Sight Session Outline
For the Outdoor Skills Program
K-2nd Grade Lessons

I. Welcome students

II. Activity: Bird Scavenger Hunt

III. Read the book *Rainbow Fish* by Marcus Pfister

IV. Activity: Make a Bird Feeder

Literature Link: Nature and wildlife based books have been included in the lessons and kits. Books may directly relate to the lesson or may just be a fun read. Unless directed in the lesson, incorporate the book as you see fit.

Suggested reading times:

- Before lesson to bring students together
- In between activities as a transition
- After an activity while waiting for parents to arrive
- After an activity while waiting for a project

The Outdoor Skills program is a partnership with Nebraska Games & Parks and the UNL Extension/4-H Youth Development Program to provide hands-on lessons for youth during their afterschool time and school days off. It provides the opportunity to master skills in the areas of hunting, fishing, and exploring the outdoors. This educational program is part of the 20 year plan to recruit, develop and retain hunters, anglers, and outdoor enthusiasts in Nebraska.

Inventory

Session: Sight
Curriculum Level: K - 2

Kit Materials & Equipment

- ☐ Example bird feeder
- ☐ Bird Journal page (original copy)
- ☐ Example Bird Journal
- ☐ Utility knife
- ☐ Markers or crayons (in craft tote)
- ☐ Stapler and staples (in craft tote)
- ☐ String – sturdy cotton or twine
- ☐ Laminated images of birds
- ☐ Bird Scavenger Hunt page (original copy)
- ☐ Tape (in craft tote)
- ☐ Duct Tape (in craft tote)
- ☐ (4) Glue bottles (in craft tote)
- ☐ Clothes pins

Extended Activity Supplies Provided by Instructor (Optional)

Activity – Bird Scavenger Hunt

- ☐ Two toilet paper rolls – per student (or a paper towel roll cut in half)
- ☐ Yarn or string
- ☐ Scissors
- ☐ Hole punch
- ☐ Paint, stickers, markers or paper for decorating

Supplies Instructor Provides

- ☐ 2-liter soda bottle with cap
- ☐ Wooden dowel/stick (approx. 9')
- ☐ Bird seed
- ☐ Copies of Bird Journal (5 copies for each student)
- ☐ Construction or colored paper
- ☐ Copies of Scavenger Hunt pages

Literature Provided

- ☐ *Rainbow Fish* by Marcus Pfister

Suggested Literature (Not provided in kit)

Animal Talk: How Animals Communicate through Sight, Sound and Smell By: Etta Kaner

- ☐

For information on restocking items contact Julia Plugge at 402-471-6009 or julia.plugge@nebraska.gov

All orders must be placed at least 2 weeks in advance.

Session: Sight
Title of Activity: Bird Scavenger Hunt

Grade Level: K-2nd

Objectives: Participants will

1. Understand how the sense of sight helps discover their surroundings.
2. Observe and identify birds by sense of sight through a scavenger hunt.

Method: Students use their sense of sight to find birds hidden throughout their school grounds or outside area.

Materials Contained in Kit:

- (15) Laminated images of birds
- Bird scavenger hunt (original copy)
- Tape (in craft tote)
- Clothes pins

Materials Needed for Activity:

- Copies of scavenger hunt pages (one for each student or pair of students).

Duration: 40 minutes

Group Size: any

Setting: Outdoors

Key Terms: senses, rods, cones, lens, pupil.

Set Abilities (Concepts): Observe

Fair/Take Home Project: Binoculars

Background:

Sight, touch, taste, sound, and smell. Our five senses help us learn and understand the world around us. It is through our sense of sound we know there is a bird chirping in the pine tree. It is through our sense of touch we know a cactus is prickly and hurtful to touch. It is through our sense of taste we know the bitter taste of nightshade means the plant's leaves are poisonous. And, it is through our sense of sight we know a snake is in the grass and we should step over it.

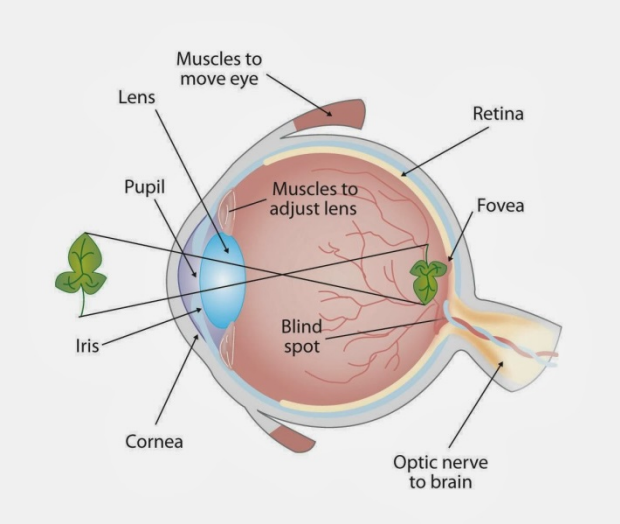
Just like every other sense, our sense of sight is important in learning about and understanding the natural world. Our sense of sight helps us learn male cardinals are a different color than females. Out sense of sight also helps us learn what birds regularly visit our bird feeder and which birds prefer to eat seeds from the ground. And, of course our sense of sight lets us know there is a hawk soaring high above in the sky.

But, just how does our sense of sight work? Vision begins when light is reflected off an object and enters the eyes through the cornea, the transparent outer covering of the eye.

The cornea bends the light passes through a round hole called the pupil. The iris, or colored portion of the eye that surrounds the pupil, opens and closes (making the pupil bigger or smaller) to regulate the amount of light that passes through the pupil.

The light then passes through the lens, which actually changes shape so it can further bend the light and focus it on the retina at the back of the eye.
The retina is a thin layer of tissue at the back of the eye that contains millions of tiny

light-sensing nerve cells called rods and cones, which are named for their distinct shapes.



Cones are concentrated in the center of the retina, in an area called the macula. In bright light conditions, cones provide clear, sharp central vision and detect colors and fine details.

Rods are located outside the macula and extend all the way to the outer edge of the retina. They provide peripheral or side vision. Rods also allow the eyes to detect motion and help us see in dim light and at night.

These cells in the retina – the rods and cones – convert the light into electrical impulses. The optic nerve sends these impulses to the brain where an image is produced.

Fun fact: Owls need to see at night. So, they have more rods which allow the eye to detect motion (but not fine details) and is better in dim light.

The Activity:

Before the activity:

1. Hang the laminated images of birds around the school grounds or outside area. Clothes pins or blue painters tape may be used to hang the pictures.
2. Make copies of the Scavenger Hunt page (one per student or pair of students)

Procedure:

1. Ask students what their five senses are (sight, taste, smell, hearing and touch).
2. Ask children if they think they ever use their sense of sight. For what? Why is the sense of sight important? What would it be like if they did not have their sense of sight?
3. Read the book *The Rainbow Fish* by Marcus Pfister.
    a. Discuss how we visually see beauty. The book reminds us that sharing brings happiness and acceptances.
4. Explain to children they are going to be using their sense of sight to explore outside and look for birds. Explain the birds they will be looking for are pictures and are hung all around the outside area.
5. Give each student a copy of the scavenger hunt page and a marker. Explain when they go outside, they will need to find each bird on their scavenger hunt page. When they find one, they should circle it on their page.
6. Head outside with the group. Show them the area where the images are posted (from this sidewalk to that row of trees and from the building to that fence).
7. Explain that they should be quiet and secretive about their searching… if

they are loud and point to every posted bird, they will let others know where they are posted!

8. Allow students plenty of time to find all the hidden images.
9. Bring students back together. Talk with students about why your sense of sight is important:
    a. It helps you know what is around you and keeps you safe (snake in the grass, falling limb, etc.).
    b. It helps you see learn (reading books, watching the teacher, etc.).
10. Talk to students about the birds they found. How can they identify which bird is which (size, color, shape, location, marking like red eyes or yellow-tipped feathers). Explain that finding and identifying birds is fun and easy once you learn how. Encourage students to continue bird watching at home!

Resources:

Nebraska Bird Library
www.nebraskabirdlibrary.org
An online, searchable database for all Nebraska birds. Simple and easy to use.

Project BEAK
www.projectbeak.org
A Nebraska-specific website devoted to learning about birds. Students can investigate bird adaptations – wings, feathers, feet, beaks, etc. And, take part in fin, interactive games.

Bridge to Birding Binocular Kits
www.nebraskaprojectwild.org – Bridge to Birding
Provides free binocular kits for groups to check-out. Twelve kits located throughout Nebraska.

Extended Activity:

Play the game I Spy outside. Look through a window if the weather is not favorable to be outside. Encourage the students to seek plants, animals and natural structures.

Binoculars Craft (Students will learn how to spot wildlife with their own homemade binoculars)

Materials:

- Two toilet paper rolls – per student (or a paper towel roll cut in half)
- Glue
- Duct Tape (designed tape will make the binoculars colorful)
- Yarn or string
- Scissors
- Hole punch
- Paint, stickers, markers or paper for decorating

Instructions:

1. Give each student 2 toilet paper rolls.
2. Use glue to secure the two rolls together, side by side. Then wrap duct tape around them to form the binoculars.
3. Use the hole punch to make a hold on each side of the binoculars (the outside of each roll) and tie the end of an 18-20 inch strand of yarn through each hole.
4. Student is ready to “see” wildlife.

Literature Link:

Animal Talk: How Animals Communicate through Sight, Sound and Smell By: Etta Kaner

The Rainbow Fish by Marcus Pfister

NATIONAL
GEOGRAPHIC

Bird Scavenger Hunt

Use your sense of sight to find these birds hidden outside! When you find one, circle it!
Have Fun!

Black-capped Chickadee

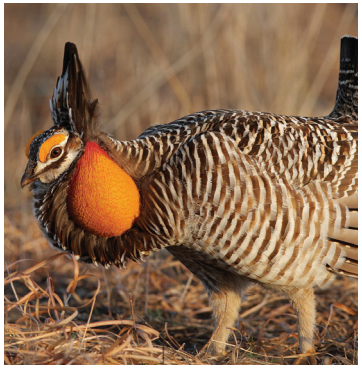
Barred Owl

Cardinal (female)

Wild Turkey

Northern Flicker

Hairy Woodpecker


Prairie Chicken

Blue Jay

Grasshopper Sparrow

Red-tailed Hawk

American Robin

Screech Owl

Tufted Titmouse

Sharp-tailed Grouse

Western Meadowlark

NATIONAL
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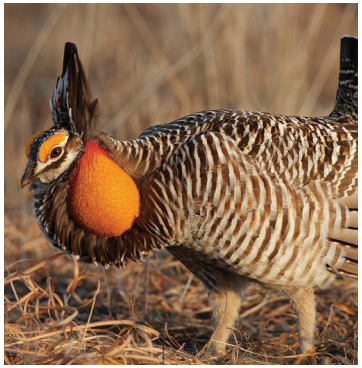
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American Robin

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Tufted Titmouse

Sharp-tailed Grouse

Western Meadowlark

My Bird Journal

Date: _____

Bird Name: _____

Bird Colors: _____

_____

Bird Size (circle one):

smaller than a robin robin to crow larger than a crow

Bird Location (tree, feeder, ground, sky): _____

_____

Draw a picture of your bird below:

My Bird Journal

Date: _____

Bird Name: _____

Bird Colors: _____

_____

Bird Size (circle one):

smaller than a robin robin to crow larger than a crow

Bird Location (tree, feeder, ground, sky): _____

_____

Draw a picture of your bird below:

My Bird Journal

Date: _____

Bird Name: _____

Bird Colors: _____

_____

Bird Size (circle one):

smaller than a robin robin to crow larger than a crow

Bird Location (tree, feeder, ground, sky): _____

_____

Draw a picture of your bird below:

My Bird Journal

Date: _____

Bird Name: _____

Bird Colors: _____

_____

Bird Size (circle one):

smaller than a robin robin to crow larger than a crow

Bird Location (tree, feeder, ground, sky): _____

_____

Draw a picture of your bird below:

Session: Sight
Title of Activity: Make a Bird Feeder

Grade Level: K-2nd

Objectives: Participants will

1. Construct a recycled bird feeder
2. Understand how their sense of sight helps them identify birds that will utilize the bird feeder.

Method: Students use their sense of sight to build a bird feeder and track what birds come to their feeder.

Materials Contained in Kit:

- Bird journal pages (original to make copies)
- Example bird journal
- Utility knife
- Markers or crayons (in craft tote)
- Stapler and staples (in craft tote)
- String
- Example bird feeder

Materials Needed for Activity:

- 2-liter soda bottle with cap
- Wooden dowel/stick (approx. 9')
- Bird seed
- Copies of bird journal pages (5 copies for each student).
- Construction paper

Duration: 40 minutes

Group Size: any

Setting: indoors and outdoors

Key Terms: senses and sight

Set Abilities (Concepts): Build/Construct, Observe

Fair/Take Home Project: Bird Feeder

Background:

In the "Bird Scavenger Hunt" Activity, we learned all about our sense of sight and how it helps us learn about the world and identify wildlife. We learned that our sense of sight helps us determine what color and how big animals are. We also learned that birds come in all shapes, sizes and colors.

Now, we will use our sense of sight to build a bird feeder and track what birds come for a feast!

The Activity:

Before the activity:

1. Gather supplies to make bird feeder (enough supplies for each student to make one bird feeder).
2. Cut holes ("x") in the bird feeder following the instructions.
3. Make copies of the bird journal pages
    a. 5 copies for each student
    b. Double-sided copies best

Procedure:

1. Tell students they are going to be making their own bird feeder. They will take it home and be able to track what birds come to visit the feeder.
2. Follow the instructions attached to help each student make a soda bottle bird feeder.
3. Next, help students create a bird journal to track what birds visit their feeder.
    a. Give each student 5 copies of the bird journal page. Instruct them to fold them in half to create a book.
    b. Give each student a piece of construction paper to fold in

half as a cover for their journal.
    c. Staple the journals together to create a book.
    d. Invite students to decorate their journal.
4. Tell students they should go home and hang their feeder as high above the ground as they can while still being able to get the feeder down to re-fill. Also, it is a good idea to hang your feeder near a window so you can see what birds are coming to your feeder without scaring the birds away.
5. Ask students to watch their feeder for several minutes every day and record in their journal what birds come.
6. If possible, students should take pictures of what birds come to their feeder.

As the weeks go on, remind students to watch their feeder, re-fill their feeder and track what birds are coming to visit.

Resources:

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Literature Link:

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The Rainbow Fish by Marcus Pfister

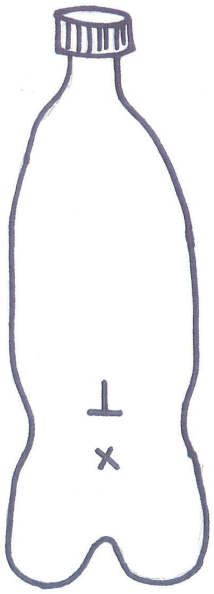
Bird Feeder Designs: Soda Bottle Feeder

Materials:

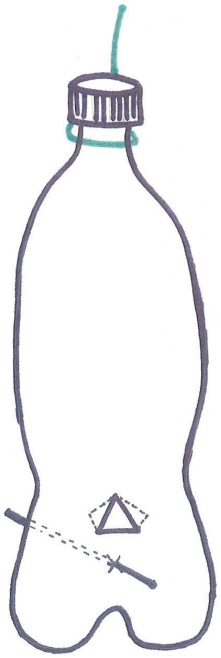
- 2-liter soda bottle with cap
- wooden dowel/stick (approx. 9')
- string
- bird seed
- utility knife

Instructions:

1. Take the label off the bottle.
2. Using the utility knife, cut an "x" on both sides of the bottle opposite each other. Just about the "x", cut an upside-down "T".
3. Insert the wooden dowel into the "x" holes. Push the dowel through the bottle and out the other side.
4. Push the flaps of the inverted "T" into the bottle creating a triangle opening for birds to grab their seed.
5. Cut a length of string approximately 18 inches. Tie it around the bottle cap. Create a loop to hang from a tree/hook.
6. Turn the bird feeder over and remove the cap.
7. Using a funnel, fill the feeder with bird seed.
8. Secure the cap - if you do not replace the cap, rain will get in the bottle and spoil the seed.



Initial Steps:
Cut an "x" in the bottle approximately 3/4 down the bottle. Cut another "x" on the exact opposite side of the bottle. Just above the "x", cut an inverted "T".

Following Steps:
Insert the wooden dowel through the "x", through the bottle, and through the second "x".

Then, fold the flaps of the inverted "T" into the bottle to create a triangle opening.