

## Early Elementary Lesson Plans for Oklahoma PASS Standards

([www.itsallaboutbirds.com](http://www.itsallaboutbirds.com))

### I. Introduction to Birds

There are many distinctive traits that make up a bird. Feathers and hollow bones are a few traits unique to birds, while wings, endothermy (being warm-blooded), and the ability to lay eggs are all characteristics that birds share with other groups of animals. Whether a bird is very large like an eagle or very small like a hummingbird, it will possess each of these traits.

While all birds have feathers, wings, beaks, and feet, each species of bird has evolved over time to have very unique traits. Owls, for instance, hunt in low light and benefit from near silent flight; therefore, their feathers have evolved to have soft edges to muffle their sound. The general rule of thumb for birds is that “they fly,” but there are always exceptions to the rule. Penguins and Ostriches are two species unable to fly. Not only do they have wings reduced in relative size, but their bones are not hollow. These anomalies do have merit though. The marrow-filled bones add weight for penguins allowing them to dive to deeper depths, and for ostriches, their denser leg bones give the birds much needed strength for running and kicking while supporting their large bodies. The wings of these two birds, while not functional for flying, also have their specific purposes. Penguins use their wings to swim and steer underwater, and Ostriches use their wings for balance while running and also during courtship displays. Beaks and feet in birds also have to be functional for each bird and the habitat in which they live. Raptors have hooked beaks to rip and tear meat and strong feet with sharp talons with which to grasp prey, while perching, seed eating birds have small spindly legs and feet for perching and beaks designed to reach and crack open specific seeds. As with all animals, birds have evolved and adapted throughout time in order to maintain populations in nearly every type of habitat.

### II. *Diverse Wings*

Wings are not unique to birds. Insects and Mammals also possess these appendages. Bird, Insect, and Mammalian wings are vastly different; however, wings found in birds are extremely diverse as well. The size, shape, and even function can differ from one bird species to the next depending on habitat and diet. The Wandering Albatross, while not the largest bird on the planet, can lay claim to the broadest

wingspan at nearly 12 feet. The largest bird on the planet is the Ostrich, but its wingspan is only 6-7 feet. Bee Hummingbirds are the smallest birds on Earth with a wingspan of just over 1 inch.

## Grade 1 & 2

### *Science*

#### Science Process Standard 1: Observe and Measure

1.1: Observe and measure objects, organisms and/or events using developmentally appropriate nonstandard units of measurement (e.g., hand, paper clip, book); and Systems International (SI) units (i.e., meters, centimeters, and degrees Celsius).

1.2: Compare and contrast similar and/or different characteristics in a given set of simple objects, familiar organisms and/or observable events.

#### Science Process Standard 2: Classify

2.2: Arrange simple objects, familiar organisms, and/or observable events in a serial order (e.g., least to greatest, tallest to shortest)

#### GRADE 1 Science Standard 2: Characteristics and Basic Needs of Organisms

2.2: Scientists use the five senses and tools (e.g., magnifiers and rulers) to gather information, such as size and shape about living things.

### *Math*

GRADE 1 Standard 4.1: Linear measurement: Measure objects with one-inch tiles and with a standard ruler to the nearest inch.

GRADE 2 Standard 4.1: Linear Measurement: Measure objects using standard units (e.g., measure length to the nearest foot, inch, and half inch).

### *Art*

#### Standard 3: Visual Art Expression

3.2: Use a variety of subjects, basic media and techniques in making original art including drawing, painting, and sculpture.

#### Standard 4: Visual Art Appreciation

4.2: Demonstrate respect for personal artwork and the artwork of others.

**Activity:** What's Your Wingspan?!

Objective: To demonstrate the basic skills of measurement and differentiate between English and Metric units of measurement. This activity will also allow students to look at characteristics of nature while putting them into perspective using compare/contrast techniques.

Materials: A large piece of paper (at least 8 feet long)  
3"x5" index cards  
Colored pencils or crayons  
Pencils, Markers, pens, etc...  
Tape or magnets  
Rulers and Yardsticks with both Inches and Centimeters  
List of birds and their wingspans (see below)  
Field guides, encyclopedias, and/or reliable informational websites

Procedure:

1. Using the list of birds and wingspans provided, assign each student 1 bird. You may have each student draw a bird's name out of a hat instead of assigning them all.
2. Using a bird field guide, the internet, or other research tools/books, have each student find a picture of his/her assigned bird, so that he/she may see what it looks like.
3. Using colored pencils or crayons, have each student draw a picture of his/her bird on a small index card.
4. Draw a starting point/dot on the left end of the paper. This will be the point from which students will start the measurement.
5. Using rulers or yardsticks, have each student take turns measuring from the starting point to the left and marking their bird's wingspan with a long vertical line on the paper. Wingspans should be measured to the nearest inch. Each student should label their end line with their bird's name and tape their index card under the line.
6. After all students have marked their wingspans, tape the sheet of paper to the wall. Allow each student to measure their own wingspan in order to see which species of bird they resemble.
7. Make sure each student measures his/her wingspan by placing the middle finger of his/her right hand on the starting point and stretching his/her arms out as far as possible towards the left.

8. Mark and label each student's wingspan on the paper using a marker that is a different color than the bird measurements.
9. After a student has had his/her wingspan measured and labeled, hand a ruler with centimeters or a meter stick to him/her, and let each measure his/her own wingspan to the nearest centimeter. Students should also record to what bird wingspan they are most similar.
10. After students have discovered what "birds they are," they should each draw pictures of themselves with that bird on a sheet of paper using colored pencils or crayons.
11. Hang these pictures up in the classroom or hallway to show off the class flock!

<b>Birds</b>	<b>Wingspans (inches)</b>
Ruby-Throated Hummingbird	4"
Cedar Waxwing	10"
Blue Jay	15"
American Kestrel	20"
Wood Duck	30"
American Crow	33"
Mallard	36"
Cattle Egret	38"
Peregrine Falcon	40"
Black Crowned Night-Heron	42"
Barred Owl	45"
Red-Tailed Hawk	48"
Great Horned Owl	50"
Great Egret	52"
Wild Turkey	55"
Common Loon	58"
American Flamingo	60"
Canada Goose	68"
Turkey Vulture	72"
Golden Eagle	78"
Sandhill Crane	83"
Brown Pelican	86"
Northern Bald Eagle (female)	90"

### III. Birds and Humans

The program *It's All About Birds!* teaches various ways that birds and humans interact with each other. Humans are an important aspect of many birds' daily lives and vice versa. We impact the environment in which birds live and on which they depend, we raise game birds for sport and food, we keep them as pets or as education animals, and we even interact with them in the wild. Birds impact human lives as well. As mentioned in the Sutton Center's program, birds help to contribute over 100 billion dollars annually to our American economy. Birds have been important also to various other cultures throughout history, are used for food, help teach about the health of the environment which we share with them, and provide us with joy, a sense of artistic beauty, and fascinating entertainment through bird watching. Without humans, birds would surely flourish and thrive; yet without birds, the quality of human life would be reduced, and the environment would be in serious jeopardy.

#### Grade 1 & 2

##### *Social Studies*

Grade 1 Standard 1: The student will develop and practice the process skills of social studies.

1.2: Use children's literature to compare and contrast one's own neighborhood/community to others.

Standard 2: The student will examine neighborhoods/communities from a spatial perspective.

2.5: Describe events and tell whether they belong in the past, present, or future (e.g., place representations of events such as pictures, words, or phrases on a simple past, present, future timeline).

Standard 3: The student will analyze the human characteristics of communities.

3.1: Identify how choices in behavior and action are related to consequences and have an impact upon student himself/herself and others.

Grade 2 Standard 1: The student will develop and practice the process skills of social studies.

1.2: Use children's literature to compare and contrast one's own community to others.

1.3: Identify the order of events on a simple timeline (e.g., holidays, school events, and the student's life).

### *Language Arts*

#### Grade 1/Grade 2

Standard 4/3: Vocabulary – The student will develop and expand knowledge of words and word meanings to increase vocabulary.

Standard 5/4: Fluency – The student will identify words rapidly so that attention is directed at the meaning of the text.

Standard 6/5: Comprehension/Critical Literacy – The student will interact with the words and concepts in a text to construct an appropriate meaning.

Standard 7/6: Literature – The student will read to construct meaning and respond to a wide variety of literary forms.

### *Writing*

Standard 3: Grammar/Usage and Mechanics: The student will demonstrate appropriate practices in writing by applying Standard English conventions to the revising and editing stages of writing.

### **Activity:** Ducks Disappearing Timeline

**Objective:** To improve reading skills especially in overall comprehension. This activity will allow students to practice their ability to understand chronology and cause/effect relationships. Students will practice drawing conclusions based on given facts as well as information that they infer from their own interpretations.

**Materials:** The book, Ducks Disappearing by Phyllis Reynolds Naylor (either a class set for students to read individually, or just 1 read aloud by the teacher/class)

Pencils

Notebook Paper

Construction paper

Crayons or Colored Pencils

### **Procedure:**

1. Read the book Ducks Disappearing by Phyllis Reynolds Naylor. This may be done either as a class (aloud- taking turns, or read by the teacher) or by each individual student if a class set of books is available.

2. Ask the students to write down what they think may be happening to the ducklings as they begin to disappear.
3. Also, as the story is being read, have students write down any words with which they are unfamiliar.
4. At the end of the story, discuss, as a class, any words that the children may have written down. Ask them what they think the word may mean based on their previous experience and the context in the story in which it was used. Be sure to give them the correct definition and use of the word if the class is unable to figure it out.
5. After completing the book and defining any vocabulary words, have each student create a timeline that follows the storyline. Students should use construction paper and crayons or colored pencils to draw each scene on their timeline.
  - a. Start when the young boy first sees the duck family and proceed to the point when he leaves and encourages everyone to look out for the birds.
  - b. Another option for the timeline is to make a class timeline on a larger sheet of paper or the chalkboard. Have students draw and cut out ducks to correspond with the number seen throughout each scene of the book.
6. When the students complete their timelines, have them write down what they would have done if they were in the same position as the protagonist. Would they have noticed the ducks? What solutions do they suggest for saving the ducklings? Should the dangerous grate be permanently fixed, or just until the ducklings get too big to fall through?

IV. The Sutton Center's education program, *It's All About Birds*, attempts to cover a myriad of subjects from art to math and social studies to language arts. With so much emphasis placed on "teaching to the test" these days, the Sutton Center's education team focuses on lessons and subjects that adhere to the state's PASS objectives, but teaches them in an "outside of the box" way.

It is the goal of the Sutton Center to instill new ideas and facts during a class field trip which can then be taken back to the classroom and expanded. Hopefully students not only enjoy their trip, but learn as much as they possibly can and share the information with others.

The field trip itself covers many of the PASS objectives, especially those relating to Oral Language and Listening and Speaking. Using the events of the field trip back in the classroom, however, also allows for coverage of many more of the objectives.

**Activity:** Thanks Sutton Center!

### Grade 1 & 2

*Language Arts: Writing/Grammar Usage/ and Mechanics*

Standard 2: Modes and Forms of Writing – The Student will Communicate through a variety of written forms and for various purposes and to a specific audience or person.

Standard 3: Grammar/Usage and Mechanics: The student will demonstrate appropriate practices in writing by applying Standard English conventions to the revising and editing stages of writing.

**Objective:** To improve writing and grammar skills. Students will practice and improve upon their knowledge of grammar by writing a thank you letter recalling what they learned and what they liked most about an event.

**Materials:** Lined Notebook Paper  
Pencils  
Colored Pencils

### Procedure:

1. Pass out a sheet of lined notebook paper to each student.
2. As a class go over what was learned during the class field trip to the Sutton Avian Research Center. Allow students to call out things they learned and what they liked best about the trip.
3. Have students write a Thank You Letter to the Sutton Center, practicing their best penmanship and grammar. Allow them to write what they liked best and what they did not like, if they wish. Encourage students to recall something they learned and to write about it.
4. Each student should sign his/her name at the bottom and date the letter appropriately.
5. After they have finished their note, allow students to draw a picture of their favorite bird or favorite activity experienced while at the Sutton Center (optional).



**Activity:** AlphaBIRDtize

Grade 1 & 2

*Language Arts: Reading/Literature*

Grade 1/2: Standard 8/7: Research and Information – The student will conduct research and organize information.

8.1a/7.1a: Accessing Information: Select the best source for a given purpose—Alphabetize words to the first/second letter.

Objective: To practice and enhance a student’s ability to work in groups and alphabetize words from a given list.

Materials:      Index cards  
                         Pencils  
                         List of Sutton Center Show Birds (see below)  
                         Computer/Internet (optional)

Procedure:

1. Allow students to view our education page at [www.itsallaboutbirds.com](http://www.itsallaboutbirds.com) to learn about all of the animals we have here at the Sutton Center.
2. See which birds they can recall seeing – by name and/or picture.
3. The species names are alphabetized on our website already, but have students explore each link to learn the bird’s name and some information about it. Once students have read about all the birds, ask them to put the birds they saw in alphabetical order (Steps 1-3 are optional).
4. Separate students into groups of 2 or 3.
5. Using the list provided (or the list of show birds the kids remembered), have each group write down the names of all the birds they saw on index cards.
6. Once all the birds’ names (given, “show” names, not species names) have been written down, each group should attempt to place the index cards in alphabetical order. For first graders, names should be alphabetized to the first letter while second graders should use the second letter if needed.

Several of our birds’ names do start with the same letter. For first graders, either have students group all names with the same starting letter together, or explain and encourage them to try to alphabetize to the 2<sup>nd</sup> letter.

Sutton Center Show Birds' Names and Species \*\*

Arroyo – Harris' Hawk

Doodle – Sandhill Crane

Ellie – African Grey Parrot

Banshee – Barn Owl

Rats

Rose – Striped Skunk

Lola – Black Vulture

Zephyr – Harris' Hawk

Edgar – American Crow

Chupacabra – Common Raven

Beaker – Abyssinian Ground Hornbill

Fiona – Bald Eagle

Merlin – Moluccan Cockatoo

Charles – Mallard Duck

\*\*Several of our Show Birds rotate with other birds, so birds may vary. This is the most common lineup for our shows. Other possible birds you may have seen include Timber, the Great Horned Owl, instead of Banshee; also Cholla, the Roadrunner, and Elbie, the Red-Shouldered Hawk.