#### **DIGITAL CAMERA**



#### ... understanding the camera and getting better pictures

Adapted 2014 by OK 4-H from original work of Bob Harlan, Kansas Photography Action Team, 2012

#### What is the best camera?







## The one in your hand!

#### Terms to know

- Depth-of-field the area in front of and beyond the point of focus that will still be in focus.
- Exposure The amount of light that reaches the camera sensor.
   Determined by shutter speed and size of lens opening.





## AUTO MODE

- When you just want to point and shoot leaving all the decision making to the camera
- When set to Auto, the camera does everything and locks out any adjustment and makes an average picture.



## PORTRAIT MODE



#### Think shallow depth-of-field

The mode emphasizes the subject by de-emphasizing the background. The camera selects the largest possible lens opening to minimize depth-of-field for a softened background.

## LANDSCAPE OR SCENIC MODE





#### Think large depth-of-field

In Landscape mode, your camera will select the smallest possible lens opening to maximize depth-of-field in the image. Your image will be as sharp as possible under the conditions in both the foreground and background.



## SPORTS MODE OR KIDS & PETS





#### Think fast shutter speed

Speed is the name of the game in Sports mode. Your camera will automatically choose the fastest shutter speed possible, and also will enable continuous high-speed shooting if available.



## CLOSE-UP (MACRO) MODE





#### Think small subject

Macro shots can be an interesting window into a smaller world that we don't usually notice. Macro mode allows you to focus on objects extremely close up.

## NIGHT MODE





#### **Think slow**

Successful night photography requires a slow shutter speed for a long exposure without flash. The exposure may last several seconds, so use a tripod when shooting in this mode or place your camera on a solid platform. Also, be aware that most digital sensors generate image noise during exposures of more than a few seconds.



## NIGHT PORTRAIT MODE OR NIGHT SCENE

#### Think slow with flash

For flattering portraits in dark conditions, you want a combination of flash with a long exposure to pick up ambient background lights. In this mode, the flash fires to freeze the action of your subject amid the lengthened exposure.





#### **FIREWORKS**

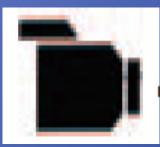
Captures fireworks in the sky sharply and at optimal exposure.





#### PROGRAM MODE

The camera lets you make some of the decisions. The camera selects shutter speed and aperture but allows you to decide what white balance and ISO settings to use.



## VIDEO

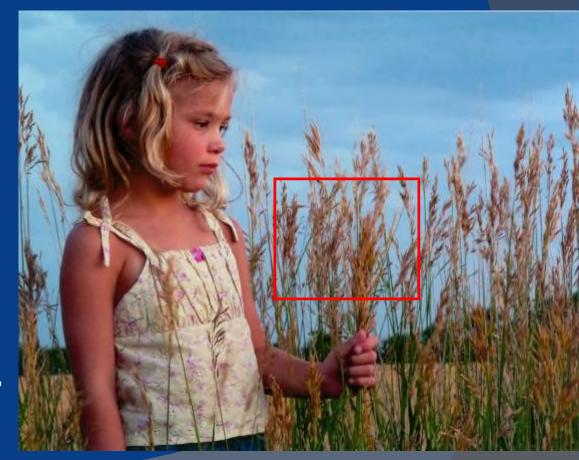
Many digital cameras are capable of taking fairly good video.

#### **ISO Settings**

- Sets the cameras sensitivity to light.
- Cannot be changed when in auto modes.
- Can be changed as you go.
- Higher numbers increase the sensitivity to light.
- More noise at higher numbers.
- Use the lowest number that will give a good exposure.

## Focusing

- Know the auto focus points in your camera.
- Single or continuous auto focus.
- Face detection.
- Use focus lock.
- Try manual focus.



#### White Balance

- Camera adjustment for different kinds of light
- Pre-sets usually give better results than auto
- Use as a creative tool
- Also available on some camera phones
  - AWB Auto White Balance
  - Daylight
  - Shade
  - Cloudy, Twilight & Sunset

- Flash
- Fluorescent
- Tungsten
- Custom

## White Balance Available light for these photos was tungsten



Auto



#### **Exposure Compensation**

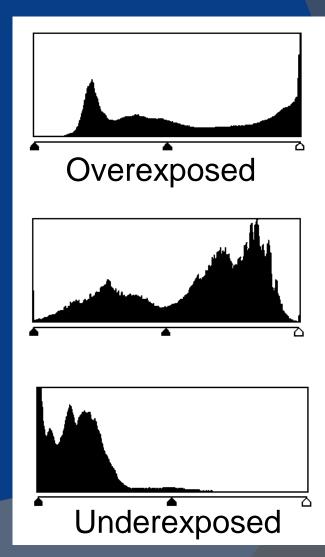
# Standard exposure index

Decreased 
Increased
exposure
Exposure level mark

Exposure compensation is used to alter the camera's standard exposure setting. You can make the image look lighter or darker.

#### Exposure and the Histogram

Checking the exposure on the LCD screen can be misleading when viewed in bright sunlight or in a darkened room



#### Be Ready....

#### Reset to preferred defaults to be ready for the next photo opportunity



## Elements and Principles in Photographic Composition

- The Elements and Principles of Art are used in *making* photographs – not just taking photographs.
- You have to know and understand the elements and principles to see them all around you and capture them in your photos.

ELEMENTS

are the basic building blocks Art

- Line
- Shape/Form
- Space
- Value
- Texture
- Color

#### PRINCPLES of Art

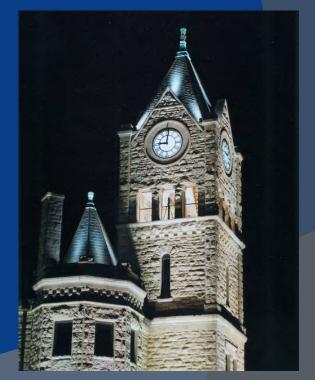
- Emphasis
- Balance
- Unity
- Contrast
- Movement/ Rhythm
- Pattern/Repetition

#### GREAT Photo have...

- Sharp focus
- Strong Subject
- Plain uncluttered background





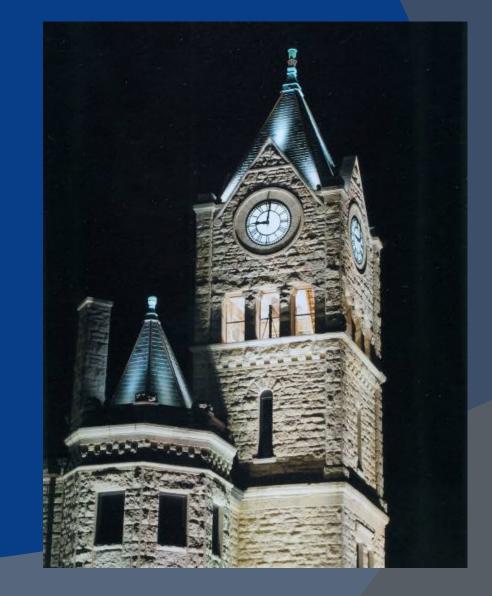


#### Focus

- The sharpest focus should be on the subject.
- The eyes of people and animals need to be sharp.

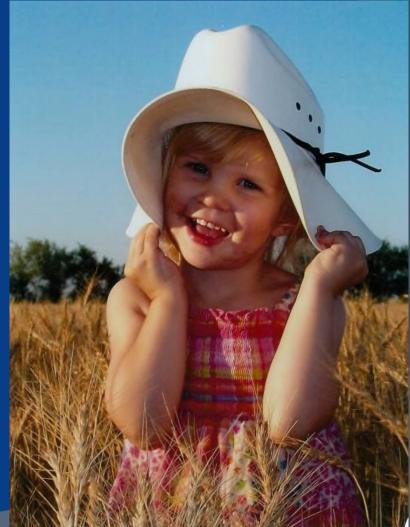


 Fills the frame.
 Leaves no doubt as to what the subject is.



## Plain Uncluttered Background

Background
 should not
 distract from the
 subject.



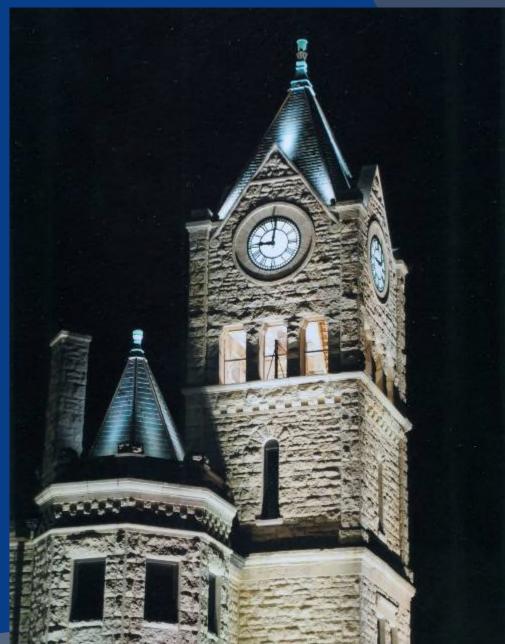
## A GUIDE TO PHOTOGRAPHIC COMPOSITION

**3** 4-H PHOTOGRAPHY

• Fills the frame.

 Leaves no doubt as to what the subject is.







Katy Nuss, Ellsworth Co.



#### Michaela Sellers, Dickinson Co.

#### NOT a Strong Subject



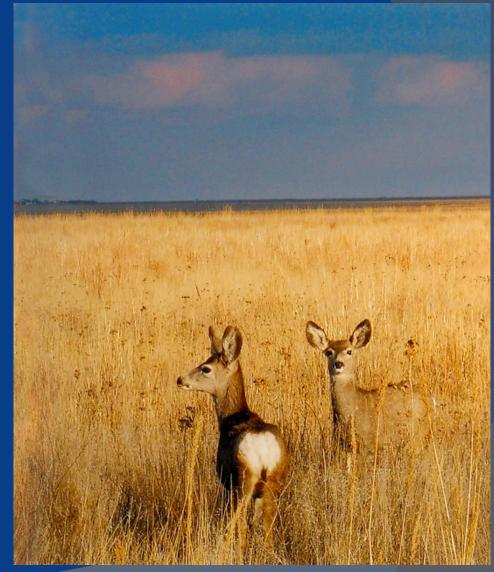
#### **Get Close**



#### Allie Ifland, Smith Co.

### Plain Uncluttered Background

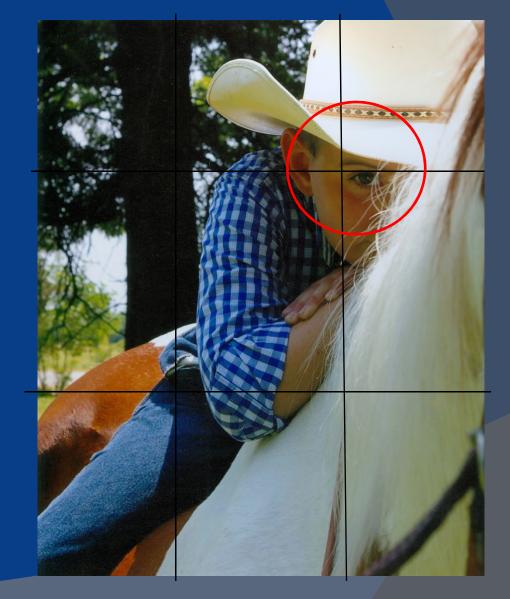
 Background should not distract from the subject.



#### Sydnee Hale, Grant Co.

#### **Rule of Thirds**

Subject can be On or near 1, 2 or 3 of the Intersection of the lines.



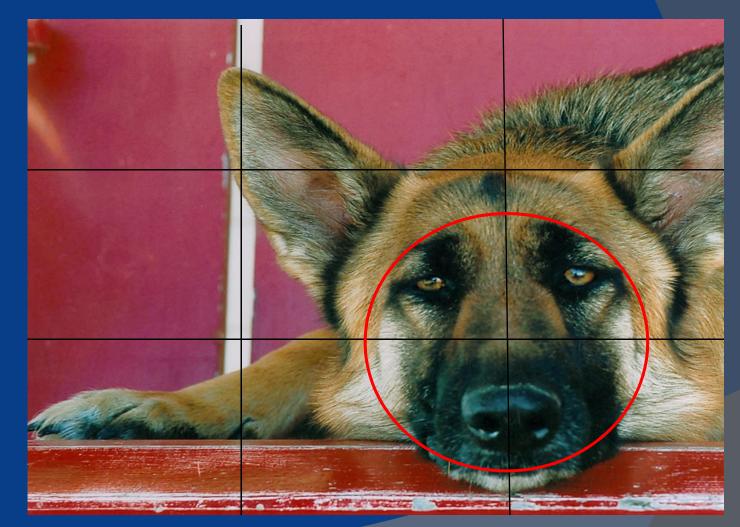
#### Tori Bastion, Crawford Co.

#### Rule of Thirds



Dominic Jirak, Smith Co.

#### Rule of Thirds



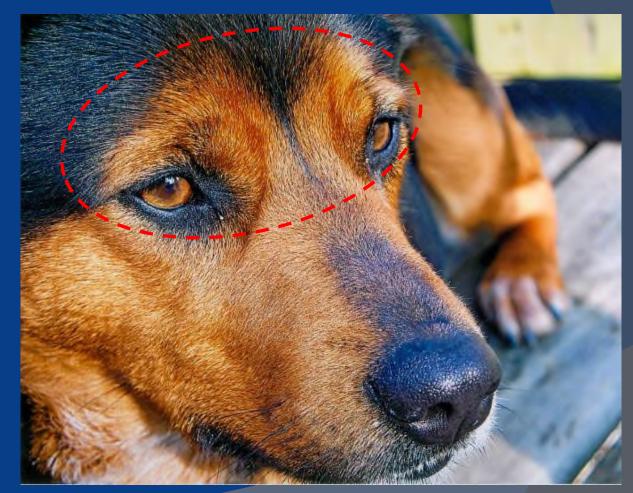
#### Daniel Johnson, Butler Co.

## NOT a Rule of Thirds



## Focus

- The sharpest focus should be on the subject.
- The eyes of people and animals need to be sharp.



### Morgan Poole, Morris Co.

# Horizon

- Better if horizon is not centered.
- Keep it high or low.
- Centered divides the picture in two.



#### Taylor Bunch, Ellsworth Co.

# Horizon



### Karsen Odle, Mitchell Co.

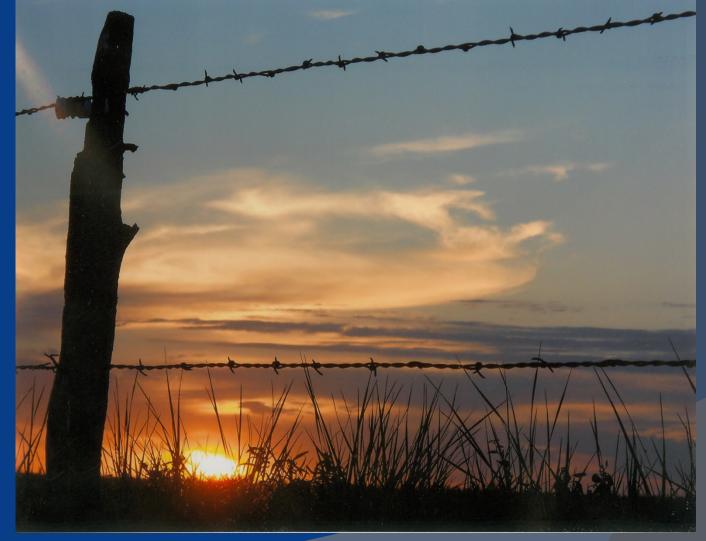
## Front Lighting

The light shines on the side of the subject that is toward the photographer.



Rachel Juenemann, Thomas Co.

# Backlighting



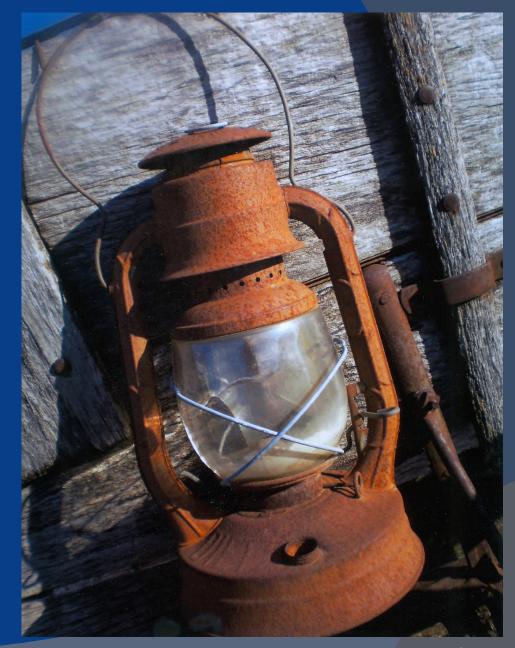
Karsen Odle, Mitchell Co.

# Backlighting



### Stacy Cox, Butler Co.

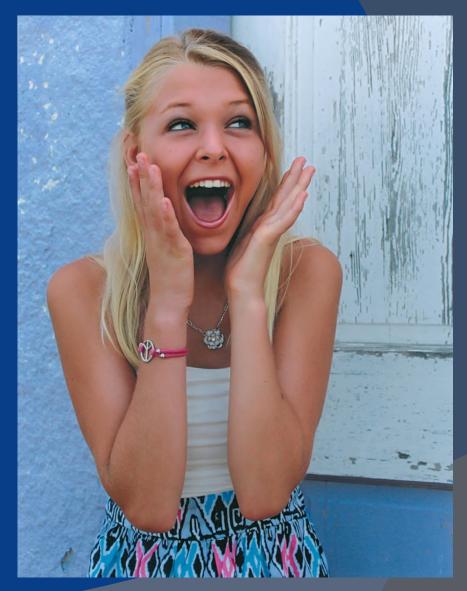
## Backlighting Shows the texture of the subject better and adds depth to the image.



#### Kimberly Doman, Barber Co.

# Diffuse Lighting

Soft light, no distinct shadows, can be found in shade, indoors near a window or on cloudy days.



Katelyn Niehues, Nemaha Co.

# Diffuse Lighting

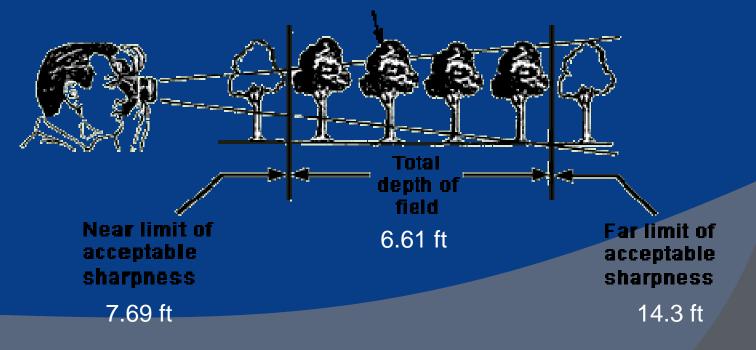


Marcus Resco, Cloud Co.

## Depth-Of-Field

 Depth-of-field – the area in front of and beyond the point of focus that will still be in focus

Focus at the subject distance, 10 ft



## Shallow depth of field



#### Dillon Mccosh, Ottawa Co.

## Large depth of field



### Abigail Bauer, Cowley Co.

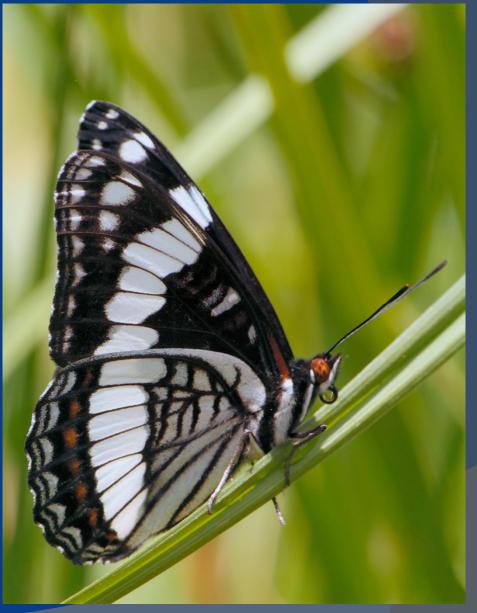
## Framing

Use objects to frame the subject to direct the viewer to the subject.



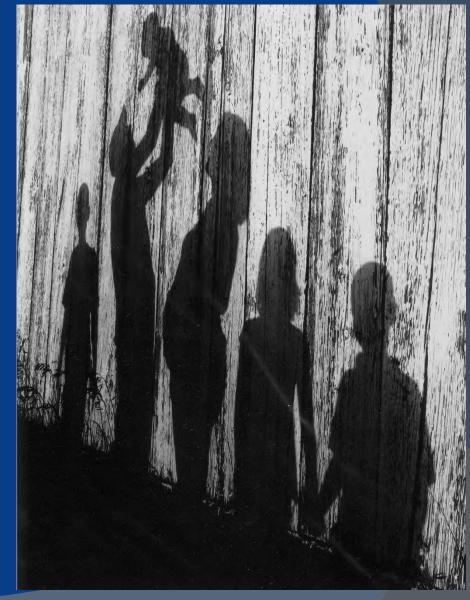
#### Ann Clawson, Meade Co.

## Angles Make photos more pleasing.



Wade Stroda, Riley Co.

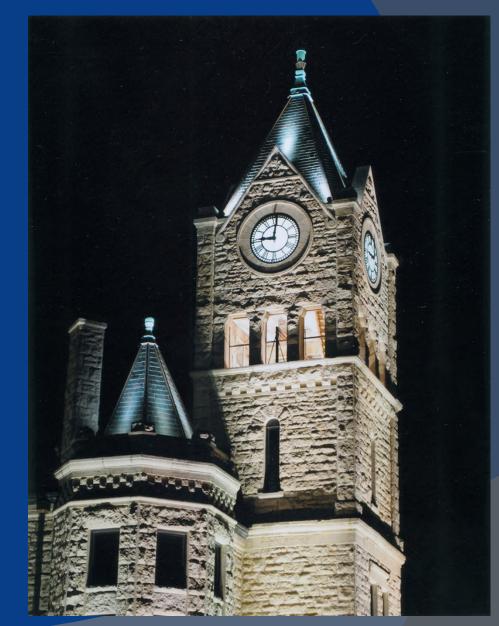
# Angles



### Grant Fincham, Marshall Co.

# Angles

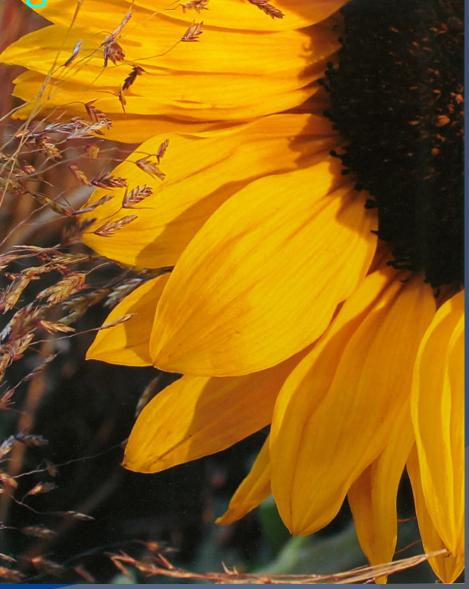
Show buildings at an angle to show depth.



### Kaylee Littrell, McPherson Co.



Allison Simon, Greenwood Co,



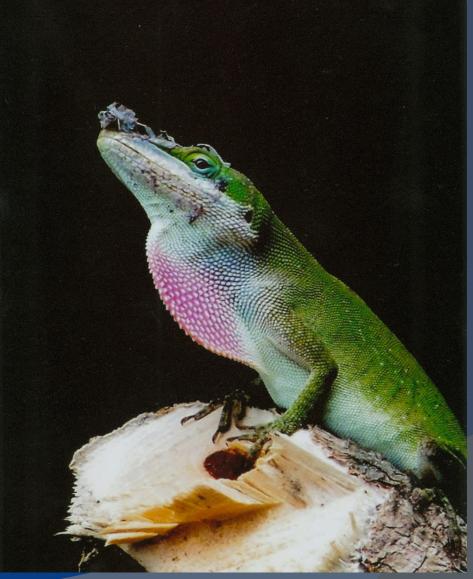
Adam Lattin, Montgomery Co.



#### Anna Wenner, Shawnee Co.



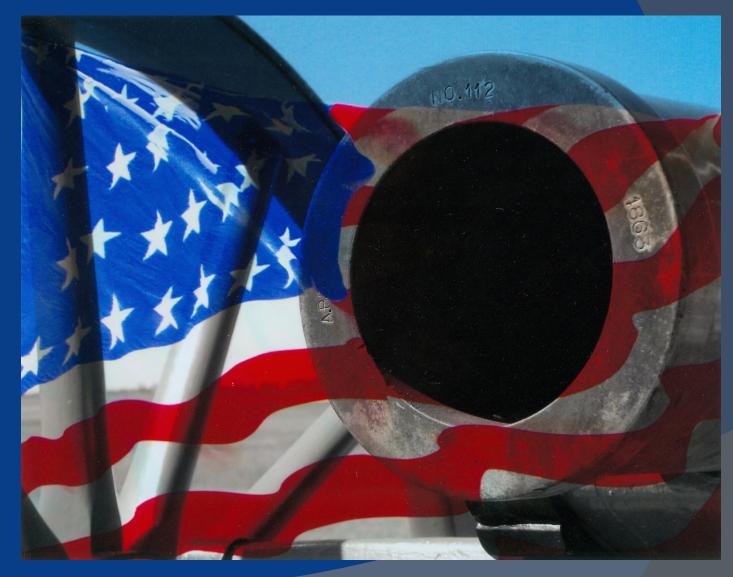
### Erin Leach, Leavenworth Co.



### Brooklyn Storrer, Allen Co.



### Shandle Ratzlaff, Clark Co.

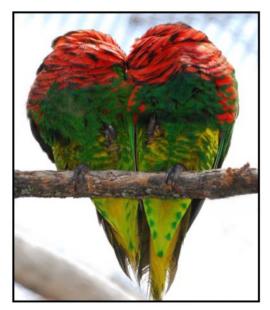


### Shiloh Murray, Pratt Co.



### Anthony Fallett, Cowley Co.







## What makes the picture good? What story can be seen in these photos?



What makes the picture good? Tell me about the photo composition of these pictures?



What makes this picture good? Tell me how the elements and principles of arts applied to these pictures.

