SHELTER PHOTOGRAPHY BASICS

PART 1

THE EXPOSURE TRIANGLE

HEARTS SPEAK®

CREATING A WORLD WHERE NO SHELTER ANIMAL GOES UNSEEN

HEARTSSPEAK.ORG

HOW APERTURE, SHUTTER SPEED, AND ISO *work together*

The 3 Stooges. Charlie's Angels. Rock, paper, scissors. History is full of awesome trios, but our favorite is the exposure dream team, more formally known as the exposure triangle. It's the magical interaction between aperture, ISO, and shutter speed that forms the foundation of a great photograph — a photograph that could connect a homeless animal with a loving family!

If you've been happily snapping away in auto mode, today's the day to nudge that dial to manual and make some magic happen! When you're shooting in auto mode, your camera is deciding the settings for each element of the exposure t riangle — and we're 150% certain that your brain is bigger and better than your camera's. So put on your boss hat on and click it over to manual!

GO AHEAD. BE BOLD. WE BELIEVE IN YOU!

What is exposure?

An exposure is a single release of the camera shutter (taking a picture!). The exposure triangle comprises the 3 main elements that work together to decide how much light is let into the camera sensor, and that, in turn, dictates the resulting image.

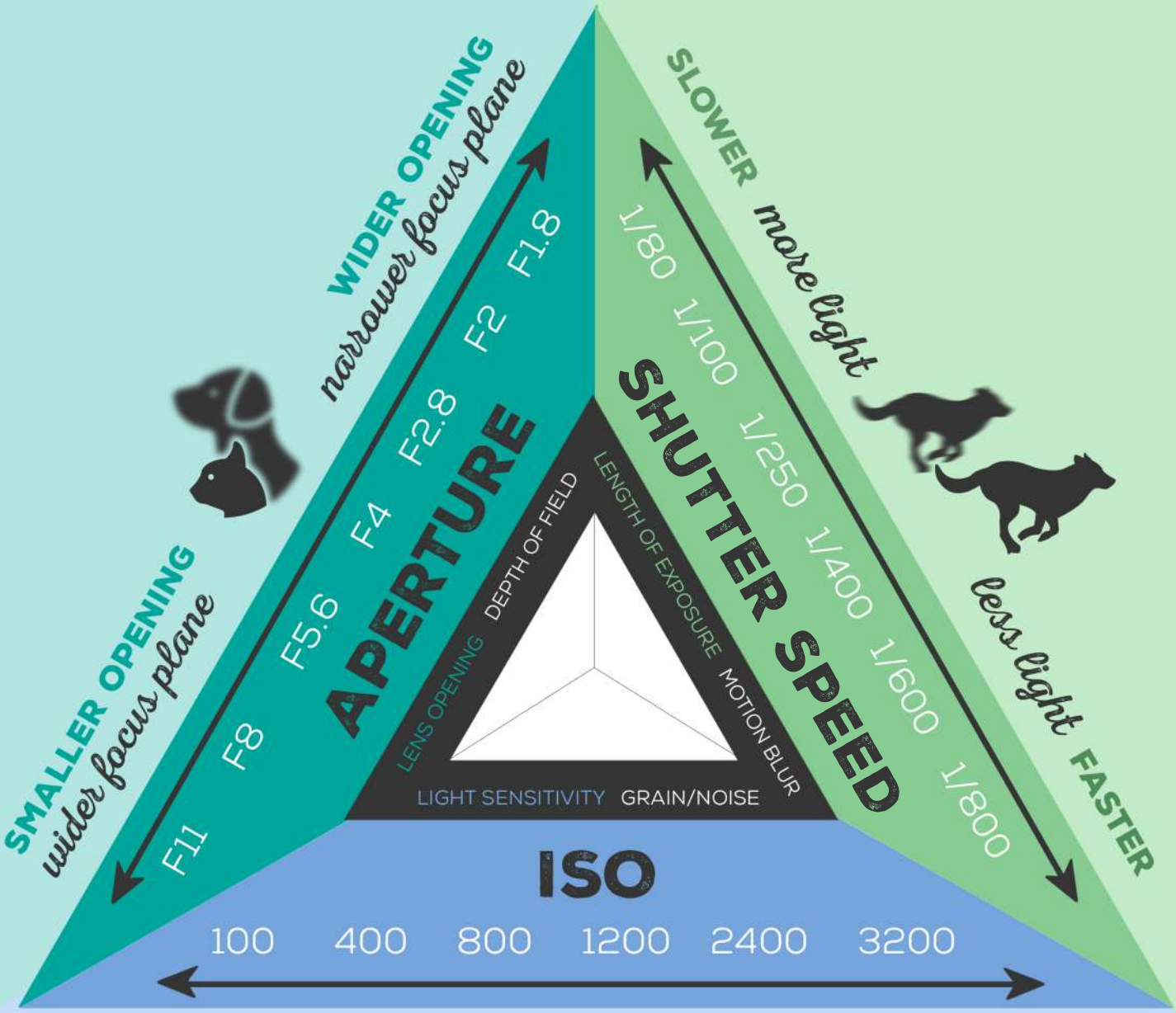
The primary goal with exposure is to maintain as much detail as possible in the darkest and brightest parts of an image. In a correctly exposed photo, you'll be able to distinguish details in both the whitest and blackest areas of the image.

In an underexposed photo, you'll notice a loss of detail in the shadow areas, and important dark areas may appear muddy. In an over-exposed photo, the bright parts will appear washed out or solid white.

A correctly exposed photograph.

SO, LET'S MEET THE DREAM TEAM AND LEARN HOW THEY CAN HELP YOU STEP UP YOUR SHELTER PHOTOGRAPHY GAME!

the EXPOSURE TRIANGLE



BRIGHT ENVIRONMENT
less sensitivity to light

DIM ENVIRONMENT
more sensitivity to light

APERTURE

Aperture controls depth of field or depth of focus. It is the size of the opening that allows light into your lens. It also determines how much of the foreground or background will be in focus. It's the secret to that dreamy background blur, or 'bokeh' that can work wonders in a shelter environment where you may have less control over background clutter or activity. The wider the aperture/opening, the more shallow the depth of focus, which is great for bringing attention to your subject!

The catch with aperture is that a smaller opening is a higher number, also known as an f-stop ('f' stands for 'focal length', and that's what the 'f' means in the diagram above). The aperture range, how low or high you can set your aperture, varies depending on your lens.

Look at that nice blurry fence in the background on the right! It really helps the pup pop out of the frame, doesn't it?

Quick Tip

Another way to create a blurrier background is to move the animal further away from the background. The further the animal is from the background, the less in focus the background will be. The combination of the distance from the background and a wide aperture to help create a shallow depth of field!

SHUTTER SPEED

Shutter speed refers to the length of time the camera's shutter stays open while the picture is being taken. The faster the shutter speed, the briefer the period of time the shutter stays open and the less light is allowed into the camera. The slower the shutter speed, the the longer the period of time the shutter stays open and the greater the amount of light entering the camera.

A slower shutter speed may make it harder to freeze motion and your image may appear blurry. We recommend a minimum shutter speed of 1/160 in a shelter environment. Want to get a great action shot of a dog running or a cat jumping? Aim for a shutter speed of 1/800 or higher!

Remember:
A higher shutter speed allows you to freeze things in motion — like happy tails or jumping cats!

1/25

1/320

ISO

ISO is the sensitivity of the sensor to light. For example, when you first walk into a dark room you can't see as well, but after a minute or two your eyes adjust. They're becoming more sensitive to the light and you start to see more. That's your eye raising it's own ISO. How cool is that?!

Typically, you will change your ISO when you change locations — especially indoor to outdoor.

less sensitivity to light

100 200 400 800 1600 3200 6400

more sensitivity to light

LOW LIGHT CONDITIONS:
Shooting in low light conditions, such as indoor natural light photography, will require you to use a higher ISO.

GOOD LIGHTING CONDITIONS:
Photographing animals with studio lights or with plentiful outdoor light will allow you to use a lower ISO.

Low lighting conditions
= HIGHER ISO

Good lighting conditions
= LOWER ISO

REAL-WORLD EXAMPLES
to inspire

correct exposure

Underexposed

TOO DARK, LOSS OF DETAIL IN BLACK AREAS

correct exposure

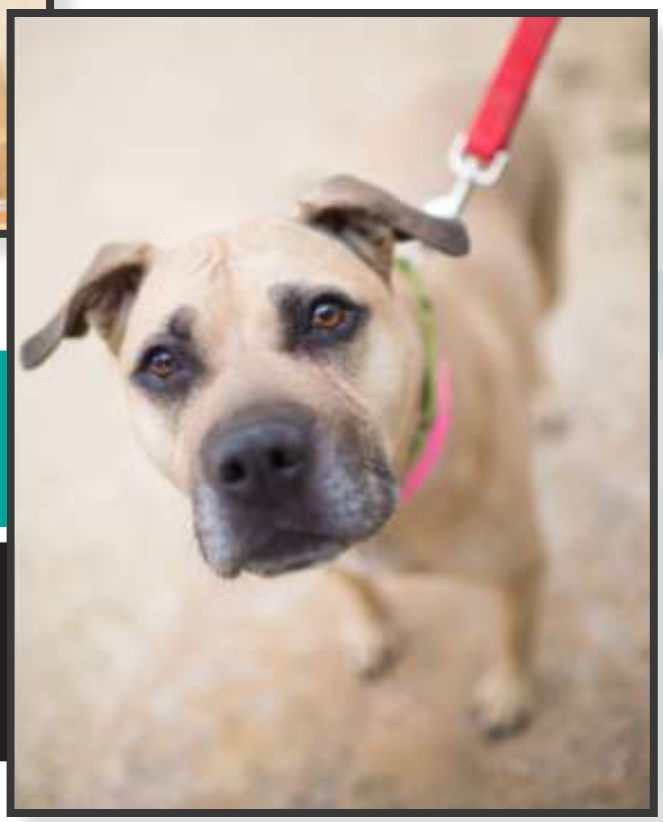
Overexposed

TOO BRIGHT, LOSS OF DETAIL IN WHITE AREAS

REAL-WORLD EXAMPLES
to inspire

APERTURE: **F2.8**
SHUTTER SPEED: **1/100**
ISO: **320**

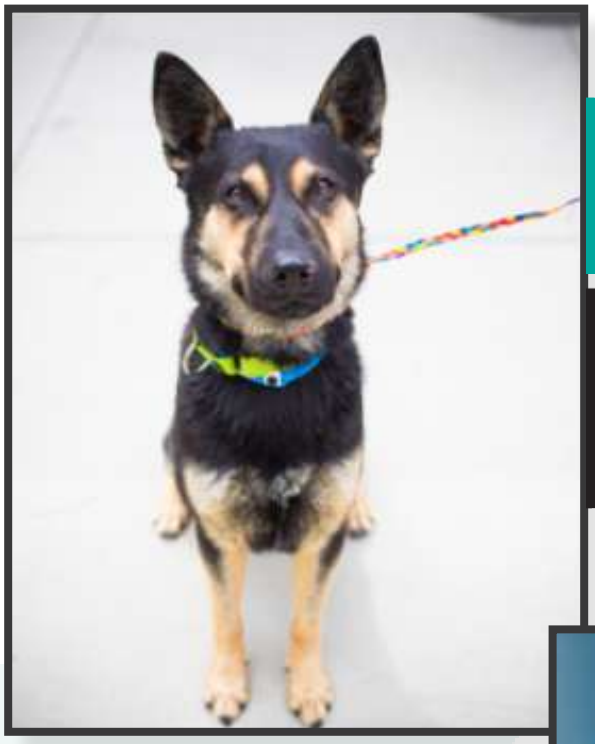
APERTURE TO BLUR THE BACKGROUND



Setting:
OPEN SHADE
OVERCAST

APERTURE: **F1.4**
SHUTTER SPEED: **1/5000**
ISO: **400**

REAL-WORLD EXAMPLES
to inspire



Setting:
OVERCAST
BRIGHT

APERTURE: **F2.5**
SHUTTER SPEED: **1/2500**
ISO: **200**

Setting:
OPEN SHADE

APERTURE: **F2**
SHUTTER SPEED: **1/400**
ISO: **100**

REAL-WORLD EXAMPLES
to inspire

Setting:
FREE-ROAM ROOM

APERTURE: **F2.8**
SHUTTER SPEED: **1/250**
ISO: **640**

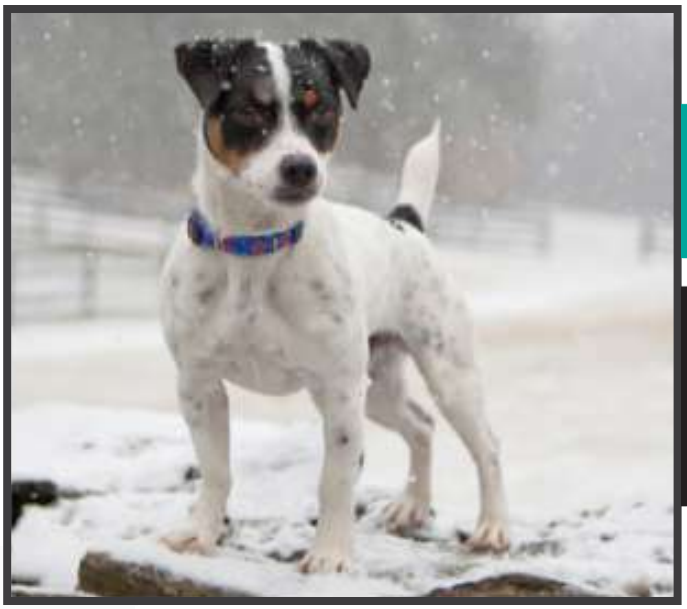
Setting:
FREE-ROAM ROOM

APERTURE: **F3.2**
SHUTTER SPEED: **1/200**
ISO: **2000**

Setting:
FREE-ROAM ROOM

APERTURE: **F3.2**
SHUTTER SPEED: **1/250**
ISO: **1000**

REAL-WORLD EXAMPLES
to inspire

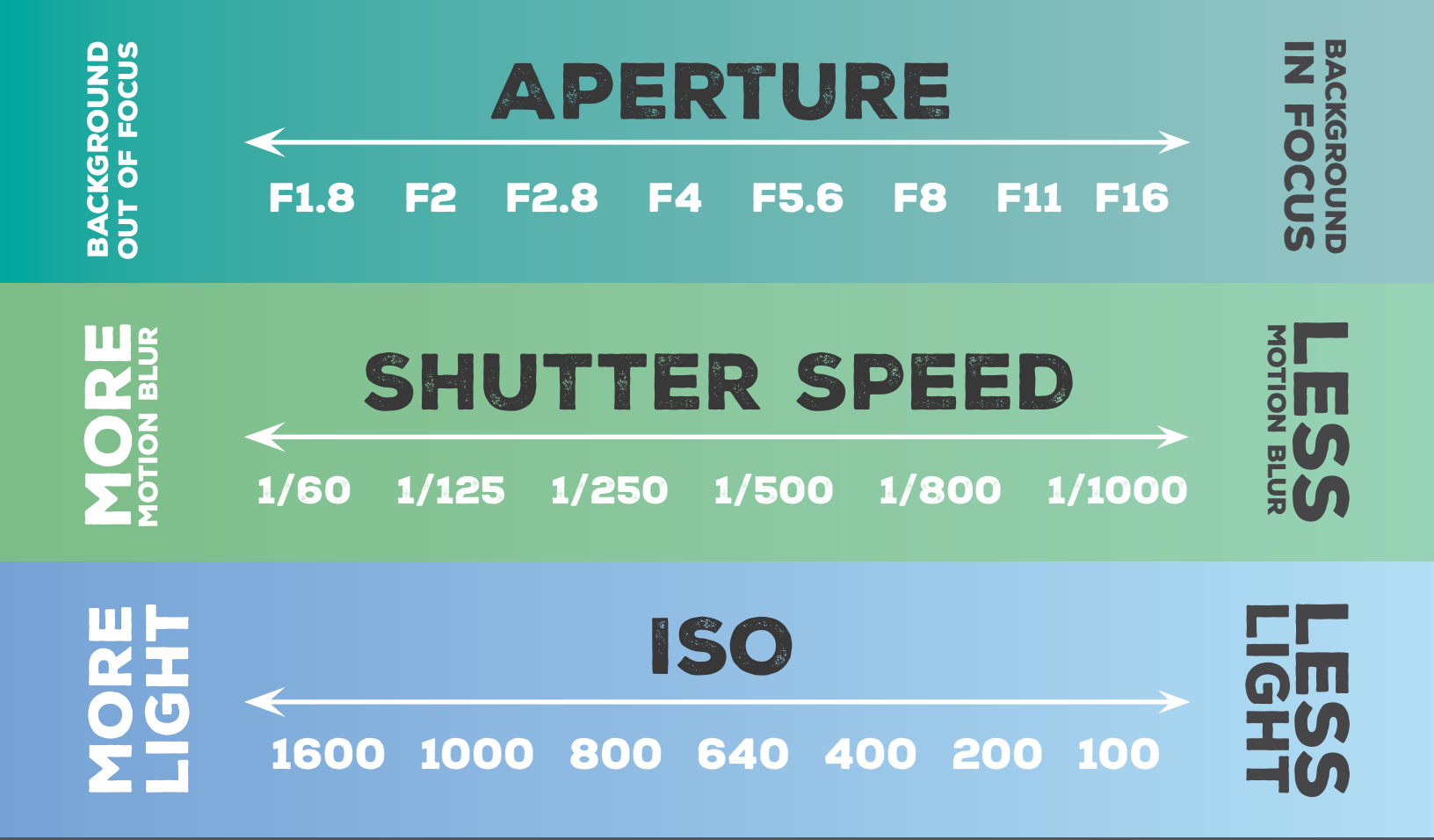


Setting:
SNOW

APERTURE: **F2.8**
SHUTTER SPEED: **1/1000**
ISO: **200**

Setting:
FREE-ROAM ROOM

APERTURE: **F3.2**
SHUTTER SPEED: **1/200**
ISO: **3200**


BACKGROUND OUT OF FOCUS
APERTURE
F1.8 F2 F2.8 F4 F5.6 F8 F11 F16
BACKGROUND IN FOCUS
MORE MOTION BLUR
SHUTTER SPEED
1/60 1/125 1/250 1/500 1/800 1/1000
LESS MOTION BLUR
MORE LIGHT
ISO
1600 1000 800 640 400 200 100
LESS LIGHT