# **Teaching Activities**

for



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### Questions to ask children before reading the book

- What do you think the book is about by looking at the cover? (or one or two of the inside illustrations) Sometimes it is easy to tell from the cover, other times it is not.
- What kind of bird is on the cover and what is it doing?
- What is the boy doing?
- What time of year do you think it is?

## What do children already know?

- Young children are naturally inquisitive and are sponges for information. The
  whole purpose of this activity is to help children verify the information they know
  (or think they know) and to get them thinking "beyond the box" about a particular
  subject.
- The children should write down their "concepts" (or adults for them if the children are not yet writing) on the provided chart found on the next page.
- Use the questions to get children thinking about what they already know. Feel free to add more questions or thoughts according to the child(ren) involved.

# What do children already know—activity chart

Ask children to write down what they think they know before reading the book. If the information is verified while reading the book, check "yes." If the information is wrong, mark "no" and cross it off. Write the correct information in another section, below. Make a note of how you verify the information.

What do I think I know?	Yes	No	<u>Verified</u>
What do many birds do in winter?			Text Illustration Info in FCM Other
How do birds stay warm?			Text Illustration Info in FCM Other
Do all birds migrate?			Text Illustration Info in FCM Other
True or false: both the male and female cardinals are bright red.			Text Illustration Info in FCM Other
True or false: birds are born from eggs.			Text Illustration Info in FCM Other
True or false: if a baby bird looks like it has fallen out of a tree, it must have a broken wing.			Text Illustration Info in FCM Other

Use this chart for any other thoughts the children might have.

Use this chart for any other thoughts  What do I think I know?	tne cr	mare	en might nave.
What do I think I know?	<u>Yes</u>	<u>No</u>	
			Text Illustration Info in FCM Other
			Text Illustration Info in FCM Other
			Text Illustration Info in FCM Other
			Text Illustration Info in FCM Other
			Text Illustration Info in FCM Other
			Text Illustration Info in FCM Other
			Text Illustration Info in FCM Other
			Text Illustration Info in FCM Other

### After reading the book – writing prompts & thinking it through

- Did the cover "tell" you what the book was about?
- If not, how does the illustration on the front relate to the story?
- Draw your own cover
- Write a song
- Can you think of another title for the book?
- What other animals did the illustrator hide in the art?
- Write a different ending to the story
- What would have happened if the grandfather had not helped Nicholas care for the bird?

# Re-read the book looking for more information

Go back and re-read the book studying each page carefully.

- What, if any, facts are mentioned in the text?
- What can be seen or inferred from the illustrations that is not or are not mentioned in the text?
- What, if anything, can be inferred from the text?
- Pause during second readings and ask the child(ren) if they remember what happens next.
- What would happen if a character did something different or if something different happened to the character? Would it/could it change the story?

## **Comprehension Questions**

- What was Nicholas worried about? Why?
- What was the tree that the grandfather wanted Nicholas to think about?
- What did Nicholas see out the window?
- What caused the bird to fall?
- Was it easy for Nicholas to reach the bird? Why or why not?
- What did Nicholas and his grandfather do to help the bird?
- What was the first thing Nicholas did on Christmas morning?
- What happened every year after that?
- Who came to see it?

# What do children already know—activity conclusion

•	Do the children have any more questions about cardinals or blizzards? If so, write them down on the chart.
•	Identify whether the information was verified and how.
•	If the concept is correct, make a note of how the information was confirmed (illustration, in text, in fun fact notes)
•	If the concept was not correct, what IS the correct information – with above confirmation notes as above.
•	If the concept was neither confirmed nor denied, look the information up in a reliable source and note where it was confirmed.
•	Wrap it all up by adding notes with new information that they learned either through the reading or the research while looking up something else.

### Language Arts

### Developing a vocabulary "word wall"

If using the book as a way to introduce a topic or subject, this is also a great way to introduce subject-related vocabulary words. If you don't have the time (or the inclination) to develop the word wall by playing the Vocabulary Game (below), we have provided a vocabulary list for you.

Vocabulary words for the "word wall" may be written on index cards, on a poster board, or on a chalk board. If writing on poster board or chalk board, you might want to sort into noun, verbs, etc. right away to save a step later. Leaving the words posted (even on a refrigerator at home) allows the children to see and think about them frequently.

### Vocabulary game

This activity is designed to get children thinking of vocabulary words which will then be used as the beginning vocabulary list for a science lesson.

Select an illustration and give children a specific length of time (five minutes?) to write down all the words the children can think of about the particular subject. If you do not have classroom sets of the book, it is helpful to project an illustration on a white board. Check Web site (www.ArbordalePublishing.com) for book "previews" that may be used for this purpose.

Their word list should include anything and everything that comes to mind, including nouns, verbs and adjectives. At the end of the time period, have each child take turns reading a word from his/her list. If anyone else has the word, they do nothing. If however, they are the only one with the word, they should circle it. While reading the list, one person should write the word on a flashcard or large index card and post it on a bulletin board or wall.

At the end, the child with the most words circled "wins." And you have a start to your science vocabulary list. Note if children use an incorrect word, this is a good time to explain the proper word or the proper usage.

# Putting it all together

The following activities may be done all together or over a period of several days.

- Continue to add words to the vocabulary list as children think of them.
- Sort vocabulary words into nouns, verbs, adjectives, etc. and write what it is on the back of the card. When the cards are turned over, all you will see is "noun," etc. (These can then be used to create silly sentences, below)
- Now sort the vocabulary words into more specific categories. For example, nouns can be divided into plants, animals, rocks, minerals, etc. They can be divided into living/non-living, or into habitat-related words.
- Have children create sentences using their vocabulary words. Each sentence could be written on a separate slip of paper.
- Have children (individually or in small groups) sort and put sentences into informative paragraphs or a story.
- Edit and re-write paragraphs into one informative paper or a story.



# Suggested vocabulary list

<u>nouns</u>	<u>verbs</u>	<u>adjectives</u>
animals	build	bright
apple tree	feed	cold
babies	fell	red
bird	fly	windy
blizzard	migrate	
cage	sits	
cardinal	sleep	
egg		
feathers		
female		
hatchlings		
male		
nest		
snow		



# Silly sentence structure activity

This is a fun activity that develops both an understanding of sentence structure and the science subject. Use words from the "word wall" to fill in the blanks. After completing silly sentences for fun, have children try to fill in the proper words by looking for the information in the book.

Birds are the only _	s that hav	/es
·	noun	noun
A male Northern coloring.	is usually reco	gnized by bright,
	s on the	_ and the male
brings her food.	noun	
noun	_s are 9 or 10 days old	d, they leave the
noun		
Cardinals	short distances.	
Birds need a place	to and	nests.

# Christmas Eve Blizzard

# Sequence sentence strips

ch in	eparation: Cut into sentence strips, laminate if desired, and place in a "center." Have ldren put the events in order. Children may work alone or in small groups. Cards are order but should be mixed up when cut apart.
	Nicholas saw the cardinal fall from the tree.
	Nicholas ran out into the storm to get the bird.
	Nicholas and his grandfather made a bird cage.
	icholas put water and some birdseed in the cage for the bird.

××
Nicholas and his grandfather finished decorating the tree.
Nicholas woke up on Christmas morning and rushed to check on the bird.
Nicholas took the bird outside and let it go.
Nicholas opened his Christmas presents.



### Word search

Find the hidden words. Even non-reading children can try to match letters to letters to find the words! Easy – words go up to down or left to right.

For older children, identify the coordinates of the first letter in each word (number, letter).

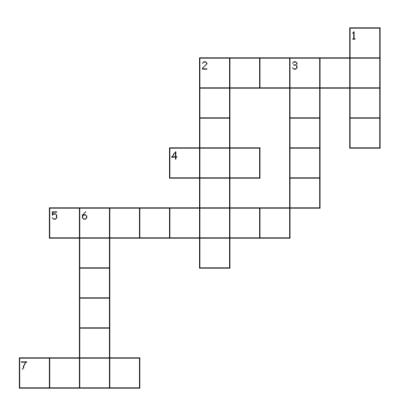
	Α	В	C	D	Е	F	G	Н	- 1	J
1	Α	Т	C	Α	G	Е	Ι	I	S	Н
2	F	Е	Α	Т	Ι	Ш	R	S	Α	Α
3		Α	R	0		G	J	Ν	D	Т
4	Υ	М	D	K	D	G	М	0	В	С
5	Е	Z		J	Е	S		W	U	Н
6	S	U	Z	Ш	S	Τ	G	В	1	L
7	В	Р	Α	Г	I	0	R	1	L	I
8	Α	В	┙		Z	Z	Α	R	D	Ν
9	В	I	R	Υ	Ζ	Α	Т	D	0	G
10	S	0	М	Α	N	Υ	Е	Α	Т	S

, BLIZZARD	, CARDINAL	, BIRD
, MIGRATE	, FEATHERS	, EGGS
, NEST	, BUILD	, FLY
, SNOW	, CAGE	, HATCHLINGS

# **Matching Crossword Puzzle**

Match these Spanish and English words to help solve the crossword puzzle:

- 1) Angry \_\_\_\_\_
  2) Very \_\_\_\_
  3) Grandfather\_\_\_
  4) Bird \_\_\_\_
  5) Cardinal \_\_\_\_
  6) Red \_\_\_\_
  7) Little \_\_\_\_
  8) Snow \_\_\_\_
- a) Pequeño
- b) Cardenal
- c) Enojado
- d) Rojo
- e) Nieve
- f) Abuelo
- g) Pájaro
- h) Muy



### Across:

- 2. bird
- 4. very
- 5. cardenal
- 7. nieve

#### Down:

- 1. red
- 2. little
- 3. enojado
- 6. Grandfather

# Science Edible sorting and classifying activity

Gather together a cup of edible "sorting items." For example:

- As many different kinds of M&Ms as you can find
- Chocolate & peanut butter chips
- Hershey kisses
- Peanuts or other type of nuts

Ask the child to sort the items into groups. There is no right and wrong, only what makes sense to the child. When finished, ask the child:

What criteria or attribute (color, size, ingredient, etc.) did you use to sort the items?

- Are there some items that fit more than one group or don't fit any group?
- Is it easy to sort or were there some items that were a little confusing?

If more than one person did this, did everyone sort by the same criteria? To really extend the learning, graph the attributes used to sort the items. (blank graph below)

### Sorting by attribute graph

Graph the attributes that children used to sort their items. What was the most common attribute (size, shape, color, etc.) used?

10			
9			
8			
7			
6			
5			
4			
3			
2			
1			
Attribute:			

### Classifying animals

Animals can be sorted too. What are some attributes you might use to sort animals?

- By habitat
- Do they have backbones?
- Do they have arms or legs?
- How many legs do they have?
- Do they have stripes or patterns on their bodies?
- Do they walk, swim, jump, or fly?

Some things are very easy for scientists to sort or classify, other things are not so easy. The first question they will ask is whether the item is (or was) alive or not. Both plants and animals are living things.

If the item in question is an animal, like the animals in the story, scientists will then ask other questions:

- Does it have hair or fur, feathers, or dry skin or scales?
- Does it breathe oxygen from air (lungs) or water (gills)?
- Are the babies born alive or from eggs?
- Does the baby eat milk from its mother?
- Is it warm or cold-blooded?
- How many body parts does the animal have?

By answering these (and other) questions, scientists can sort or classify the animals into "classes" such as mammal, bird, reptile, fish, amphibian, or insect.

## Animal classification chart at class level (vertebrates)

Information on the five classes of **vertebrates** (animals with backbones) is given in the table below. Using information found in the book or below, fill in the blanks for each of the animals mentioned in the book (text and the *For Creative Minds* section). Some of the information may be determined by looking at the illustrations. For example, if the animal breathes water, it will be shown living in the water. If the information is not in the book, it has already been filled in.

Have the children use the chart to determine to which class of animals each animal belongs (mammal, bird, fish, or reptile). The chart may also be used to complete a Venn diagram.

	Breaths oxygen air or water	Warm or cold- blooded	Lays eggs or live birth	Hair, scales, or feathers
Mammals	Air	Warm	Mostly live	Hair
Birds	Air	Warm	Eggs	Feathers
Fish	Water	Cold	Varies	Scales
Reptiles	Air	Cold	Mostly eggs	Scales
Amphibians	Water, then air	Cold	Eggs in water to larva	Moist skin that is naked & smooth

**Bird Life Cycle** Sequence Sentence Strips for: **Christmas Eve Blizzard** (2005) Loon Chase (2006) **The Best Nest** (2008) Whistling Wings (2008)

Preparation: Cut into sentence strips, laminate if desired, and place in a "center." Have children put the events in order. Children may work alone or in small groups. Cards are in order but should be mixed up when cut apart.
The female lays her eggs in the nest. Depending on the type of bird, she will lay between two to six eggs.
×
She then sits on the nest to keep the eggs warm (incubate) until they hatch—about two weeks.
While the female is incubating the eggs, the male will guard them. If a predator gets too close, the male will make a lot of noise and fly around to try to distract the predator from the nest. He will also deliver food to the female as she sits on the nest.

The baby birds <b>hatch</b> out of the eggs.
The babies are called <b>nestlings</b> while they live in the nest. It takes a few weeks for their feathers to develop and for them to be big enough to fly.
Usually both the male and female care for the nestlings by keeping them warm and feeding them.
Once they start to fly, they are called <b>fledglings</b> .  They will fly to and from the nest for another week or two, still being feed by their parents.

×
The parents provide less and less food to teach the fledglings how to find food. After a short amount of time the parent birds chase the fledglings out of the nest.
Many birds will lay several groups of eggs ( <b>broods</b> ) a year. Sometimes the female lays more eggs within days of one brood leaving the nest.
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# **Adaptations**

Adaptations help animals to live in their habitat: to get food and water, to protect themselves from predators, to survive weather, and even to help them make their homes.

Camouflage is an adaptation to help animals hide from predators or prey that they want to catch and eat.

Why are the birds in the picture below harder to find in the snow than a cardinal? Describe how the birds in the picture below are using camouflage. How many birds can you find in the picture?



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### Think it through or look it up

- Birds don't have blankets or soft, cozy beds so where and how do you think they sleep? Could you sleep like birds do? Why or why not? (Note to teachers and parents: Birds sleep while either standing or sitting with their feet locked on branches or their nails clinging to tree-trunks. They insulate themselves by fluffing out their feathers to prevent their body heat from escaping.)
- What kinds of birds do you have in the backyard or in the playground?
- Do you know what kind of foods they eat? (Fruit, nuts, bugs, worms, etc.)
- How do the baby birds eat?
- What seasons during the year do you want to stay inside for most of the day? Are the summers where you live very hot? or are the winters where you live very cold? How do you think that the birds live through those seasons?







- What is a blizzard and what do you think makes it dangerous?
- Write or draw a description of what you would do before a blizzard or during a blizzard.

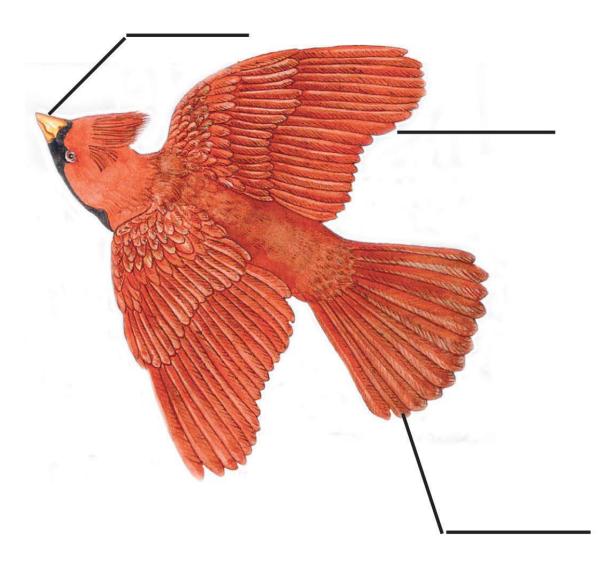
# Science journal

Have children draw a picture to define the vocabulary word or concept

bird		
feathers		
migration		

# Christmas Eve Blizzard

# Label the Bird Body Parts



### Word Bank

beak wing & feathers tail & feathers

Birds are the only animals that have feathers. But not all birds can fly.

### Nature observation notebook

Animals are busy around you at different times of the day or year. Birds are particularly fun and easy animals to watch.

Do different animals show up in your backyard at different times of day? Go in your backyard (or school playground) at different times of the day (morning, noon, evening and night) and write down the animals you see. Are they the same or different? What changes there during the day that might cause different animals to come out at different times (such as light or temperature)?

Keep a journal with the following information

- Where are you?
- What time of day is it?
- What is the weather? (clear/rainy/cloudy or hot/cold)
- · What animals do you see?
- What are they doing?

Those are the animals that you can see. Are there animals that you can hear but can't see?

- What type of sounds do you hear?
- What type of animal do you think makes the sound?
- Is it one animal or many animals?

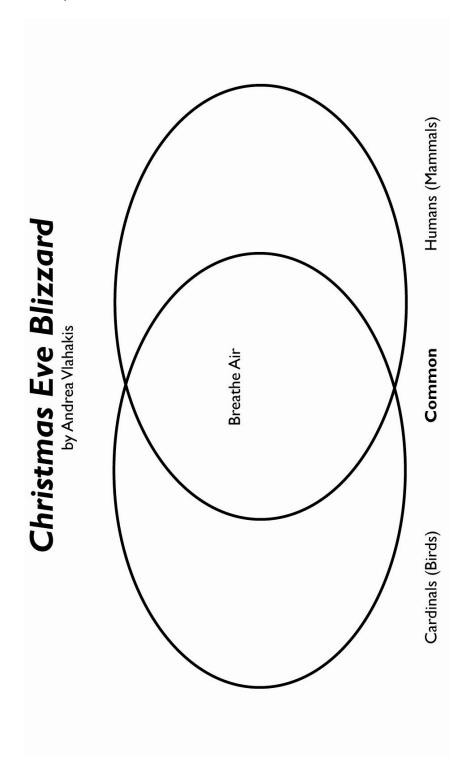
Do you think you would see the same animal at the same place and time tomorrow?

Do you see any "signs" that animals have been there?

- Feathers or bones?
- Tracks or footprints?
- Scat (poop?)
- Scratches or claw marks on trees?
- Partially eaten plants (leaves, nuts, pinecones) or other animals?
- Signs of nests or homes?

# Venn diagram

Both birds and humans breathe air. What are some of the differences between birds and humans? Use the Venn diagram to show the characteristics that they share or that is unique.



### **Bird Math**

For use with Christmas Eve Blizzard (2005) Loon Chase (2006)



The wing span of an adult cardinal is 10 to 12 inches. The wing span of an adult loon can be as large as 58 inches.

- Which is the larger bird?
- By how much?
- Use a ruler to see how big it is and compare it to:
  - your foot
  - o how tall you are
  - o a book
  - o a notebook
  - a favorite toy

An adult cardinal weighs between one and two ounces (2 oz.) or less than two string cheeses. What other things can you find that are less than 2 oz.?

An adult loon weighs between 8 and 15 pounds. What other things can you find that weigh about 15 pounds?

### **Great Backyard Bird Count**

The following data is taken from the Great Backyard Bird Count and indicated how many Northern Cardinals were seen in each state during the census period. Click on your state to see specific observation locations. For more information, go to: <a href="http://gbbc.birdsource.org/gbbcApps/results">http://gbbc.birdsource.org/gbbcApps/results</a>

Interestingly, there is also data about precipitation and storms leading up to the 2007 count also: <a href="http://www.birdsource.org/gbbc/science-stories/2007-results/2007-gbbc-weather-details/">http://www.birdsource.org/gbbc/science-stories/2007-results/2007-gbbc-weather-details/</a>. What correlations might there be between bird counts and the storms?

State/Province	<b>Number of Birds</b>	Number of Checklists Reporting the Species
Alabama	4,216	801
<u>Alberta</u>	5	5
<u>Arizona</u>	469	272
<u>Arkansas</u>	3,790	615
Connecticut	2,858	922
<u>Delaware</u>	1,672	350
District of Columbia	158	32
<u>Florida</u>	7,332	1,911
<u>Georgia</u>	12,922	3,053
<u>Hawaii</u>	56	24
<u>Illinois</u>	8,468	1,403
<u>Indiana</u>	9,717	1,320
<u>Iowa</u>	3,622	694
<u>Kansas</u>	3,678	629
<u>Kentucky</u>	7,832	1,101
<u>Louisiana</u>	2,259	424
<u>Maine</u>	483	219
Maryland	8,714	1,625
<u>Massachusetts</u>	2,192	703
<u>Michigan</u>	7,793	1,555
<u>Minnesota</u>	1,559	442
<u>Mississippi</u>	6,321	1,017
<u>Missouri</u>	9,269	1,336
<u>Nebraska</u>	1,803	500
New Brunswick	31	17
New Hampshire	616	234
New Jersey	5,748	1,625
New Mexico	2	1
New York	11,488	3,322

North Carolina	14,405	3,124
North Dakota	2	2
Nova Scotia	10	9
<u>Ohio</u>	19,038	2,683
<u>Oklahoma</u>	2,661	415
<u>Ontario</u>	2,416	756
<u>Pennsylvania</u>	15,324	3,208
Quebec	285	146
Rhode Island	474	156
Saskatchewan	1	1
South Carolina	4,048	1,004
South Dakota	60	33
<u>Tennessee</u>	8,741	1,347
<u>Texas</u>	10,242	2,262
Vermont	979	347
<u>Virginia</u>	13,153	3,005
West Virginia	3,765	494
Wisconsin	3,487	822
Total	224,164	

Which state or Canadian province sited the most/least cardinals during the census? Why do you think that might be?

# Research and geography

Create a color code for the number of cardinals seen during the observation period.

 1 to 25
 26 to 50
 51 to 75
 76 to 100
 over 101

Using your color code and the information from the Great Backyard Bird Count on the previous pages, color the state to show how many loons were seen.

Circle the state in which you live. How many, if any, Northern Cardinals were seen in your state?





Range and Distribution of the Northern Cardinal <a href="http://en.wikipedia.org/wiki/Northern Cardinal">http://en.wikipedia.org/wiki/Northern Cardinal</a>

The green in the above map indicates where Northern Cardinals live. Answer the following questions:

- Look for the state in which you live. Do cardinals live in your state?
- If you live in or visit Florida, is it possible for you to see a cardinal?
- If you live in or visit Utah, is it possible for you to see a cardinal?
- Would you find more cardinals on the east coast or the west coast of the US?

The Northern Cardinal is the state bird for each of the following states. Find the states on the map:

- Illinois
- Indiana
- Kentucky
- North Carolina
- Ohio
- Virginia
- West Virginia

### Character

According to Character Counts (<a href="http://www.charactercounts.org/defsix.htm">http://www.charactercounts.org/defsix.htm</a>), one of the six pillars of character is:

### Citizenship

- Do your share to make your school and community a better place
- Cooperate with others
- · Get involved in community affairs
- Stay informed; vote
- Be a good neighbor
- Obey laws and rules
- Respect authority
- Protect the environment

What are some other things that Nicholas and his grandfather might have done when they saw the cardinal trapped in the snow?
Do you think they did a good thing?
How do you think Nicholas felt when he saw the bird fly away?
Do you think Nicholas had a nice Christmas?
How were they being good citizens by helping the bird?
What would you have done?