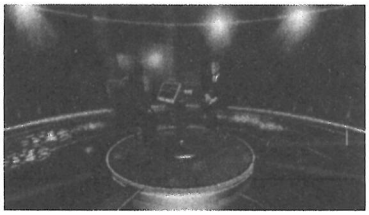
The Great Photography Knowledge Quiz

3rd edition, Part- 1



by Clem Wehner

PRINT SIZES VS. MEGAPIXELS

Megapixels / Print Size	8	12	16	18	24	36	40
5x7"	✓	✓	✓	✓	✓	✓	✓
8x10"	✓	✓	✓	✓	✓	✓	✓
11x14"	✓	✓	✓	✓	✓	✓	✓
16x20"	X	✓	✓	✓	✓	✓	✓
16x24"	X	✓	✓	✓	✓	✓	✓
20x30"	X	✓	✓	✓	✓	✓	✓
24x36"	X	X	✓	✓	✓	✓	✓
30x40"	X	X	✓	✓	✓	✓	✓
40x60"	X	X	X	X	✓	✓	✓
Billboard	X	X	✓	✓	✓	✓	✓

✓ Perfect Quality ✓ Good Quality X Low Resolution

Q. When printing a large print it is best if the photo was taken using:

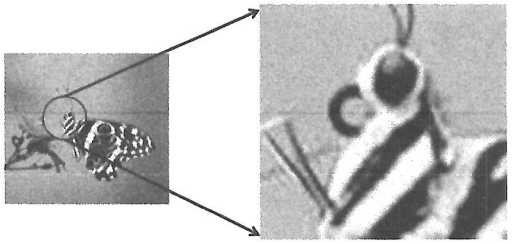
✓a. more pixels

b. larger pixels

c. faster pixels

d. mega pixels

Not enough pixels for enlarging



A. When printing a large print it is best if the photo was taken using:

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Q. To ensure a focused image when hand holding a camera, use a shutter speed that is:

a. double the focal length

b. ½ the focal length

c. equal to the aperture

d. double the ISO setting

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Q. Moving a light closer to a subject:

a. makes the light on the subject brighter.

b. makes the light on the subject dimmer.

c. does not change the brightness of the light on the subject.

d. it depends on the subject's reflectivity.

RULES OF THUMB

HAND HOLDING THE CAMERA

SET SHUTTER SPEED AT LEAST EQUAL TO FOCAL LENGTH
(Ex. 100 mm lens, use 1/100th shutter speed (minimum)

FOR TACK-SHARP FOCUS, DOUBLE THE SHUTTER SPEED.
(ex. 100 mm lens, use 1/200th shutter speed)

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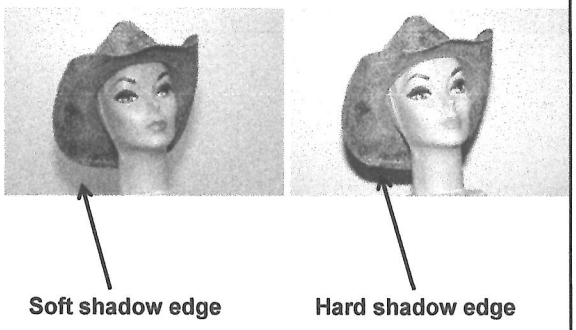

Q. Moving a light closer to a subject:

a. makes the shadows harsher (harder).

b. makes the shadows less harsh (softer).

c. makes no difference in the shadow.

d. makes the shadows darker

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a. makes the shadow edges softer

b. makes the shadow edges harder

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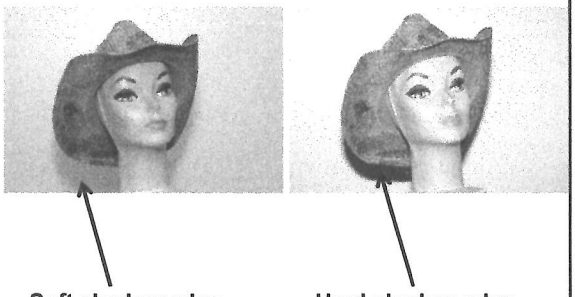
Q. An umbrella is a useful tool because it:

a. softens the light

b. increases light specularity

c. brightens the light

d. softens the shadow edges



Soft shadow edge

Hard shadow edge

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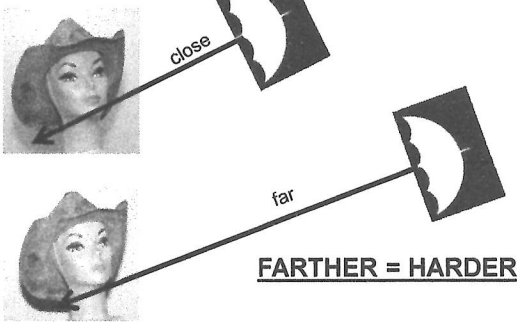
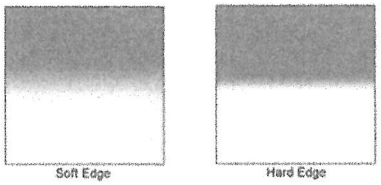
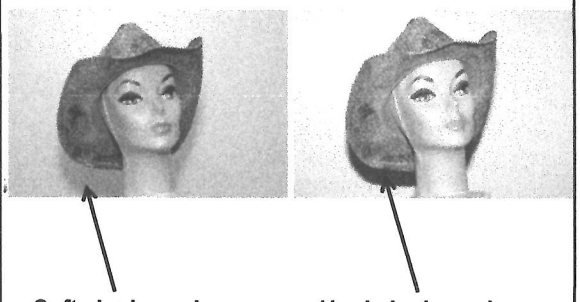






Soft shadow edge

Hard shadow edge

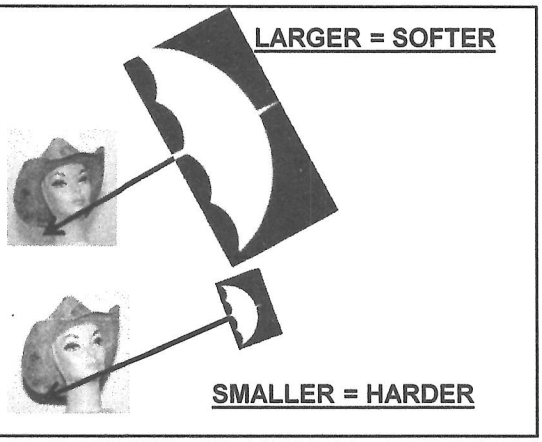
A. A larger light source:

✓ a. makes the shadow edges softer

b. makes the shadow edges harder

c. makes no difference in the shadow.

d. makes the shadow darker



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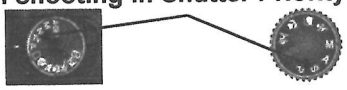
Q. When shooting in Shutter Priority mode:



a. the camera chooses the shutter speed

b. the camera chooses a shutter speed that keeps the subject from blurring

c. the photographer chooses any shutter speed desired

d. Camera sets shutter, photographer sets aperture

EXPOSURE DIAL LABELS

NIKON, FIJI, SONY, OLYMPUS, KODAK, SAMSUNG, PANASONIC

CANON, PENTAX

A – aperture priority ⟷ Av - aperture value

S - shutter priority ⟷ Tv – time value

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a. the camera chooses the shutter speed

b. the camera chooses a shutter speed that keeps the subject from blurring

✓ c. the photographer chooses any shutter speed desired

d. Camera sets shutter, photographer sets aperture

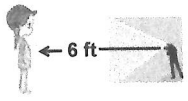
<u>Camera measures the light, then</u>

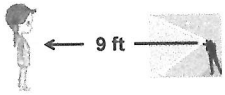
SHUTTER PRIORITY (S, Tv):
You set shutter speed, camera sets aperture.

APERTURE PRIORITY (A, Av):
You set aperture, camera sets shutter speed.

Q. A subject is 6 feet from a light. The exposure is good at f/8. If the subject moves to 9 feet from the light, the f/stop should be changed to:

a. f/4
b. f/5.6
c. f/7
d. f/11





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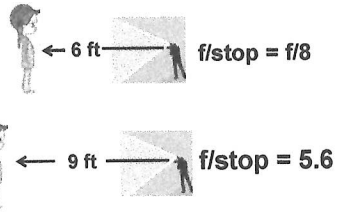
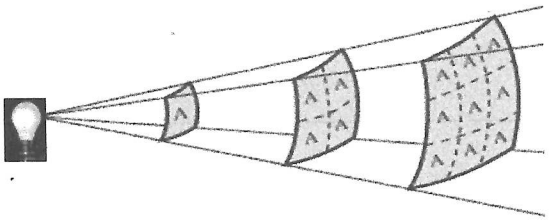


Light Fall Off



Q. A lens designated as a 100mm lens means:

a. the diameter of the lens is 100mm

b. the effective distance from lens to the sensor is 100mm

c. the circumference of the lens is 100mm

d. the focal ratio is 100mm to 1mm

The True f/stops

BIG APERTURE — SMALL APERTURE

f/stops: 1.0 1.4 2.0 2.8 4.0 5.6 8.0 11 16 22 . .

More light comes in — Less light comes in

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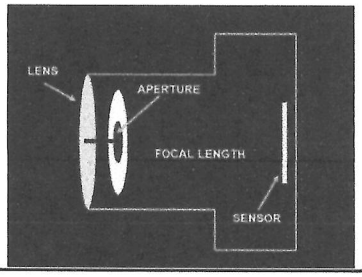
d. the focal ratio is 100mm to 1mm

Focal Length

The effective distance from lens to sensor



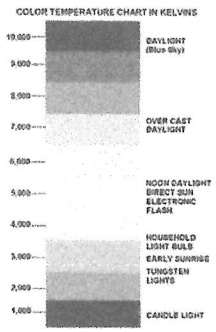
A. If mid-day sunlight is about 5500 Kelvin, which is a "warmer-colored" light?

✓ **a. 3000 K**

b. 7000 K

c. 3000 K, but only if the light is diffused

d. it depends on the color of the subject



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Q. To cause images to be "warmer", change the camera's Kelvin setting to:

a. a lower Kelvin setting

b. a higher Kelvin setting

c. a Kelvin setting equal to the temperature of the light shining on the subject

d. a Kelvin setting no more than 20% below the current setting in the camera

Shifting the Kelvin settings

Can cool down or warm up an image

Lower Kelvin = more blue

Higher Kelvin = more red

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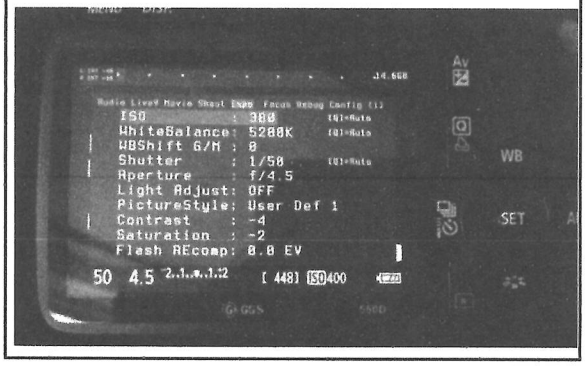
Remember it this way

To make it warmer, raise the temperature

Changing Kelvin for Special Effects



Q. To increase the Depth of Field:

a. zoom in to a close up

b. zoom out to a wider shot

c. change to a higher ISO

d. zoom to a setting equal to the lens focal length

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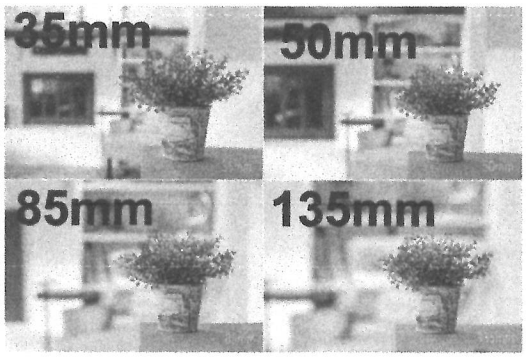

A. To increase the Depth of Field:

a. change f/stop to a lower value

b. change f/stop to a higher value

c. change f/stop to a value less than f/4

d. change f/stop to a setting equal to the proper exposure value

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Small f/stop number = short Depth of Field

(f/1.4, f/2.8, f/4.0)

Large f/stop number = long Depth of Field

(f/11, f/16, f/22)

A. A camera's ISO setting:

a. sets the speed that the camera records the image

b. adjusts the sensor to match the focal length of the lens

✓ c. sets the sensitivity of the sensor to light

d. changes the sensor's pixel size

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Q. Changing the ISO setting from ISO 200 to ISO 400:

a. increases the camera's light sensitivity by 200 times

b. increases the camera's light sensitivity by 50%

c. increases lens aperture by 2 times

d. doubles the camera's light sensitivity

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A. What is the ISO setting at which noise typically starts to be objectionable in an image made with a "cropped" size sensor?

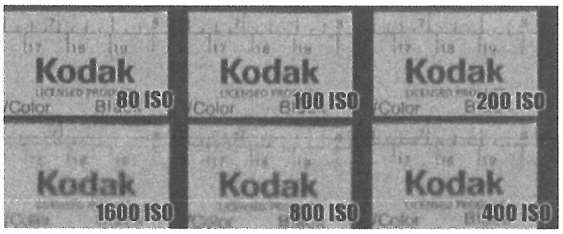
a. ISO 200

b. ISO 400

✓ c. ISO 800

d. ISO 1600

NOISE vs. ISO



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Q. How would you overcome "raccoon eyes" caused by overhead sunlight?

a. Use a lower f/stop to brighten the dark areas

b. Use a higher f/stop to darken the bright areas

c. Use a flash even in bright sunlight

d. Have the subject tilt their head upwards

Q. What is the main use for this panel?

a. to make the light brighter

b. to block light from bouncing off a colored wall behind you

c. to add catchlights in eyes

d. to reduce the amount of light bounced off the ceiling

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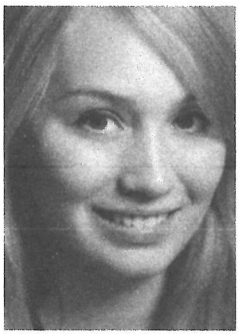
Catchlights add dimension to eyes



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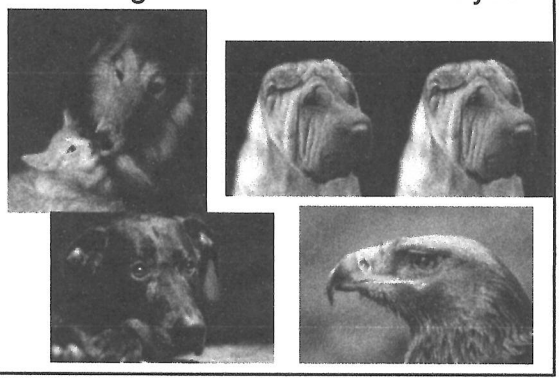


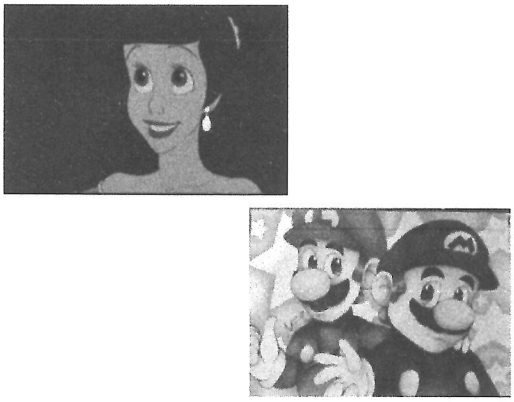
Q. What is the ideal position for catchlights in eyes ?

a. center of the eye

b. 10 or 2 o'clock position in the eye

c. on the same side as the flash

d. 12 o'clock position in the eye



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Ideal Catchlight Positions

10 o'clock

2 o'clock

Don't let nose block the eye

(Also, don't let nose break the cheek line)

No

X

No

X

Perfect!

✓

Q. In portraits, what is a good technique related to the nose?

a. don't photograph noses in profile view

b. don't show both nostrils

c. don't let nose block part of an eye

d. don't photograph a nose straight ahead

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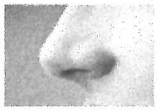

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Q. Why would you hold a flash like this?

a. to check the flash is working

b. to provide light to help the autofocus in a dark room

c. to reduce the amount of light bounced off the ceiling

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A. Where should a person be placed when using a tree to block overhead bright sun?

a. In shadow, near the trunk of the tree

✓b. In shadow, near the outer edge of foliage

c. In the darkest part of the shadow

d. In the sunlight, but near the tree

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Q. Color film was first available in 1935. When was the first color image made?

a. 1877

b. 1933

c. 1940

d. 1961

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d. 1961

FINAL QUESTION

Color image made with B&W "film"

in 1877 !

Using color filters of:

Red

Green

Blue

Q. Generally, which is the best way to expose for this high-contrast scene?

a. Expose for the bright parts

b. Expose for the shadows

c. Expose for the mid-tone parts

d. Expose for the darkest parts

A. Generally, which is the best way to expose for this high-contrast scene?

a. Expose for the bright parts

b. Expose for the shadows

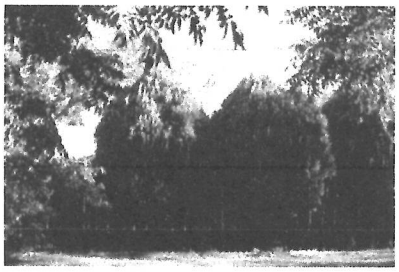
✓ c. Expose for the mid-tone parts

d. Expose for the darkest parts

Exposed for sky

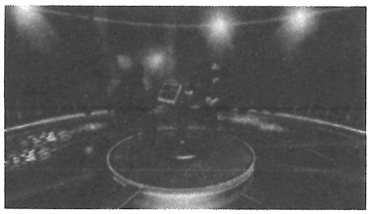
Exposed for shadows

Compromise solution: expose for the middle



This is about the best you can do
Because the scene has more contrast range than the camera can handle.

The Great Photography Knowledge Quiz



3rd edition, part 1