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

ACKNOWLEDGMENTS

2019 Curriculum Coordinator and Co-Author:
Dr. Robert L. Horton, 4-H Curriculum Specialist,
The Ohio State University

2019 Co-Authors:
Jeanne Gogolski and Sally Ewan,
EducationProjects.org and Scott Wittenburg,
Upper Arlington High School, Columbus, OH

With thanks to the many individuals who contributed to the 2007 Edition.

Graphic Design:
TM Design, Inc., tmdesigninc.com

Photo Credits:
Many photographs in this book were contributed by photography students and their instructor/co-author Scott Wittenburg at Upper Arlington High School in Columbus, Ohio. This 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.

Cover Photo: JoAnna Sudler

National 4-H Council works to advance the 4-H youth development movement, building a world in which youth and adults learn, grow and work together as catalysts for positive change. National 4-H Council partners with the Cooperative Extension System of the Land Grant Universities, the National 4-H Headquarters at USDA, communities and other organizations to provide technical support and training, develop curricula, create model programs and promote positive youth development to fulfill its missions. National 4-H Council also manages the National 4-H Youth Conference Center, a full-service conference facility, and the National 4-H Supply Service, the authorized agent for items bearing the 4-H name and the emblem. National 4-H Council is committed to a policy that all persons shall have equal access to its programs, facilities and employment without regard to race, color, sex, status, sexual orientation, marital status, disability, physical or mental disability. Mention or display of trademark, proprietary product or firm in text or figures, does not constitute an endorsement by National 4-H Council and does not imply approval to the exclusion of suitable products or firms.

Copyright © 2019 National 4-H Council. All rights reserved. Reproduction without permission of National 4-H Council is strictly prohibited.
# TABLE OF CONTENTS

**Notes to the Project Helper** ................................................................. 2

**Project Guidelines** ................................................................. 3

**Introduction** ................................................................. 8

**PROJECT AREA A: EQUIPMENT**
  - Activity 1: First Photo Shoot ....................................................... 10
  - Activity 2: Keep it Steady, Keep it Level ........................................ 14
  - Talking it Over ........................................................................ 18

**PROJECT AREA B: LIGHTING**
  - Activity 3: The Light Makes a Difference ..................................... 20
  - Activity 4: Fun with Shadows ....................................................... 24
  - Activity 5: Directing the Light ..................................................... 28
  - Activity 6: Flash for More Light .................................................. 32
  - Talking it Over ........................................................................ 36

**PROJECT AREA C: COMPOSITION**
  - Activity 7: What do you see? ......................................................... 38
  - Activity 8: Photograph with Your Feet ......................................... 42
  - Activity 9: What’s the Point? ......................................................... 46
  - Activity 10: Bird’s (or Bug’s) Eye View ......................................... 50
  - Activity 11: Hat Tricks and Magic ................................................. 54
  - Activity 12: The Art of the Selfie ................................................. 58
  - Talking it Over ........................................................................ 62

**PROJECT AREA D: SKILL BUILDING**
  - Activity 13: Taking Great Photos ............................................... 64
  - Activity 14: Telling a Story ........................................................ 68
  - Activity 15: Black and White ....................................................... 72
  - Activity 16: You Be the Judge ....................................................... 76
  - Talking it Over ........................................................................ 80

**Glossary** ........................................................................... 82

**Exhibiting Your Work** .............................................................. 84

**Summary of Learning Outcomes** ............................................... 88
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.

**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.

Welcome to Photography Basics, Book 1!

This is a beginning level book for the study of photography, and recommended for youth in grades 5-12. Younger students will need help from a committed adult. It can be taken as a stand-alone project or in connection with another 4-H area of interest. Activities cover four main areas related to photography: Equipment, Lighting, Composition, and Skill Building. Having access to a camera (phone or Digital Single Lens Reflex Camera) is essential, as well as deciding how and where to store the photos you will take during the project.

Check your county's 4-H project and record keeping guidelines (if any) for additional requirements. This is especially important if you want to participate in county project judging or prepare an exhibit for competition. This project may be repeated if you select activities that were not satisfactorily completed or not attempted in prior years. The Challenge Yourself activities, which are optional, are a good source of additional activities if you choose to repeat this level project multiple times. They may also inspire you to take a companion project or plan a self determined project on such topics as scrapbooking or photo editing.

YOUR PROJECT GUIDELINES

**STEP 1:** Explore each of the four Project Areas (Equipment, Lighting, Composition, Skill Building). In each area, complete the Photo Shoot activities (at least 2) of your choice along with the Talking it Over activity.

**STEP 2:** Take part in at least two Learning Experiences.

**STEP 3:** Become involved in at least two Leadership/Citizenship activities.

**STEP 4:** Take part in a Project Review.

**OPTIONAL:** The Challenge Yourself activities are optional.
INTRODUCTION

Photography has come a long way since its beginnings nearly two hundred years ago. In its infancy, photographs were taken with large cumbersome cameras by a handful of people fascinated by the optical principle of camera obscura, which is Latin for “dark chamber.” Long before the camera was invented, somebody discovered an image of the scene outside his home was being projected onto a wall in his dark living room. Upon further inspection, he realized that the image was the result of light coming through a tiny hole on the opposite side of the room. Although the image was upside down, it was a faithful replica of the scene outside his front door! This phenomenon is the same principle by which all cameras work their magic.

Since the earliest days of photography, when cameras using light-sensitive film only recorded images in black and white, we have seen the advent of color film, smaller, feature-packed cameras, and more recently the ability to record images digitally. Virtually everybody owning a smartphone is an experienced photographer now, snapping photos of this and that and sharing them online and on their phones.
The ability to take a photo is limited only by the availability of a camera at the appropriate time. Yet in spite of the convenience of camera accessibility and ease of operation nowadays, the final image is what really matters. Is the subject interesting? Is the exposure correct—not too light or too dark? Is it in crisp focus with good detail? Is it well-composed, free of distractions? Does it “say” something to the viewer? Or bring out an emotion of some kind? Regardless of what camera you use, a great image is what we all strive for.

The ability to take great images is dependent on a number of factors including equipment and technique, lighting, and composition. And just like everything else we do, practice makes perfect. In Photography Basics, you will learn the nuts and bolts of photography and the difference between a snapshot and art. You will explore exciting ways to enhance your photo taking skills while learning how to shoot scenes at night and objects in motion. So grab a camera and get ready to embark on an exciting journey!
FIRST PHOTO SHOOT

A great camera will not necessarily make you a great photographer! But knowing your equipment will help. Are you using a digital camera? A cell-phone camera? Get to know your camera and start taking photos.

### PHOTO SHOOT

1. Which of these parts does your camera have?
   - a. lens
   - b. on/off button
   - c. viewfinder
   - d. flash
   - e. memory card
   - f. camera app icon
   - g. shutter release button
   - h. home screen
   - i. shooting mode dial (auto, Av, TV, P, M -- or maybe other abbreviations)

2. Remember that your camera is a fragile piece of equipment. Hold it firmly with both hands, and be careful when you put it down. And don’t drop it! Do you have a protective case?

3. Start out in “auto” mode. The camera will “automatically” adjust to take your photo.

4. Hold your camera and point it at something interesting. To get started, choose a subject that is not moving. Depending on the camera you are using, you might be looking through the viewfinder or looking at the screen on your phone.
   - a. Choose the view: **landscape mode** (wide view) or **portrait mode** (tall view). Take one of each.
   - b. Hold the camera steady, then take a photo.
   - c. Move closer to the subject of your photo or zoom in and take a photo.
   - d. Step farther away or zoom out and take a photo. Continue to move farther away or zoom out some more, taking a photo every few steps. How do the photos change?
   - e. Walk around your subject and take a photo from another angle.
   - f. Take lots of pictures.

5. Where will you store your photos? Will you download them to a computer? Download to an online site (Google photos, Flickr)? Talk to your Project Helper and make a plan. Then store your photos in a safe place.

6. Study the photos you took. Decide on the best 3. Why are they the best photos?
It may not be necessary to know everything about how your camera works in order to enjoy taking photos. But the more you understand about it, the more likely you are to get some great photos. Research the type of camera that you are using so that you understand the different parts, settings and photo editing capabilities. If you have a “user guide” for your camera, read it -- even if it is a little long. You could also ask someone else to review the parts of your camera with you; your Project Helper is willing to do this. As you learn more about what your camera can do, you will have a chance to test it out!

Is your camera a DSLR camera (digital single lens reflex)? Are you using the camera that comes on your phone?

It is important to store your photos in an appropriate place. Discuss a plan to share your photos with your Project Helper. Be sure to store them as you go along and label them so that you know which Activity you were working on. For example, the photos that you just took could be stored in a folder called: Equipment: First Photo Shoot. You can also add comments or words that describe when and where you took the photos so that you can remember.

**TIP**

A zoom lens lets you get closer without having to move your feet. A close-up lens helps you focus on things that are just inches away!

**CHALLENGE YOURSELF AS A PHOTOGRAPHER!**

★ What do you think this quote means?

“Your first ten thousand photographs are your worst.” – Henri Cartier-Bresson

The “viewfinder” on a camera phone

**NOTE!** Words in bold throughout this book are defined in the glossary.
Can you name the different parts on these cameras?
Stepping farther away (zooming out) or stepping closer (zooming in) to your subject
## SUMMARY OF LEARNING OUTCOMES


<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>PROJECT SKILL</th>
<th>LIFE SKILL</th>
<th>EDUCATIONAL STANDARD</th>
<th>SUCCESS INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 First Photo Shoot</td>
<td>Get to know your camera</td>
<td>Mastering technology</td>
<td>Anchor Standard #1: Generate and conceptualize artistic ideas and work. VA:Cr1.2.2a: Apply knowledge of available resources, tools, and technologies.</td>
<td>Identifies camera equipment/parts</td>
</tr>
<tr>
<td>2 Keep it Steady, Keep it Level</td>
<td>Practice keeping camera steady and level</td>
<td>Mastering technology</td>
<td>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.</td>
<td>Takes clear and straight/level photos</td>
</tr>
<tr>
<td><strong>Lighting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Light Makes a Difference</td>
<td>Practice taking photos, noticing natural light</td>
<td>Planning and organizing</td>
<td>Anchor Standard #7: Perceive and analyze artistic work. VA:Re7.2.1a: Compare images that represent the same subject.</td>
<td>Shows how to use lighting from different times of day that enhances the same subject</td>
</tr>
<tr>
<td>4 Fun With Shadows</td>
<td>Notice shadows and their potential in photography</td>
<td>Practicing creativity</td>
<td>Anchor Standard #1: Generate and conceptualize artistic ideas and work. VA:Cr1.1.3a: Elaborate on an imaginative idea.</td>
<td>Uses shadows to demonstrate an element of surprise/creativity in photos</td>
</tr>
<tr>
<td>5 Directing the Light</td>
<td>Practice using natural light from several different directions</td>
<td>Practicing creativity</td>
<td>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.</td>
<td>Shows how to use directional light creatively in photos</td>
</tr>
<tr>
<td>6 Flash for More Light</td>
<td>Practice using flash for fill, solving red-eye problems</td>
<td>Solving Problems</td>
<td>Anchor Standard #1: Generate and conceptualize artistic ideas and work. VA:Cra.2.1a: Use observation and investigation in preparation for making a work of art.</td>
<td>Uses flash to eliminate shadows and red-eyes in photos</td>
</tr>
<tr>
<td><strong>Composition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 What Do You See?</td>
<td>Evaluate background, middle-ground, foreground when taking photos</td>
<td>Practicing Creativity</td>
<td>Anchor Standard #1: Generate and conceptualize artistic ideas and work. VA:Cra.2.1a: Use observation and investigation in preparation for making a work of art.</td>
<td>Uses background/middle-ground/foreground creatively in photos</td>
</tr>
<tr>
<td>8 Photograph with Your Feet</td>
<td>Practice filling the frame with the subject</td>
<td>Thinking critically</td>
<td>Anchor Standard #3: Refine and complete artistic work. VR:Cr3.1.4a: Revise artwork in progress on the basis of insights gained through peer discussion.</td>
<td>Uses critical thinking to show the role of distance in filling the frame in photos</td>
</tr>
<tr>
<td>9 What’s the Point?</td>
<td>Practice eliminating of background clutter in photos</td>
<td>Thinking critically</td>
<td>Anchor Standard #3: Refine and complete artistic work. VR:Cr3.1.4a: Revise artwork in progress on the basis of insights gained through peer discussion.</td>
<td>Chooses focal point and eliminates clutter in photos</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>PROJECT SKILL</td>
<td>LIFE SKILL</td>
<td>EDUCATIONAL STANDARD</td>
<td>SUCCESS INDICATOR</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------</td>
<td>----------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>10 Bird’s Eye (or Bug’s Eye) View</strong></td>
<td>Practice using different viewpoints and perspectives in photos</td>
<td>Practicing creativity</td>
<td>Anchor Standard #1: Generate and conceptualize artistic ideas and work. VA:Cr1.1.5a: Combine ideas to generate an innovative idea for art-making.</td>
<td>Uses different viewpoints to create interest in photos</td>
</tr>
<tr>
<td><strong>11 Hat Tricks and Magic</strong></td>
<td>Composes creative, unusual photos</td>
<td>Practicing Creativity</td>
<td>Anchor Standard #1: Generate and conceptualize artistic ideas and work. VA:Cr1.1.5a: Combine ideas to generate an innovative idea for art-making.</td>
<td>Demonstrates creativity in composition of photos</td>
</tr>
<tr>
<td><strong>12 The Art of Taking a Selfie</strong></td>
<td>Composes variety of selfies</td>
<td>Communicating</td>
<td>Anchor Standard #7: Perceive and analyze artistic work. VA:Re7.2.3a: Determine messages communicated by an image.</td>
<td>Composes a flattering selfie</td>
</tr>
<tr>
<td><strong>Skill Building</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13 Taking Great Photographs</strong></td>
<td>Takes photos of people, places, things</td>
<td>Making decisions</td>
<td>Anchor Standard #10: Synthesize and relate knowledge and personal experiences to make art. VA:Cn10.1.2a: Create works of art about events in home, school, or community life.</td>
<td>Chooses a variety of subjects while taking good photos</td>
</tr>
<tr>
<td><strong>14 Telling a Story</strong></td>
<td>Sequences photos to tell a story</td>
<td>Communicating</td>
<td>Anchor Standard #10: Synthesize and relate knowledge of personal experiences to create art. VA:Cn10.1.Ka: Create art that tells a story about a life experience.</td>
<td>Creates a story using a series of photographs</td>
</tr>
<tr>
<td><strong>15 Black and White</strong></td>
<td>Creates black and white photos</td>
<td>Practicing creativity</td>
<td>Anchor Standard #1: Generate and conceptualize artistic ideas and work. VA:Cr1.2.1a: Use observation and investigation in preparation for making a work of art.</td>
<td>Composes interesting, creative black and white photos</td>
</tr>
<tr>
<td><strong>16 You Be the Judge</strong></td>
<td>Evaluates photos using critical thinking</td>
<td>Thinking critically</td>
<td>Anchor Standard #8: Apply criteria to evaluate artistic work. VA:Re9.1.3a: Evaluate an artwork based on given criteria</td>
<td>Judges personal photographs critically</td>
</tr>
</tbody>
</table>

**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 |