

About the Book

Text Type: Nonfiction/Informational Page Count: 16 Word Count: 751

Book Summary

Scientists still discover hundreds of new animal species every year. *Animal Discoveries* reveals some fascinating recently discovered species from locations around the world. Brilliant photographs showcase these amazing and unusual animals, and charts and maps help expand upon information in the text. The book teaches students about valuing and protecting species new and old while also presenting the opportunity to teach author's purpose and prepositional phrases. Book and lesson are also available for Levels R and U.

About the Lesson

Targeted Reading Strategy

- Ask and answer questions

Objectives

- Ask and answer questions to understand text
- Determine author's purpose
- Identify consonant *ch* digraph
- Identify and use prepositional phrases
- Place words in alphabetical order

Materials

Green text indicates resources are available on the website.

- Book—*Animal Discoveries* (copy for each student)
- Chalkboard or dry-erase board
- Pictures of unusual animals
- [Author's purpose, prepositional phrases, alphabetical order worksheets](#)
- [Discussion cards](#)



Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting the book on an interactive whiteboard or completed with paper and pencil if the books are reused.)

Vocabulary

*Bold vocabulary words also appear in a pre-made lesson for this title on [VocabularyA-Z.com](#).

- Content words:
 Story critical: *arachnid* (n.), *endangered* (adj.), *habitat* (n.), *remote* (adj.), *scientists* (n.),
 species (n.)

Before Reading

Build Background

- Place on the board pictures of unusual animals, such as the Narwhal, the platypus, and the sloth. Ask students to identify the animals, and write their names on the board beneath the correct picture. Have students share with a partner which animal of those on the board they like the most and why.

- Discuss with students the variety of the animal kingdom. Draw on the board a basic classification chart of animals. For example, distinguish between vertebrate and invertebrate, and list the vertebrate classes (mammal, fish, bird, reptile, amphibian) and some invertebrate classes (mollusks, sponges, worms). Point to a class, such as *mammal*, and have students call out animals they know that belong to that class. Record animal names on the chart beneath the corresponding class name.
- Have students discuss in groups unusual animals or their favorite kinds and what most interests them about those animals. Ask students to share with the class where they learned about these animals.

Preview the Book

Introduce the Book

- Give students their copy of the book. Guide them to the front and back covers and read the title. Have students discuss what they see on the covers. Encourage them to offer ideas as to what type of book it is (genre, text type, and so on) and what it might be about.
- Show students the title page. Discuss the information on the page (title of book, author's name).

Introduce the Reading Strategy: **Ask and answer questions**

- Explain to students that engaged readers help themselves to understand what they are reading by asking questions before and during reading and by searching for answers while they read. Discuss with students how interacting with the text by asking and answering questions will help them understand and remember what they read.
- Model how to ask questions.
Think-aloud: When I read a book, I am constantly asking questions as I read. Even before I start the book, questions come to mind that I want the book to answer. The cover and the table of contents provide tantalizing clues that inspire many questions. What are the animals on the cover? What does the title, Animal Discoveries, mean? Who is discovering them? The table of contents also produces questions, for example: What monkeys are in the book, and why are they special? I'll have to read the book to find the answers to some of these questions.
- Draw a T-chart on the board, and label the left side *Questions*, the right side *Answers*. Record the questions from the think-aloud in the left side of the T-chart. Explain to students that graphic organizers, even simple ones like a T-chart, will help readers remember the questions they asked and keep track of the answers they find.
- Have students review the section titles and photographs in the book, and then discuss with a partner questions they have for the book. Invite volunteers to share a question with the rest of the class, and record it in the T-chart on the board.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Comprehension Skill: **Author's purpose**

- Review or explain that an author has a purpose, or reason, for writing a book. The purpose can be to inform, entertain, or persuade. Explain that to *inform* means to give the reader information about a topic, to *entertain* means to amuse the reader, and to *persuade* means to convince the reader to feel or act in a certain way.
- Explain to students that readers determine an author's purpose by considering how they are affected by the text.
- Model determining an author's purpose using a familiar tale, such as the fable "The Crow and the Pitcher."
Think-aloud: In the fable "The Crow and the Pitcher," we read about a crow that is thirsty and wants a drink out of a pitcher. The water in the pitcher is too low for the bird to drink, so it drops pebbles in the pitcher until the water rises high enough for the crow to reach. While reading this story, I was curious to see what happened next and delighted with the crow's solution. The story entertained me. At the same time, fables have morals, messages meant

to teach people lessons in life. This fable's moral is that little by little does the trick. The fable is used to convince readers to keep working at a problem because they can slowly resolve it. Not only does the author want to entertain, he also wants to persuade with the same story.

- Reinforce that an author can write for just one purpose, or for a combination of two or more purposes.
- Remind students of two stories they have previously read as a class. Have students work in groups to review the details from those books and to discuss the effect the books had on them. Discuss with students the author's purpose for each book, and invite volunteers to provide evidence to support that purpose.

Introduce the Vocabulary

- While previewing the book, reinforce the vocabulary words students will encounter. For example, while looking at the picture on page 9, you might say: *Look at the arachnid on this page! This arachnid is a tarantula with gleaming blue fur. What is an arachnid? That's right; some arachnids are spiders.*
- Write the story-critical vocabulary words on the board and review the correct pronunciation for each word. Remind students of the strategies they can use to sound out words they don't know. For example, they can use what they know about letter and sound correspondence to figure out the word. They can look for words within words, and prefixes and suffixes. They can use the context to work out the meanings of unfamiliar words.
- Have students discuss with a partner their prior knowledge of the words on the board. Invite volunteers to share with the rest of the class a definition for any of the story-critical vocabulary words.
- Have students work in groups to find the words in the book. Remind students that in this book, as in many nonfiction books, the vocabulary words are in boldface print to stand out from the rest of the text. Have students observe the picture on the same page as the vocabulary word and read the sentence containing the word. Have groups formulate a definition for each word on the basis of its context.
- Direct students to turn to the glossary on page 16. Remind students that glossaries contain lists of words and their definitions specific to the book. Read the words and discuss their meanings aloud.
- Have students draw a picture that represents the meaning of each vocabulary word.

Set the Purpose


- Have students read to find out more about recent animal discoveries. Remind students to consider the author's purpose for writing as they read the book.

During Reading

Student Reading

- **Guide the reading:** Have students read from page 4 to the end of page 7. Encourage those who finish early to go back and reread. Ask students to go back and look at the questions-and-answers T-chart on the board to see if this part of the book answered any questions.
- **Model asking and answering questions.**
Think-aloud: *Earlier, I had several questions about the book. I have already learned some of the answers. I now know the book is called Animal Discoveries because it is about new animal species discovered around the world, and the ones who find them are scientists. I also learned about the two monkeys in the book, the lasula and the Caquetá titi. These monkeys are special because they are new species, different from all the others. I had a question about the animals on the cover. So far, I haven't read about any of those animals. I will keep searching for the answer to that question. Also, I will be looking for answers to some new questions. What other animals have scientists found? Will any be smaller than the frogs? I thought of these questions after reading the information in the text.*

- Write the answers from the think-aloud in the T-chart on the board, beneath the *Answers* label. Draw a line from each answer to its corresponding question.
- Ask students to point to other questions from the T-chart that were answered in the first part of the book. Invite volunteers to share the answer with the rest of the class, and record answers in the second column. Connect matching questions and answers with a line between them.
- Have students discuss with a partner new questions they have. Invite volunteers to share a question with the rest of the class, and record questions in the first column of the T-chart.
- Review the three purposes an author can have for writing a book. Remind students that to determine an author's purpose, they need to examine the details of the book and consider the effect they have on the reader. Have students discuss with a partner the details they learned in the first three sections of the book.
- Invite volunteers to share a detail with the rest of the class, and record it on the board using key words and pictures. Have students work in groups to discuss their opinion on the author's purpose for the book. Point out that they need to read the whole book to fully understand the author's purpose for writing.
- **Check for understanding:** Have students read pages 8 through 11. Have them discuss with a partner the answers they found while reading and any additional questions that came to mind. Invite volunteers to share questions or answers with the rest of the class, and record them in the T-chart on the board.
- Call on students to share with the rest of the class a new detail about animal discoveries from the second portion of the book. Record details on the board using key words and pictures.
- Ask students whether those details are informative or persuasive, or if they are entertaining. Have students whisper to the front of the class their opinion on the author's purpose for the book.
- Have students read the remainder of the book. Remind them to look for answers to their questions. Encourage them to think of new questions as they read. Remind them to examine the details to determine the author's purpose for the book.

 Have students make a question mark in their book beside any word they do not understand or cannot pronounce. Encourage them to use the strategies they have learned to read each word and figure out its meaning.

After Reading

- Ask students what words, if any, they marked in their book. Use this opportunity to model how they can read these words using decoding strategies and context clues.

Reflect on the Reading Strategy

- **Think-aloud:** *Now that I have finished reading the book, it is time to review all my questions and think about what answers I found. I did learn the answer to my question about the identity of all the animals on the cover, such as the blossom bat and the olinguito, the planthopper and the lemur. Another question I had was whether any of the animals would be smaller than the tiny frogs. The planthopper may be smaller than the pea-sized, narrow-mouthed frog, although the book doesn't mention its size, so I don't know for sure. I need more information to fully answer this question. I could also research to learn more about another question I had, what other animals have scientists found. The book did describe several discovered animal species, but it also referred to other discoveries. The book partially answered my question, but to learn more about discovered species, I will need to research in other places.*
- Have students discuss with a partner the questions they had for the book and all the answers they found. Invite volunteers to share any final questions with the class and add them to the T-chart on the board.

- Ask students to point to questions in the T-chart that were answered by information in the book. Call on students to share the answers with the rest of the class and record answers in the second column of the T-chart. Invite volunteers to come to the board and draw a line between corresponding questions and answers.
- Invite volunteers to come to the board and circle unanswered questions. Discuss with students how they could find answers to these questions, using other sources such as encyclopedias, magazines, other books, and the Internet.
- Have students share with a partner how asking and answering questions helped them to understand and remember information they read in the book. Reinforce with students that asking and answering questions keeps readers engaged with the book, and encouraged to read more.

Reflect on the Comprehension Skill

- **Discussion:** Invite volunteers to share remaining details from the book, and record them on the board, using key words and pictures. Ask students to consider the effect the details of the book had on them as readers. Have students discuss with a partner the author's purpose for the book and think of reasons to justify their choice. Guide students to a class consensus that the author's purpose for the book is to inform readers about animal discoveries. Circle the word *inform* on the board.
- Discuss with students whether the author had any other purpose besides the main one of informing. Have students share with a partner sections in the book that entertained or persuaded them, and invite volunteers to share their thoughts with the rest of the class.
- **Independent practice:** Introduce, explain, and have students complete the [author's purpose worksheet](#). If time allows, discuss their answers aloud.
- **Enduring understanding:** In this book, you learned about new animal species discovered in recent years. Do you think there are many more species left undiscovered? What do these discoveries add to our knowledge of the world?

Build Skills

Phonics: Consonant *ch* digraph

- Write the word *arachnid* on the board and read it aloud with students. Point to the letters *ch* and read the word slowly, emphasizing each phoneme. Ask students to identify the sound the consonant digraph *ch* makes in the word *arachnid*.
- Write the letters *ch* on the board and ask students to identify the phoneme corresponding to that consonant digraph. Reinforce with students that the consonant *ch* digraph typically creates the /ch/ sound. Point out that in the word *arachnid*, the digraph makes a /k/ sound.
- Explain to students that the consonant *ch* digraph makes two sounds. For the majority of words, it creates the /ch/ sound, but in a few words, it creates the /k/ sound.
- Write the words *echo* and *chair* on the board. Read them aloud with students, and have them point to the word using the /k/ sound. Point out that while there are a couple of complicated rules for knowing when to use a /k/ sound versus a /ch/ sound, the easiest method is to read the word aloud and listen to which pronunciation sounds right.
- Have students work with a partner to find and circle all words with the consonant *ch* digraph in the book. Invite volunteers to share a word with the rest of the class, and identify with students the sound the *ch* digraph creates in each word.
- **Check for understanding:** Write the following words on the board: *epoch*, *chop*, *rich*, *ache*, *branch*, *school*, *anchor*, and *chin*. Read the words aloud with students. Call on students to come to the board and circle the consonant digraph *ch* in each word while other students trace the letters *ch* in the air. Ask students to discuss with a partner which words use the /k/ sound and which words use the /ch/ sound. Invite volunteers to come to the board and underline words that use the /k/ sound.

Grammar and Mechanics: **Prepositional phrases**

- Write the following sentence on the board: *Scientists found the Gorgon's head starfish in the Atlantic Ocean.* Circle the word *in*, and have students share with a partner the word's meaning in the sentence (it explains where the starfish was found).
- Review or explain to students that a *preposition* is a word that *shows a relationship between parts of a sentence*, and often locates objects in space or time. Remind students that prepositions provide information about where, when, and how something happens. Point out that in the sentence above, the word *in* describes where the starfish is physically located.
- Review with students common prepositions and record them in a list on the board. The list may include: *above, below, on, in, over, under, off, since, between, beside, during, toward, with, without, around, at, by, and out.*
- Write the following sentence on the board: *The olinguito sits.* Explain to students that prepositions change the meaning of a sentence by adding more detail. Erase the period and write the word *in* at the end of the sentence. Have students share with a partner how they would complete the sentence. Invite a volunteer to share with the rest of the class how to conclude the sentence, and record it on the board, for example, *The olinguito sits in a tree.*
- Rewrite the sentence, substituting in a new preposition, such as *under*. Have students share with a partner a new way to end the sentence, and invite volunteers to share a sentence with the rest of the class. (*The olinguito sits under a bush.*) Record examples on the board. Discuss with students the difference in meaning between these sentences and the sentence using the preposition *in*.
- Have students choose three prepositions from the board and think about how each preposition would change the original sentence. Ask students to work with a partner to create three oral sentences using new prepositions. Invite volunteers to share a sentence with the rest of the class, and record sentences on the board.
- Remind students that a phrase is a group of words that expresses an idea but doesn't make a complete sentence. Explain to students that a *prepositional phrase* is a group of words *beginning with a preposition and ending with the object of the preposition*.
- Review with students one of the sentences on the board, and have them share with a partner the prepositional phrase. Underline the phrase. Have students share with a partner the preposition and the object of the preposition in the phrase. For example, in the phrase *in a tree*, the preposition is *in*, and the object is *tree*.
- Have students work with a partner to find the prepositional phrase in each sentence on the board. Invite volunteers to come to the board and underline the phrase. Have students discuss with a partner the preposition and object in each phrase. Point to a sentence, and have students call out the preposition and the object. Write the letter *P* above the preposition and the letter *O* above the object.
- **Check for understanding:** Have students work with a partner to locate and circle the prepositions on pages 7 and 8. Then, have students work in groups to identify the prepositional phrases attached to each preposition and underline them. Invite volunteers to share a prepositional phrase with the rest of the class, and have other students identify the preposition and its corresponding object.
- **Independent practice:** Introduce, explain, and have students complete the **prepositional phrases worksheet**. If time allows, discuss their answers aloud.

Word Work: **Alphabetical order**

- Review the process of putting a list of words in alphabetical order. Remind students to begin by comparing the first letter of each word and determining which letter comes first in the alphabet.
- Write the words *monkey* and *animal* on the board. Have students share with a partner which word comes first in alphabetical order and why. Invite a volunteer to identify which word comes first (*animal*) and to explain the reason to the rest of the class.

- Add the word *arachnid* to the board. Ask students to compare *arachnid* and *animal* and to decide with a partner which word comes first. Point out to students that both words start with the same letter. Explain to students that when words begin with the same letter, they then compare the second letter in each word. Have students point to the word that comes first in alphabetical order, and reinforce that because the letter *r* comes after the letter *n* in the alphabet, the word *arachnid* comes after the word *animal* in alphabetical order.
- Ask students whether *arachnid* would come before or after *monkey*. Invite a volunteer to describe its alphabetical relationship to *monkey* and explain why. Write the three words so they form a list. Point out to students that when they add a new word to the list, they need to make sure it comes between the first letters of the words before it and after it in the list.
- Write the words *mania* and *tailorbird* on the board. Have students work in groups to compare the words to the three already recorded on the board and add them to the list. Remind students to determine which words come before and after in alphabetical order. Invite a volunteer to share his or her list with the class, and have other students give a thumbs-up signal if they agree. Record the list in correct alphabetical order on the board.
- **Check for understanding:** Write the words *furry*, *starfish*, and *frog* on the board. Have students work with a partner to arrange these words in an alphabetical list. Have students write the words on a separate piece of paper, in the correct order. Invite a volunteer to share the list with the rest of the class, and have other students give a thumbs-up signal if they agree the words are in correct alphabetical order.
- **Independent practice:** Introduce, explain, and have students complete the [alphabetical order worksheet](#). If time allows, discuss answers aloud.

Build Fluency

Independent Reading

- Allow students to read their book independently. Additionally, partners can take turns reading parts of the book to each other.

Home Connection

- Give students their book to take home to read with parents, caregivers, siblings, or friends. Have students demonstrate how a reader asks questions then reflects on the answers while reading.

Extend the Reading

Informational Writing and Art Connection

Ask students to choose an animal that is similar to one of the animals in the book. Have students draw a picture of their animal, and discuss with a partner how it compares to an animal in the book. Have students write a paragraph about their animal. Ask students to write at least two sentences describing their chosen animal and another sentence explaining why the animal is unique or special. Invite volunteers to share their paragraph and picture with the rest of the class.

Visit WritingA-Z.com for a lesson and leveled materials on informational writing.

Science Connection

Review with students the animal classification chart from the Build Background section of the lesson. Discuss with students why scientists decided to create a classification system for organizing animals. Focus on the vertebrates phylum, and explain to students the qualifying factors for each of the five classes. Assign students to groups, and pass out to each group photographs of various animals. For each animal, have groups discuss the characteristics of the animal and decide which class it belongs to. Call on groups to share the animals they were assigned and how they classified them. Have other students give a thumbs-up signal if they agree with the classification. Tape the photographs to the board under the correct class heading.

Skill Review

Discussion cards covering comprehension skills and strategies not explicitly taught with the book are provided as an extension activity. The following is a list of some ways these cards can be used with students:

- Use as discussion starters for literature circles.
- Have students choose one or more cards and write a response, either as an essay or as a journal entry.
- Distribute before reading the book and have students use one of the questions as a purpose for reading.
- Cut apart and use the cards as game cards with a board game.
- Conduct a class discussion as a review before the book quiz.

Assessment

Monitor students to determine if they can:

- consistently use the strategy of asking and answering questions to comprehend the text during discussion
- accurately determine an author's purpose for writing during discussion and on a worksheet
- correctly identify the consonant *ch* digraph in the text and during discussion
- properly use prepositional phrases during discussion, in the text, and on a worksheet
- accurately place words in alphabetical order during discussion and on a worksheet

Comprehension Checks

- **Book Quiz**
- **Retelling Rubric**