Photography is really a story about light. How to capture just the right amount... Not too dark, not too bright, but just right!

What then are the ways of controlling the amount of light captured by the camera?

Shutter Speed
The time the camera's shutter opens to allow in light. The agreed standard speeds are: 1/1000 s ▪ 1/500 s ▪ 1/250 s ▪ 1/125 s ▪ 1/60 s ▪ 1/30 s ▪ 1/15 s ▪ 1/8 s ▪ 1/4 s ▪ 1/2 s ▪ 1 s Decreasing the speed decreases the amount of light by 1/2 (Slower = More)
Aperture
ƒ-stop. Full -stop f-number scale 1.0 1.4 2 2.8 4 5.6 8 11 16 22
Increasing 1 full stop decreases the amount of light by 1/2 (Smaller = more)
ISO formerly ASA
Sensor Sensitivity to light: Standard numbers are 50, 100, 200, 400, 800, 1600, 3200. Increasing one step increases the amount of light by a factor of 2. But, the higher the ISO number, you the more noise you get in the the shadows. (Larger = More)
Exposure Compensation.
Typically the EV compensation ranges from -2.0 EV to +2.0 EV with adjustments in steps of 0.5 or 0.3 EV. (+ = More) (- = Less)
The Flash
Artificial light typically around 1/1000 to 1/200 of a second. Color temperature of about 5500 K to help illuminate a scene. Effect limited to a distance of about 10 feet (Flash = more)

Eh? Then Let the camera do the work...

Automatic. The camera's computer decides... *"Red is grey and yellow white, But we decide which is right. And which is an illusion?"* * Actually the camera decides "what is gray and what is white..."

P **Program.** Does automatic exposure, but allows for Exposure Compensation or changing the Aperture, Shutter Speed and/or ISO

A **(Av) Aperture Priority.** To control depth of field. You choose the aperture setting, and the camera automatically sets the best shutter speed to match the conditions.

(Tv) Shutter Priority. To capture a moving subject. You select the shutter speed and the camera chooses the best aperture for a proper exposure.

Landscape. Sets "focus" to infinity, using the smallest aperture. The image will be sharp in the foreground and background. If you need the camera to be in focus under difficult situations. Try this setting.

Portrait. The camera selects a wide aperture setting, minimizing your depth of field for a blurred background. If the flash is on, it may use the red-eye setting, but verify what your camera chooses.

Sports. Sets a fast shutter speed to freeze the motion. Typically 1/250th of a second.

Macro. Close-ups at amazingly close distances—usually a few inches from the lens. Use macro mode when the little details really count.

Night/ Night Portrait Use a tripod. Sets a slow shutter speed for a long exposure without flash. Night Portrait uses a long exposure to capture the background light and fires the flash to illuminate a subject in the foreground.

Beach & Snow. Bright, reflective locations fools the camera's meter into underexposing the scene. This mode compensates automatically by automatically increasing the exposure value.

Bracket. Camera selects an exposure one stop less and one stop more than the meter reading. You have to press the shutter 3 times. Some cameras can extend the bracket range...

* From the Moody Blues *"Nights in White Satin"*
* actually, the Graeme Edge poem *"Late Lament"*

"*Cold hearted orb that rules the night,*
Removes the colours from our sight.
Red is grey and yellow white,
But we decide which is right."

Photograph, Photograph, Photograph
It's not film, it's digital!