

BOOK 2
[Next Level
Photography]

PHOTOGRAPHY



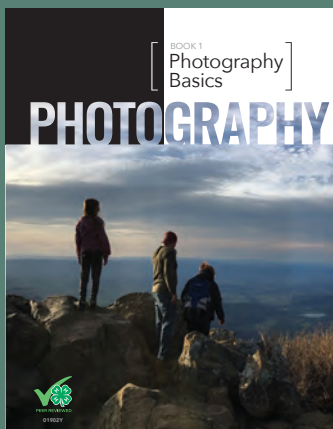
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For more on photography.....
Look for other guides in this series.

These books are available from the National 4-H Supply Service,
Shop 4-H, www.Shop4-H.org

BOOK 1: PHOTOGRAPHY BASICS



Equipment

- First Photo Shoot
- Keep it Steady, Keep it Level

Lighting

- Light Makes a Difference
- Fun with Shadows
- Flash for More Light

Composition

- What Do You See?
- Photograph With Your Feet
- What's the Point?
- Bird's Eye (or Bug's Eye) View
- Hat Tricks and Magic
- The Art of Taking a Selfie

Skill Building

- Taking Great Photographs
- Telling a Story
- Black and White
- You be the Judge

BOOK 3: MASTERING PHOTOGRAPHY



Equipment

- You Take Control - The Mode Dial
- What's in Focus?

Lighting

- Low Light Challenges
- You Take Control - Smartphone Exposure Tips
- Shooting Silhouettes

Composition

- Through the Lens
- Harmony Or Discord?
- Still Life Photography
- Studio Portraits at Home

Skill Building

- Testing Your Skills
- Freeze the Moment
- How Did They Do That?
- Create a Joiner!

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Many photographs in this book were
contributed by photography students and their
instructor/co-author Scott Wittenburg at Upper
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was a unique year-long process where students
and their instructor engaged collaboratively
in the development of this book by examining
the essential learning taking place in each
project area then identifying the types of images
needed to further the learning along the way.
Students shot a variety of photographs as actual
course assignments with the most appropriate
images selected for publication along with the
contributor's name adjacent to each photograph.

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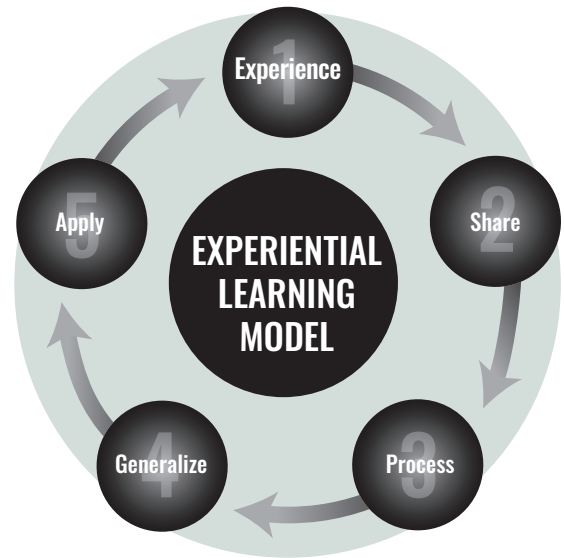
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NOTES TO THE PROJECT HELPER

This 4-H project book is designed for youth to explore and complete under the guidance of a Project Helper. This can be a parent, relative, knowledgeable adult, project leader or family friend. The duties of this individual begin with helping the child create and carry out a project plan. This is followed by helping the child Focus on each activity in his/her project plan, providing Support and Feedback for the learning taking place, and conducting Debriefing sessions to determine what was done well, what could have been done differently, and where to go from here.

The information and activities contained in this book are arranged in a unique experiential fashion (see model). In this way, youth are introduced to a particular practice, idea or piece of information through an opening Photo Shoot (1) Experience. Following this, youth take the opportunity to (2) Share what they did with their Project Helper and (3) Process the experience through a series of questions allowing the learner to (4) Generalize and (5) Apply the knowledge and skills gained. Project Helpers also provide encouragement for the learner to extend the experience by taking on one of the Challenge Yourself activities in each activity section.



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Project Helper Expectations

- Review the Learner Outcomes (Photography Skill, Life Skill, Educational Standard and Success Indicator) on the lower left-hand side of each activity to understand the learning taking place. Each activity in this book is tied to a specific National Education Standard. See the inside back cover for a summary of these standards along with the goals and outcomes for this project.
- Become familiar with the Background sections and Photo Shoot activities contained in this book. The background information is intended to enlighten the Project Helper as much as the learner. Stay ahead of the learner by trying out activities beforehand.
- Begin the project by helping the learner establish his/her plan for the project. This is accomplished by reviewing and completing pages 4-7.
- Conduct a debriefing session allowing the learner to answer Review questions and share results. This will improve their understanding about what was learned for an experiential perspective and the particular life skill and photography skill that were practices.
- Encourage use of a photo journal or scrapbook to help the learner celebrate what was done well, and to see what could have been done differently. Allow them to become better at assessing their own work.
- Date and initial the activities that have been competed on page 4 of their project plan.

ACTIVITY 1

SELECTING A LENS

How close up? How far away? Interchangeable lenses will get you closer to your subject or help you slide more in the frame, expanding your creative choices.

PHOTO SHOOT

With your camera, if you are able to interchange lenses, this is a bonus!

- Position yourself in front of a scene you would like to photograph. Using the equipment/camera that you have, experiment with zooming in and out. Compare results.
- If you have a wide-angle lens, take a group shot either **careful** or **posed**. A wide view includes details that tell a story or put people into context.
- If you have a telephoto lens, take close-ups of three or four details. Some large telephoto lenses need the support of a tripod.

CHALLENGE YOURSELF AS A PHOTOGRAPHER!

If you need special lenses, talk to your photographer or a friend who has special lenses to go along with them on a photoshoot and take notes about when and why they change lenses.

LEARNER OUTCOMES

Using your camera's capabilities using zoom.

Life Skill: Mastering Technology

Educational Standard: Another Standard for Organize and Develop and VA CO 1. Use Experiment and Develop skills in multiple art-making techniques and approaches through practice.

Success Indicator: Creates High-quality photos that demonstrate appropriate use of zooming in and zooming out.

Background

Have you ever tried to take a good photo of the action at a hockey game even though you sat in the bleachers? You probably used a camera with a zoom lens. Many cameras have built-in zoom lenses. On some DSLR cameras (digital single lens reflex) you rotate the barrel of the lens. You might press a button on your compact camera to allow you to zoom in. Some camera have lenses you can change. Lenses come in different focal lengths, measured in millimeters (mm). These determine how much of a scene you see in your window. Usually, the longer the lens (larger number), the greater the magnification you will get.

Lenses that have a single, fixed focal length are called **prime lenses**. Zoom lenses have a range of focal lengths (for example, from 28 mm to 200 mm) but use a single lens. This eliminates the need to change lenses frequently.

Lenses in the 50 mm range are referred to as **normal lenses**. They include about as much as your eye can see. Telephoto and portrait lenses (80 mm to 300 mm) and higher get you close to the action when you can't move physically closer.

Photo Shoot (the activity)

Challenge Yourself

Background

Learner Outcomes

Project Area A Equipment

18-70mm Zoom Lens

18-270mm Zoom Lens



INTRODUCTION

Like a paintbrush or a pottery wheel, a camera is a tool used for creating art. And like any other art form, you need to know how to use the tool in order to make a great image. Wonderful photographs don't just happen by magic. A photographer must rely on his ability to compose an image in the viewfinder that is worth capturing and then apply his skill to ensure that the image is photographed faithfully.

What makes photography so unique is the versatility of the medium itself. In *Next Level Photography*, you will learn all sorts of methods and techniques to take your photographs to a whole new level. You will explore how to use light effectively in order to create a certain mood. You will discover how to freeze a moving object in mid-air, and how to make moving objects blur across the scene. There are special filters you can attach to your camera that will allow you to shoot multiple images in a single frame, change the overall color of a scene and make bright lights look like shining stars. You will even learn how to make your own special effects filters from basic household items! Other topics that you will explore in *Next Level Photography* are how to select the best lens for certain kinds of photos and how to shoot panoramas with your smartphone or DSLR.



Credits: (L to R) Scott Wittenburg, Adelaide Baldwin, Hannah Dabbs, Olivia Carlton

But there's more to creating great images than simply adding special effects filters and manipulating images with special camera settings. How you compose the image is equally as important. You will learn how *composition* often makes the difference between a great image and one that is just so-so. There are special compositional techniques that artists utilize in order to create powerful images such as the **Rule of Thirds** and the **Golden Rectangle**. You will also learn about negative space and how you can use it to your advantage to create awesome photos!

So grab your camera and get ready to embark on an exciting photo journey!



SELECTING A LENS

How close up? How far away? Interchangeable lenses will get you closer to your subject or help you include more in the frame, expanding your creative choices.



PHOTO SHOOT

Practice with your camera. If you are able to attach different lenses, this is a bonus!

1. Position yourself in front of a scene you would like to photograph. Using the equipment/camera that you have, experiment with zooming in and out. Compare results.
2. If you have a **wide-angle lens**, take a group shot either **candid** or **posed**. A wide view includes details that tell a story or put people into context.
3. If you have a telephoto lens, take close-ups of three or four details. Some large telephoto lenses need the support of a tripod.

18~70mm Zoom Lens



18~270mm Zoom Lens



BACKGROUND

Have you ever wanted to take a good photo of the action at a soccer game even though your seat is up in the stands? You can if you have the right kind of lens. Lenses come in different focal lengths, measured in millimeters (mm). The longer the lens (larger number), the greater the magnification you will get.

- **Prime lenses** are a fixed focal length. This means that if you chose a 35 mm lens, you cannot zoom in and out. You will have to move your body to get wide shots and close ups.
- **Zoom lenses** (28 mm - 200 mm) are often built-in on many DSLR cameras; just rotate the lens!
- Lenses in the 50 mm range are referred to as **normal lenses**. They include about as much as your eyes see.
- **Wide-angle lenses** (28mm) capture a lot of scene when you can't stand far away, like when you are in a room.
- Telephoto lenses (80 mm-300 mm) gets you close to the action when you are far away.
- Fisheye lenses (18 mm and smaller), gets you a wide angle and interesting distortions.
- **Macro lenses** allow you to focus within inches of objects that are nearby, like a seashell.

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CHALLENGE YOURSELF AS A PHOTOGRAPHER!

- ★ If you do not have special lenses, talk to a photographer or a friend who does. Get permission to go along with them on a photo shoot and take notes about when and why they change lenses.

LEARNER OUTCOMES

Project Skill: Get to know your camera's capabilities using zoom

Life Skill: Mastering technology

Educational Standard: Anchor Standard #2 Organize and develop artistic ideas and work. VA:Cr2.1.5a Experiment and develop skills in multiple art-making techniques and approaches through practice.

Success Indicator: Creates high-quality photos that demonstrate appropriate use of zooming in and zooming out.

NOTE! Words in **bold** throughout this book are defined in the glossary

iPhone camera



Credit: Scott Wittenburg

Smartphone cameras have come a long way! Now you can take high quality, high-resolution images that you can improve on your phone without exporting to software apps. Smartphone cameras let you zoom in by pinching the screen. But since the lens doesn't really change, you are really "cropping" the picture or closing in on what you want to include. When using a cell phone, if you are able, just move in closer to what you want to photograph. The photo quality will be better than zooming in. You can also buy accessories such as lens attachments that allow you to take macro shots, telephoto shots and super wide-angle/fisheye shots.

ACTIVITY 1

SELECTING A LENS (continued)



Know your equipment: lenses!



Credit: Scott Wittenburg

A variety of smartphone lens attachments, including a microscope!



A shot with a fisheye lens!



A fisheye lens can skew the perspective.



A fisheye lens can distort objects. What is distorted in this photo?

ACTIVITY 1

SELECTING A LENS (continued)

Scene shot with various size lenses



18 mm



35 mm



50 mm

Credit: Scott Wittenburg



70 mm



135 mm



75 mm



200 mm



100 mm



270 mm

Credit: Scott Wittenburg

SUMMARY OF LEARNING OUTCOMES

National Visual Arts Education Standards: <http://nationalartsstandards.org/sites/default/files/Visual%20Arts%20at%20a%20Glance%20-%20new%20copyright%20info.pdf>

ACTIVITY	PROJECT SKILL	LIFE SKILL	EDUCATIONAL STANDARD	SUCCESS INDICATOR
Equipment				
1 Selecting a Lens	Get to know your camera's capabilities using zoom	Mastering technology	Anchor Standard #2 Organize and develop artistic ideas and work. VA:Cr2.1.5a Experiment and develop skills in multiple art-making techniques and approaches through practice.	Creates high-quality photos that demonstrate appropriate use of zooming
2 Special Effects	Practice using different lens filters	Mastering technology	Anchor Standard #2: Organize and develop artistic ideas and work. VACr2.2.3a: Demonstrate an understanding of the safe and proficient use of materials, tools, and equipment.	Experiment with several different techniques/tools to create 2-3 high quality photos with special effects
Lighting				
3 Lighting the Mood	Practice using light to portray a specific mood	Communicating	Anchor Standard #7: Receive and analyze artistic work. VA:Re.7.2.4a: Analyze components in visual imagery that convey messages.	Identify how the lighting affects the mood of several different photos
4 Reflections	Practice taking photos of reflections	Practicing creativity	Anchor Standard #8: Interpret intent and meaning in artistic work. VA:Re8.1.4a Interpret art by referring to contextual information and analyzing relevant subject matter, characteristic of form and use of media.	Composes photos using reflections that demonstrate a creative way to view the world
5 Out in the Light	Practice taking photos without the flash feature on your camera	Decision making	Anchor Standard #1: Generate and conceptualize artistic ideas and work. VA:Cr1.1.4a Brainstorm multiple approaches to a creative art or design problem (no flash photography). through practice.	Chooses appropriate lighting and content to create high-quality photos without using the flash
Composition				
6 The Rule of Thirds	Practice using of the Rule of Thirds	Decision making	Anchor Standard #8: Interpret intent and meaning in artistic work. VARE9.1.6a: Develop and apply relevant criteria to evaluate a work of art	Creates photos that demonstrate the use of the Rule of Thirds
7 The Golden Photos	Practice using the Rules of the Golden Triangle and the Golden Rectangle	Thinking critically	Anchor Standard #8: Interpret intent and meaning in artistic work. VARE9.1.6a: Develop and apply relevant criteria to evaluate a work of art	Demonstrates the use of the Golden Triangle and the Golden Rectangle in photos
8 Different Viewpoints	Practice taking photos from different points of view/perspective	Decision making	Anchor Standard #10: Synthesize and relate knowledge and personal experiences to make art. VA:Cn10.1.3a: Develop a work of art based on observations of surroundings.	Creates a series of photos from unusual and different points of view from a local monument, recognizable landmark or other familiar subject in your community

ACTIVITY	PROJECT SKILL	LIFE SKILL	EDUCATIONAL STANDARD	SUCCESS INDICATOR
9 The Space Tells a Story	Practice creating photos with interesting negative space	Practicing creativity	Anchor Standard 3: Refine and complete artistic work. VA:Cr3.1.6a Reflect on whether personal artwork conveys the intended meaning and revise accordingly.	Composes at least one photo where the space (not the focal point) tells an "open-ended" story
10 Capture a Candid Photo	Practice capturing unposed, candid shots of a subject or event	Planning and organizing	Anchor Standard #2: Organize and develop artistic ideas and work. VA:Cr2.3.7a Apply visual organizational strategies to design and produce a work of art, design or media that clearly communicates information or ideas.	Captures a special moment through a candid, unposed photo of a person or event
Skill Building				
11 Bits and Pieces	Practices taking photos of "bits and pieces" of ordinary objects to create a work of art	Practicing creativity	Anchor Standard #1: Generate and conceptualize artistic ideas and work. VA:CR1.25a: Identify and demonstrate diverse methods of artistic investigation to choose an approach for beginning a work of art.	Creates an abstract photo with ordinary subject matter
12 Panorama	Practice using a camera to create a panorama	Mastering technology	Anchor standard #2: Organize and develop artistic ideas and work. VA:Cr2.1.5a: Experiment and develop skills in multiple art-making techniques and approaches through practice.	Completes a wide, unbroken panoramic view of a subject
13 Expression through Color	Uses color to create photos that are cool, warm, monochromatic, contrasting and/or complementary	Practicing creativity	Anchor Standard #7: Perceive and analyze artistic work. VA:Re.7.2.4a: Analyze components in visual imagery that convey messages.	Demonstrates understanding of the use of color to create photos that grab attention
14 Pictures with a Purpose	Practice taking photos with a specific purpose in mind to teach, instruct or sell a product or service	Visualizing information	Anchor standard #7 Perceive and analyze artistic work. VA:Re.7.2.6a: Analyze ways that visual components suggested by images influence ideas, emotions and actions.	Creates useful photographs designed to teach, instruct or sell an item or services
Exhibiting Your Work				
Exhibiting Your Work	Evaluates photos that represent body of work	Making decisions	Anchor Standard #4: Select, analyze and interpret artistic work for presentation. VA:Pr4.1.3a: Investigate and discuss possibilities and limitations of spaces, including electronic, for exhibiting artwork.	Creates online photo portfolio for sharing, deciding which photos are the best representation of work