

BRUNTON® BINOCULAR BASICS

Instructor Activity Guide

Thank you for purchasing Brunton's Binocular Instructor's Kit, the perfect teaching tool for those who are enthusiastic about helping others get a closer view of nature's wonders. This kit includes all you need to teach binocular basics—everything from the anatomy and care of binoculars to using them to identify several North American animals. The included activities will help your students gain a strong working knowledge of optics and how to apply that knowledge in real-life situations.

INCLUDED RESOURCES:

- Six Brunton 5057 binoculars
- *Brunton Optics* information brochures
- Instructor Activity Guide
- Bird Identification CD ROM
- One set of Wildlife Picture Cards

INTRODUCTION

- Has anyone ever used a pair of binoculars before?
- Discuss how optics can be useful for hunting, bird watching and wildlife viewing:
 - Binoculars can help you effectively identify an animal (i.e., hen vs. gobbler)
 - Binoculars allow one to see larger, clearer images of wildlife so that creatures' shapes, colors, and markings can be recognized much more easily.
- Explain to the group that they are going to learn some basics about using binoculars, learn about some of the animals found across North America, and then apply their knowledge in a wildlife scavenger hunt.

BINOCULAR PARTS

- Using one pair as a reference, show the parts of a binocular to the group:



- Explain the purpose of each part (it may also be helpful to use the included Brunton Optics Brochure)
 - **Ocular Lens** – the lens closest to one’s eyes through which an image is viewed
 - **Focus Wheel** – the center dial one uses to focus the binocular (moves the lenses inside the binocular)
 - **Diopter Adjustment**– moveable ring that allows custom focusing for each eye (to accommodate vision differences between one’s eyes)
 - **Objective lens** – the lens closest to the objects you are viewing
- Demonstrate the focus wheel and the diopter adjustment. Help each person adjust the binocular for a clear, focused image.
- Explain that binoculars come in different configurations, shapes, and sizes to accommodate different needs and preferences. Also mention that there are many features to consider when purchasing binoculars. Refer to the *Optics* brochure for more information.

BINOCULAR CARE

- Ask students if they have any suggestions regarding binocular care.
- Elicit responses, and guide students toward these important points:
 - Keep the lenses clean, and never touch them with your fingers.

- If the lenses get smudged, gently rub them with a lens cloth. Do not use any regular fabric to clean the lenses! Some fabrics can scratch the lenses, distorting your view.
- To clean the binocular's body, use a dry cloth or canned air to remove surface debris and dirt. Do not spray any solvent directly on the binocular. To remove more stubborn spots, spray some furniture cleaner on a rag and apply it to the affected areas.
- Attach lens caps to the binocular when you're done viewing. This protects the lenses and helps prevent dust & debris from accumulating on them.
- Always store your binoculars in a case when you're not using them. A hard case is preferable, since it offers better protection against impact, but a soft case is better than nothing.

WILDLIFE ACTIVITY

Overview:

This activity will help demonstrate the basics of binocular use. Students will focus on using optics to help them identify animals more easily when hunting, bird watching, or simply viewing wildlife. They will learn to apply these skills by participating in a simulated bird watching/wildlife scavenger hunt.

Time needed:

30-45 minutes

Materials:

- 6 Brunton 5057 model binoculars
- 1 Instructor Activity guide
- 6 Large Wildlife Picture Cards to plant prior to activity
* *You may also want to include wildlife pictures of your own!* *

Preparation:

1. Pick a suitable area for your activity. Note: it is best to have an open area for the binocular instruction/introduction and a wooded area for the scavenger hunt.
2. Plant wildlife picture cards in tree branches and thickets along a trail for your students to spot and identify.

ACTIVITY:

Step One - Binocular practice:

1. Divide the group into pairs or teams.

2. Give all students a landmark or planted object to focus on, and ask them to take turns adjusting the focus wheels and diopters so they can see the image clearly.
3. Once everyone feels comfortable using the binoculars, proceed to Step Two.

Step Two - Scavenger hunt:

1. Ask the group if they can name some animals that are found in this region.
2. Tell the teams that they will go on a wildlife watching scavenger hunt. If they are patient and observant and use their binoculars properly, they should be able to identify several animals in the area. (Explain that the animals not normally found in this area have migrated in especially for this activity!)
3. Explain the boundaries for the activity, and let the group know how much time they will have.
4. Lead the teams to the trail and begin.

Step Three - Conclusion:

At the end of the hunt discuss:

1. Some of the challenges or difficulties encountered during the hunt (getting used to the equipment, finding the animals, etc...).
2. Ask the students the following questions, and discuss the group's responses:
 - How would the hunt have been different without the binoculars?
 - What would need to be done differently if the students were on a real animal watching expedition (i.e., move quietly)?
 - Was anyone able to spot any live animals along the trail?
 - Which animals would the group have seen or not seen had this been a "real" (not simulated) expedition?
3. Give each group member a copy of the *Brunton Optics* brochure, and thank everyone for participating.

ADDITIONAL ACTIVITIES

There is no end to the possibilities of activities. Utilize resources like the Internet or library to find more activities for your students.

HAPPY HUNTING!

If you have questions, comments, or concerns about any component of the Instructor's Kit, please contact Brunton:

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