

## About the Book

Text Type: Nonfiction/Informational Page Count: 16 Word Count: 1,203

### 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 O and R.

## About the Lesson

### Targeted Reading Strategy

- Ask and answer questions

### Objectives

- Ask and answer questions to understand text
- Determine author's purpose
- Identify and use prepositional phrases
- Identify and use the suffix *-ist*

### 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
- Sheets of paper
- Author's purpose, prepositional phrases, suffix *-ist* 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](http://VocabularyA-Z.com).

- Content words:

Story critical: **endangered** (adj.), **habitat** (n.), **population** (n.), **rare** (adj.), **remote** (adj.), **species** (n.)

Enrichment: **DNA** (n.), **extinction** (n.), **genes** (n.), **herpetologist** (n.), **juveniles** (n.), **secretions** (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. Invite students to share with the class 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 and have students call out animals that belong in that category. Invite volunteers to come to the board and record the animal names under the appropriate class heading.
- Have students share with a partner 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.
- Ask students to copy the T-chart on a separate sheet of paper. Have them review the table of contents and photographs and write at least one question on their own chart.
- Invite volunteers to share a question with the rest of the class and come to the board to record it in the T-chart.
- 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.
- Ask students to give examples to a partner of times when they have said or written something to inform, entertain, or persuade others. Invite volunteers to share an example with the rest of the class.
- 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 three stories they have previously read as a class. Ensure that all three purposes are represented. Have students work with a partner to review the details from those books and to discuss the effect the books had on them. Invite volunteers to share their opinion on the author's purpose for each book. Guide students to a consensus on the author's purpose for each book, and call on students to share evidence to support that purpose.
- Have students think of other examples of books they know that entertain, persuade, and inform readers. Invite volunteers to share their examples with the rest of the class.

### Introduce the Vocabulary

- 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.
- Invite volunteers to share with the rest of the class a definition for any of the story-critical vocabulary words on the basis of their prior knowledge of the word.
- Have students work with a partner 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 partners 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. Have students work with a partner to find the vocabulary words and discuss their meanings.
- Have students write the words on a separate sheet of paper. For each word, ask students to write a definition in their own words and then write a sentence that accurately uses the 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 their questions-and-answers T-chart to see if this part of the book answered any questions. Have them write answers in the second column of their T-chart.

- Model asking and answering questions.  
**Think-aloud:** *Earlier, I had several questions for 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 on the board that were answered in the first part of the book. Invite volunteers to share an answer with the rest of the class, and have them record the answer in the second column of the T-chart on the board. Have volunteers connect matching questions and answers with a line between them.
  - Have students write new questions in the first column of their T-chart and discuss these new questions with a partner. Invite volunteers to come to the board and record questions in the first column of the T-chart on the board.
  - 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.
  - Create a three-column chart on the board with the labels *inform*, *entertain*, and *persuade* at the top.
  - Call on students to share a detail with the rest of the class, and record it in the appropriate column on the board. Have students work with a partner to examine the details and their classification and 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 students record answers they found and additional questions that came to mind in their T-chart. 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 in the chart on the board.
  - Ask students to determine whether they consider these details informative, persuasive, or 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 many 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 finish filling out their questions-and-answers T-chart. Ask them to draw lines between each question and its answer. Have them 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 answer with the rest of the class, and invite volunteers to come to the board and record answers in the second column of the T-chart. Have volunteers draw a line between the corresponding question and answer.
- Have students circle unanswered questions on their T-chart. Ask students to point to unanswered questions on the board. 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:** Talk about how stopping to review the important details helped students remember facts and better understand the information.
- **Discussion:** Invite volunteers to come to the board and record in the chart any remaining details from the book. Ask students to examine the three columns and determine which purpose has the most details. Point out that the column with the most details is likely to represent the author's purpose for the book.
- Have students identify the author's purpose for the book and discuss with a partner how they can justify their choice. Have students call out the author's purpose, and circle the word *inform* on the board. Ask students to clarify what the author is informing readers about (new animal discoveries).
- 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. Discuss with students how the author wants them to feel about taking care of animal species and habitats.
- **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

#### 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.
- Have students share with a partner common prepositions they know. Invite volunteers to share a preposition with the rest of the class 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 come to the board and conclude the sentence, using a period at the end, for example, *The olinguito sits in a tree*.
- Rewrite the sentence, substituting in a new preposition, such as *under*. Have students rewrite the sentence on a separate sheet of paper with a new ending. Invite volunteers to come to the board and complete the sentence. (*The olinguito sits under a bush*.) 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 rewrite the sentence using three different prepositions. Ask students to write their sentences on a separate sheet of paper. 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*.
- Ask students to review one of the sentences on the board, and have them point to 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 *a 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 a phrase. Have students identify the preposition and object in each phrase. Invite volunteers to come to the board and write the letter *P* above the preposition and the letter *O* above the object.
- Have students point to the first sentence of the second paragraph on page 5. Write the sentence on the board, and have students read it aloud. Point out that this sentence uses two prepositions. Explain to students that sentences can use more than one prepositional phrase, adding more and more detail to a sentence. Ask students to find and identify the prepositions (*in, along with*). Ask students to identify with a partner the prepositional phrase connected to each preposition. Underline both prepositional phrases. Invite volunteers to come to the board and write the letter *P* above the preposition and the letter *O* above the object for each prepositional phrase.
- **Check for understanding:** Have students work with a partner to locate and circle all the prepositions in the book. Then, have partners identify the prepositional phrases attached to each preposition on pages 7 and 8, and ask them to underline the phrases. Have students write a *P* above the preposition and an *O* above the object in each phrase. 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: Suffix -ist

- Write the word *scientist* on the board and read it aloud with students. Cover up most of the word so only the letters *ist* remain, and have students read them aloud. Cover the letters *ist* and ask students to identify the base word that most resembles the remaining letters (*science*).
- Review or explain to students that a *suffix* is a word part *added to the end of a base word* that changes the meaning of the word. Ask students to identify the suffix in the word *scientist*.
- Write the base word *science* on the board, and have students share with a partner the meaning of the word. Invite a volunteer to share the meaning with the rest of the class (study of the physical world). Ask students to share with a partner the meaning of the word *scientist*, and invite a volunteer to share the meaning with the rest of the class (someone who studies science, or studies the physical world).
- Write the words *physics* and *physicist* on the board, and read them aloud with students. Explain to students that a physicist is someone who studies physics, or the study of physical forces. Write the word *zoologist* on the board, and read it aloud with students. Explain to students that a zoologist is someone who studies zoology, or the study of animals.
- Have students discuss with a partner their ideas on the use of the suffix *-ist*. Explain to students that the suffix *-ist* changes a word to mean a person who studies or practices a particular subject or skill. Point out that the suffix *-ist* can also refer to a person who practices a particular religious or political belief (Marxist, Baptist).
- Point out that when adding a suffix, the ending of the base word is often changed. *Science* drops the letters *ce* and adds the letter *t* before adding *-ist*. *Zoology* drops the letter *y*. *Physics* drops the letter *s*. Explain to students that most often the word drops the last letter and adds *-ist*, but they will need to learn the other changes through practice.
- **Check for understanding:** Write the following words on the board: *art*, *biology*, *violin*, and *economy*. Discuss with students the meaning of the base words. Have students work with a partner to add the suffix *-ist* to each word and determine the meaning of the new word. Invite volunteers to come to the board and write the word with suffix attached. Correct spelling as necessary. Then, have partners use the words in oral sentences that accurately reflect the new meaning of the words.
- **Independent practice:** Introduce, explain, and have students complete the [suffix -ist 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 make a Venn diagram that compares and contrasts their animal to the one from the book. Have students share and discuss their Venn diagrams with a partner. Have students write a report on their animal using five paragraphs. Ask students to describe their chosen animal, compare it to an animal from the book, and explain why their animal is unique or special. Invite volunteers to share their report and picture with the rest of the class.

Visit [WritingA-Z.com](http://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. Choose three classes from the invertebrates phylum, and explain to students the qualifying factors for each of those classes. Assign students to groups, and pass out to each group photographs and short articles on various animals. Have groups discuss the characteristics of the animals and decide which phylum and class the animals belong 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 and articles to the board under the correct class heading. Have students copy the classification chart on a poster paper, label all the animals depicted, and illustrate it with drawings. Ask them to take the chart home and explain it to their parents, caregivers, or siblings.

### 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
- properly use prepositional phrases during discussion, in the text, and on a worksheet
- accurately use the suffix *-ist* during discussion and on a worksheet

### Comprehension Checks

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