly - from very simple, to quite capable and flexible cameras.

Some are simple point and shoot cameras, that allow very little manual control - while the cameras at the top end of this segment allow you to alter almost all settings related to how photographs are taken.





## Your Camera

*Large Zooms.* Large zoom cameras are generally a little larger than compacts, and generally allow much more optical zoom.

While they still only use a single lens, these cameras will allow you to zoom in a lot closer. They also allow much more control over camera settings - such as aperture, shutter speed, ISO, etc, than compact cameras.



## Your Camera

**DSLRs.** DSLRs (*digital single lens reflex* cameras) are the digital equivalent of the old single lens reflex cameras.

These are more expensive, larger, and are the type generally used by professionals and enthusiastic amateurs.

DSLRs allow complete control over camera settings. They also allow lenses to be removed and replaced with specialized lenses.





## Your Camera

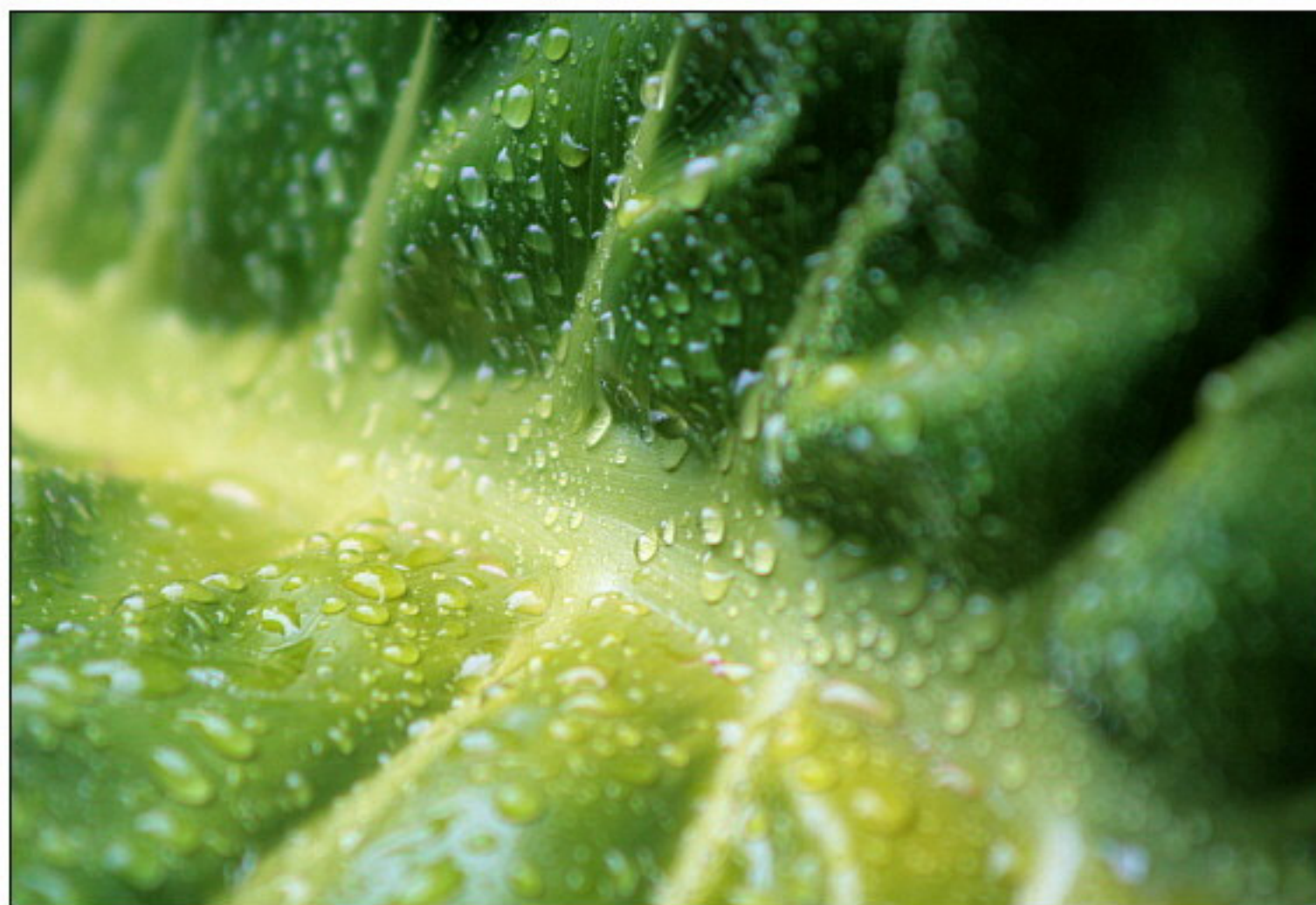
**DSLRs.** The fact that lenses can be removed and special ones used is advantage enough in itself. It can really increase the range of the sort of photos you can take.

It does mean, however, more equipment to carry, especially if you have more than one or two lenses.



## Your Camera

Many DSLRs are getting smaller - the new mirrorless DSLR cameras are rivaling the size and portability of compact cameras, with the added flexibility of lighter, interchangeable lenses, lots of control, and high quality photographs.



*The quality and control available with DSLR cameras can be hard to match...*



## Your Camera

**Phone Cameras.** Technically, phone cameras are probably their own category of camera. These generally allow the least control over how photographs are taken, although even these are improving.

The real advantage of phone cameras is their immediacy. They are always there. You've always got them. And you can use the techniques you'll learn here to improve these shots as well.





## Your Camera

***Your Camera.*** Whatever camera you have, the techniques and ideas you'll learn in the following lessons will apply.

Some of the photographic features we talk about may not be available on your camera - but not too mind - it all makes interesting reading - and who knows what camera you'll get next.

But no matter what camera you have, you can improve the photos you take.



## Your Camera

In the following steps, we'll look at some camera components that are common to all cameras (excepting phone cameras).





## Your Camera

Externally, the **front** of cameras haven't change a lot in quite a while. They all contain the same base elements...

**Viewfinder.** *This is one element that on many digital cameras has been removed. This is normally used to look through to frame your picture, but some cameras have removed this and replaced it with a digital viewfinder on the back of the camera.*



**Lens.** *The main photographic apparatus, and a main determinant in the quality of photographs.*

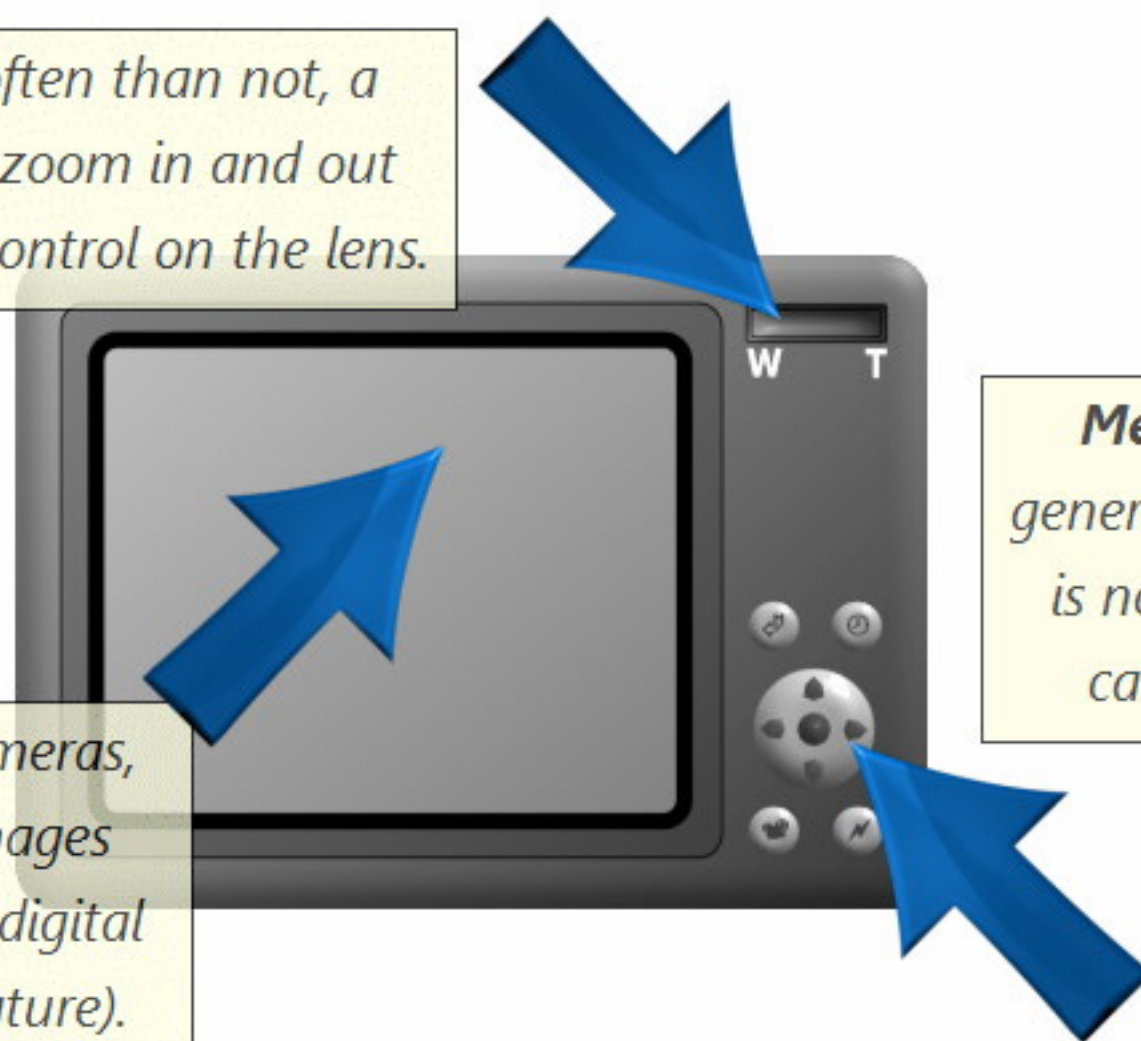
**Flash.** *Used for night time and situations where fill in light would help.*

## Your Camera

The **back** of the camera, on some models, may contain an optical viewfinder as well. This is becoming rarer and rarer on compact cameras.

**Wide Angle/Zoom Settings.** More often than not, a wide angle/zoom switch allows you to zoom in and out on an image. Some cameras have this control on the lens.

**Digital Viewfinder.** In most cameras, allows you to view and frame images before and as taking them (some digital SLR cameras do not have this feature). Also allows you to review and perform operations on photographs already taken.



**Menu and Other Controls.** These features are generally unique to each camera, or brand, but there is normally a series of controls allowing you to set camera settings, and perform other operations.



## Your Camera

The **bottom** of the camera may also contain an area to insert batteries. Some models have the SD memory card slot along the bottom of the camera as well...



**Tripod Mount.** *The bottom of the camera contains the tripod mount, used to attach the camera to a tripod for steadier shooting.*

## Your Camera

On either, or both **sides** of the camera, you'll find some combination or subset of the following controls.

**AV Out.** This allows you to connect the camera to a television set - the 'old' way, to displays photos, and perhaps video.

**USB.** Connects the camera to a computer to offload the photos.



**Memory Slot.** Where the memory card is inserted.

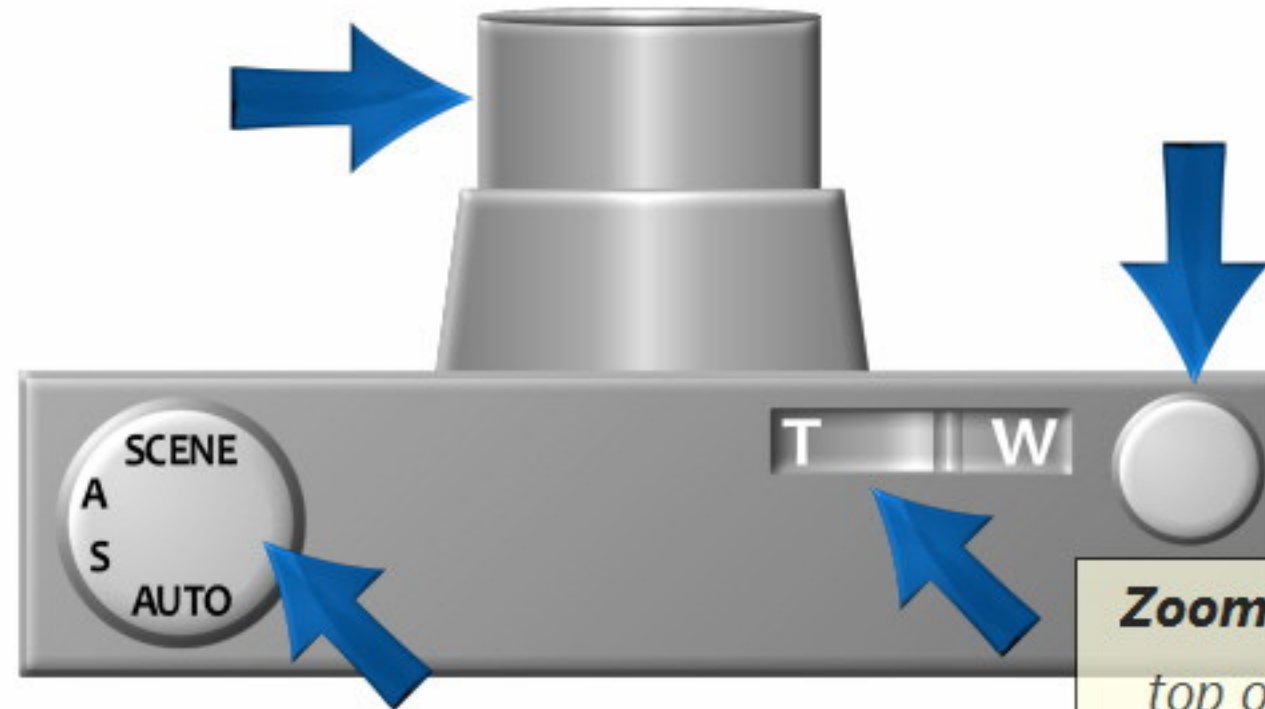
**HDMI.** This allows you to connect the camera to a television set - the 'new', higher definition way. This requires a Hi-Def HDMI compatible television to work.



## Your Camera

On top of the camera, you may find a range of controls, dials and switches.

**Lens.** *The lens will differ dramatically, based on the camera you have. Generally, the size of the lens will correspond with just how far it can zoom in. Many lenses can expand and contract automatically.*



**Shutter.** *The button used to take your photographs.*

**Controls.** *Generally found on the top of the camera is a dial that will allow you to change camera modes.*

**Zoom controls.** *Zoom controls may be found on the top of the camera, at the back of the camera, or on the lens itself. These allow you to move from wide angle, to telephoto (zoom).*

## Your Camera

The **viewfinder** gives you an idea of what the photo will look like, and allows you to frame the image, and preview certain effects.

Most cameras these days - particularly compacts, have digital viewfinders, which give a reasonably accurate idea of what the photo will look like - but you never can tell, until it is taken.



*On the left, you see the fairly standard viewfinder, on the back of the camera. On the right, you can see the rotatable viewfinder found on some cameras. These can often be rotated not just to allow you to photograph from above, but even rotated 180 degrees to allow you to take photos of yourself.*



## Your Camera

Some **DSLR** cameras do not have a digital viewfinder at all - just the same optical viewfinder that has been on cameras for years. This is partly to save batteries - a large viewfinder really chews through batteries, but also to please diehard veterans that have been using optical viewfinders for years.

While an optical viewfinder may not display exposure as accurately as a digital one, it is much easier in an optical viewfinder to determine what is in focus, and what is not.



## Your Camera

Some cameras have both, and allow you to alternate - in fact, some alternate automatically depending on whether it senses a face close to the camera.

Some optical viewfinders can even determine where your eye is looking, and set the focus on that area.





## Your Camera

Here is another tip about your viewfinder. The viewfinder is generally small, compared to the size of the photo, and relatively low resolution compared to the final photo. Because it is so small, photos as viewed on the viewfinder may be in focus - but when you see them back on your computer later on, you realize they are not in focus.

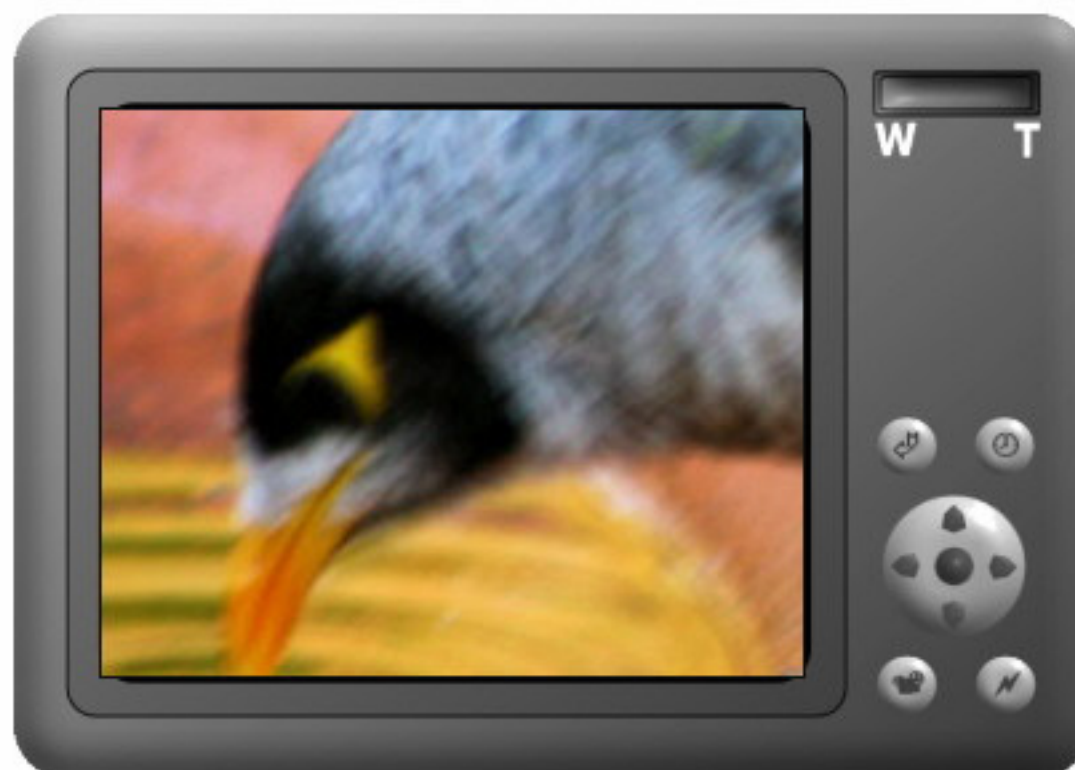


*In the viewfinder - the photo looks sharp. In reality, it may be blurry.*

## Your Camera

Two tricks will help you here - one - take a lot of photos. Much more chance one will be in focus.

Second, when reviewing your photos in the camera viewfinder, use the camera controls to zoom in as far as possible on the subject. This gives you a much better idea of whether it is in fact in focus.



*Use the camera review features at full zoom to ensure your images are sharp.*

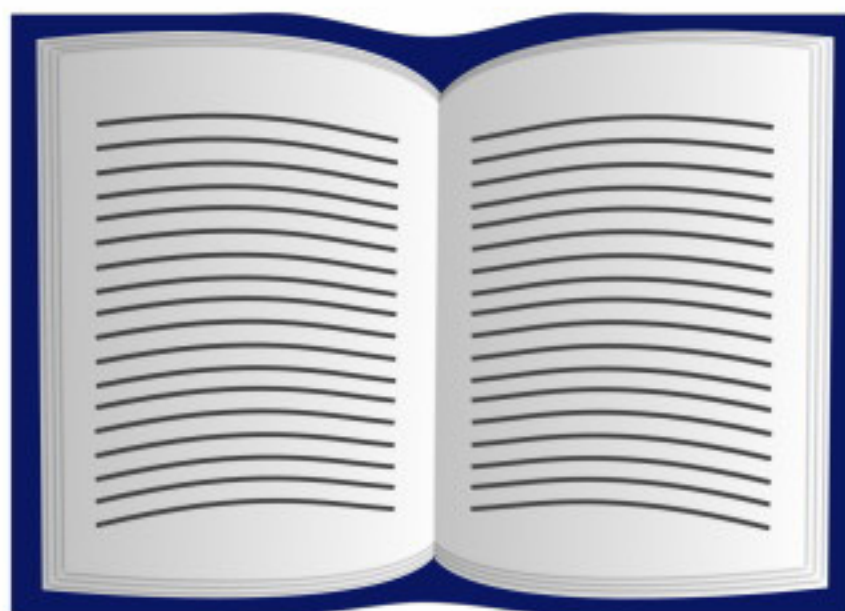


## Your Camera

All cameras will have a range of settings, buttons, and menu functions. I recommend spending some time with the camera, and the manual, getting to know what these buttons do.

When you're out in the field, and you want to use a function, the manual is not going to be there.

If you can't find the manual - try a search online. Manuals for almost everything can be found online these days.



## Your Camera

Most cameras, these days store images and video on SD memory cards - although some other types of memory cards around.

These cards can be removed and inserted into your camera into a memory card slot. Card sizes vary from around 1Gb, right through to 16Gb and more. The more the card holds, the more photos it holds, and the more expensive it is.



*Although it differs from camera to camera, most memory cards are going to store up to several thousand photographs - more than you are likely to need.*



## Your Camera

To get photos from your camera, to your PC, you use one of two techniques. I recommend **Method 2**, if you have an SD slot in your computer. This method is more straightforward, quicker, and saves camera batteries.



**Method 1.** *You can connect your camera directly to a USB port on your computer.*



**Method 2.** *Take out the SD memory card from the camera, and insert it into the computer (most modern computers have an SD memory card that will match the slot on your camera).*

## Your Camera

Many cameras, particularly phone cameras, allow you to beam - using a variety of techniques - directly from one device to another. So you can beam your photos, perhaps using Bluetooth, directly to your computer.





## Your Camera

Here's another good tip - get a cheap 1Gb or 2Gb spare card, and keep in your wallet, or purse, or camera bag.

It *will* come in handy one day.



## Your Camera

Lenses are prone to smudges - particularly fingerprints. Ensure you keep your lens clean, and check it before taking any photos. Use a soft cloth, or a special lens cloth to remove any fingerprints.

If you have a lens cap, ensure you use to prevent scratches and smudges.



*Smudges on the lens will result in blurry, or partially blurry photographs.*



## Your Camera

You've now completed this lesson.

In this lesson, we took a look at **Your Camera**.

