

FIONA THE FRUIT BAT



Teacher's guide

Title: *Fiona the Fruit Bat*

Author: Dan Riskin

Illustrator: Rachel Qiuqi

Genre: Juvenile fiction

Themes: Overcoming fear, self-reliance, self-confidence, determination, courage, problem solving, community, learning from others, senses, fruit bat biology, echolocation, survival, adaptations

Suitable for: Ages 3–7, Grades K–2

Common Core Standards

College and Career Readiness Anchor Standards for Reading, Writing, Speaking and Listening, and Language;
Reading Standards for Literature

R.CCR.1, 2, 3, 4, 7

RL.K.6; RL.K.10; RL.1.5

W.CCR.1, 2, 7

SL.CCR.1, 2, 6

L.CCR.1, 2, 6

Skills and Competencies

predicting

identifying fiction

making connections

inferring from words and illustrations

discussing the main theme of a book

writing about a book

following a list of instructions

conducting an experiment

collecting data

researching a topic





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Book Summary

Fiona the Fruit Bat is a sweet, fun, and informative picture book about bat echolocation for children aged 3 to 7, written by a scientist who works with bats in his everyday life!

Fiona is a fruit bat who needs to learn how to take her very first flight, but she's scared. Fiona worries about not being able to see in the dark. Her mama just says, "Listen." But Fiona doesn't understand how listening will help her to see. Then she starts to notice the sounds around her and unlocks a secret hidden inside herself.

Fiona the Fruit Bat is rooted in the real-life biology of short-tailed fruit bats. This adorable story features:



The fascinating science behind echolocation, including back matter pages with information on fruit bats from the author.



A comforting message to help kids scared of the dark: alongside Fiona, they'll learn there's nothing to be scared of!



A celebration of self-confidence and independence, showing readers the amazing things they can accomplish all on their own.



Delightful illustrations by Rachel Qiuqi.

Fiona the Fruit Bat is a touching tale about overcoming the fear of new experiences and finding the courage to listen to your own voice.





About the Author

Dan Riskin is obsessed with bats. On his first trip to the tropics, he stuck his head into a Costa Rican cave, looked up, and locked eyes with a juvenile short-tailed fruit bat. Since then, Dan has spent decades researching the biomechanics of bat movement and making TV shows to help audiences fall in love with science. Dan's first book, *Mother Nature Is Trying to Kill You*, was a national bestseller. With *Fiona the Fruit Bat*, Dan hopes to share the magic he saw behind that fruit bat's eyes. Dan lives in Toronto with his wife and their three kids. This is his first picture book.

About the Illustrator

Rachel Qiuqi is an illustrator and author passionate about storytelling for children. She started illustrating when she was little and has been drawing with the same naivete to this day. Her delightful work is inspiring not only for kids, but for grown-ups too. She was born in Shanghai and now lives in Toronto, Ontario.



About This Guide

This teacher guide was created by Becky Noelle, an experienced teacher with a bachelor of science and a love for all things biology. Use this guide to help your students fully engage with the book while learning about echolocation and overcoming their fears!

Before Reading



What Type of Book Is This?

Show the class the cover of the book and flip through the pages, so they can get a sense of the illustrations. Use the following questions to guide the discussion. Additional teacher directions are included in brackets after some questions.



What do you see in the pictures?



What do you think this book is about?



Do you think this is a fiction or a nonfiction book?
How do you know?

(Use the terms your students are most familiar with.
For example, they may be more familiar with “story” versus
“information” book, rather than “fiction” and “nonfiction.”)



How can I find out who the author of this book is?
(Prompt students to look at the cover and first few pages
of the book to find out who the author is.)



What does the author do in a book?







How can I find out who the illustrator of this book is?
(Prompt students to look at the cover and first few pages
of the book to find out who the illustrator is.)



What does the illustrator do in a book?

What Is This Book About?

This book is about overcoming fear and problem solving. Guide your students in a discussion about fear and things that can help in overcoming it. Use the following questions as a starting point:

-  What's something you're afraid of?
-  What has helped you feel less afraid?
-  What does it mean to problem-solve?
-  What helps you solve problems?



Tips:

Create a safe space for students to share their fears by presenting one of your own fears first and reminding students to be respectful of everyone's answers (i.e., by listening actively and never laughing at someone's fears).

Have students talk in partners or small groups to help students who may feel anxious about sharing in front of the whole class.

As students share, write their answers out on a whiteboard or chart paper to help them realize they are not alone, and to gain new ideas for working through their fears.

During Reading

What Does That Word Mean?

This book uses some descriptive words that students may not understand. As you read to the class, discuss any words that may be unfamiliar to students. The list below includes a few words used in the book that you may want to define. Students can also add words to a personal or class list as you read the book. Then, they can look up the words after the story is finished.



ceiling

creature

echo

faint

familiar

focus/focused

gracefully

images

interrupted

noticed

realized

snapped

sniffled/sniffing

suddenly

swooped

unhooked

wail

whimper

whipped



In the book, there are a number of words used to describe Fiona's crying. Have students pick out the words from the list above that tell readers that Fiona is crying (sniffled/sniffing, whimper, wail). Discuss with the class why the author might have chosen to use different words, other than "cry," to describe how Fiona was feeling. See if students know any additional words or descriptions that mean someone is crying.

Have You Ever Felt That Way?


Fiona feels many emotions throughout the story. As you read the book to your class, have students identify how Fiona is feeling on each page. They can use vocabulary words, text descriptions, and illustrations to decide. Have students make connections to Fiona and the story by thinking of times in their lives that they felt the way Fiona is feeling. Use the example prompts below to get started. Show students the pages listed as you discuss each prompt.




On the first page of the story, it says "Fiona didn't feel ready." What does it mean to not feel ready? Describe a time when you had to do something you didn't feel ready for.




On the third page of the story, it says "It made no sense." How is Fiona feeling? Describe a time when you felt confused by something an adult told you to do.



How does Fiona feel in the picture across from the text that begins “The cave was quiet again, until another bat swooped in”? What is something that makes you feel better when you are feeling grumpy?



How does Fiona feel in the picture on the following page, where the text begins with “As Mama cleaned Fiona’s fur”? Why does she feel that way? What’s something that made you so sad that you cried?



Read the words and look at the illustration on the last page of the story, as Fiona flies out of the cave. How does Fiona feel at the end of the book?



After Reading

What Did You Learn?

Have students use the following questions as writing prompts to share what they learned from the book. Alternatively, use the questions to guide a class discussion, or have students share in small groups or with a partner.



What is something new you learned from the story?



What was your favorite part of the story?



What was the problem in the story?

(Possible answers: Fiona was sad; Fiona was scared; Fiona couldn't fly on her own; Fiona didn't know how to fly in the dark.)



How did Fiona fix her problem?

(Possible answers: Fiona learned from others; Fiona did what she was told; Fiona listened carefully and observed; Fiona kept trying)



What is a problem that you have had?



How did you fix it?



How did Fiona see in the cave?



Why do bats need to echolocate?

(Note: You could introduce the concept of adaptations to your students here.)



What other animals are awake at night?

(Note: You could introduce the concept of nocturnal animals to your students here.)

What's That Sound?

This book uses onomatopoeia to show the sounds in the cave and the sounds Fiona uses to echolocate. Use the following video and prompts to teach your students about onomatopoeia.



Watch the following YouTube video together:

“The Onomatopoeia Alphabet | Onomatopoeia for Kids | Jack Hartmann”

(<https://www.youtube.com/watch?v=FBQCgjo1QTU>).



Have students describe onomatopoeia in their own words.



List examples of onomatopoeia on the board.



Revisit *Fiona the Fruit Bat* and find the examples of sound words:

bibble-babble-bubble

SPLAT, SPLAT, SPLAT

takka-takka-tik

CHIRP, CHIRP, CHIRP

Depending on your students' grasp of the concept, you could also take it further to discuss other onomatopoeic words used in the book:

whimper

whisper

swooped

licked

wail



SPLAT, SPLAT, SPLAT

Who Are Your Safe People?

In the story, when Fiona feels afraid, she finds different people to talk to that can help her. Use the following prompts to help your students discover who their safe people are.



People that help us when we're afraid are called our safe people.



Who were Fiona's safe people?



Who are your safe people?



What do safe people do to help us? (e.g., listen to us, give us encouragement, show us how, teach us)



Write a list or draw pictures of the safe people in your life—people that you know can help you when you are afraid.



Explain why those people are your safe people.










Can You Smell Like a Fruit Bat?

Fruit bats like Fiona find food using their sense of smell. Use the following directions to set up an activity for your students to try using their sense of smell like a fruit bat would!

The following activity will work best with a group of three students completing it at a time. Feel free to adapt it however you need to best suit the number of students you are working with. For example, you may want to gather and prepare multiple sets of supplies for the activity so that more than one group can complete it at a time, or you may want to combine it with other activities in this guide (e.g., the “Can You Echolocate Like a Fruit Bat?” activity on pages 24–26) to create stations which your students can rotate through in groups.






Supplies

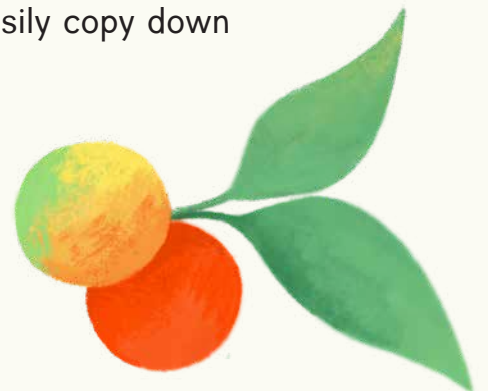
-  one Fruit Smelling Steps page for each group (page 22 of this guide)
-  one Fruit Smelling Notes page for each student (page 23 of this guide)
-  pencil
-  blindfold
-  three small, labeled containers with ripe fruit



Teacher Instructions

Preparation:

-  Print and laminate (or put in a plastic sleeve) one copy of the Fruit Smelling Steps page for each group.
-  Print one copy of the Fruit Smelling Notes page for each student in your class (note that the template on page 23 of this guide includes two copies of the Fruit Smelling Notes page that can be cut apart to save paper).
-  Purchase a variety of fruit and let them ripen until they have a good smell. Choose fruits that students will be familiar with so they can identify the fruit from the smell. For example, ripe strawberries, bananas, and oranges will have distinct and easily identifiable smells. Purchase three types of fruit for the main activity. If you want to include the bonus challenge activity, purchase at least three types of additional fruit that might be more difficult for students to identify by smell.
-  Cut up the fruit into small pieces and place some of each type of fruit in its own container with a lid.
-  Label each container with the name of the fruit inside. Use a large clear font, so students can easily copy down the name when completing the activity.



In Class:



Put students into groups of three.



Have students choose which job they'll start with (Tester, Fruit Bat, or Notetaker). Remind students that they will get to do each job at some point and that for now they are just deciding who will start in each job.

(Note: To save time, you could also assign students their jobs or put the three jobs into a hat for students to choose their first job at random.)



Explain the three jobs to students, using the descriptions below:

Tester: The Tester will be in charge of the fruit containers. They will make sure the Fruit Bat is blindfolded, show the Notetaker which fruit they are testing, remove the lid from the container, and hold the fruit under the Fruit Bat's nose.

Fruit Bat: The Fruit Bat will be blindfolded and will need to use their sense of smell to guess which type of fruit they have under their nose.

Notetaker: The Notetaker will record the Fruit Bat's name, the type of fruit being tested, and the Fruit Bat's guess using the Fruit Smelling Notes page.





Tell students what the three main fruits are that they will be smelling. (This makes the activity more accessible and allows all the students to experience the activity in the same way.)



If you have challenge fruit available, tell students where they can go to get the challenge fruit once they have completed the three main fruit. Don't tell students the type of fruit available for the challenge fruit. This will add a layer of challenge. Try to give students from the same group different challenge fruit so each group member gets a new challenge.



Demonstrate the process once with a volunteer group.



Tell students the fruit is only for smelling, not eating.



Hand out the supplies listed above to groups when they are ready to start.



Guide and support students in following the instructions on the Fruit Smelling Steps page as needed.









Can You Echolocate Like a Bat?

Bats use their sense of hearing to echolocate and fly safely in the dark. At the back of the book, under the heading “Try It Yourself!” the author describes a way for readers to try echolocating. The description below goes into more depth, allowing students to complete the activity independently.






Supplies

-  one Echolocation Steps page (page 24–25 of this guide)
-  one Echolocation Notes page for each student (page 26 of this guide)
-  pencil
-  blindfold
-  hardcover book
-  pillow

Teacher Instructions

Preparation:

-  Gather together a blindfold, hardcover book, and pillow.
-  Print and laminate (or put in a plastic sleeve) one copy of the Echolocation Steps page.
-  Print one copy of the Echolocation Notes page for each student in your class. (Note that the template on page 26 of this guide includes two copies of the Echolocation Notes page to save paper.)

In Class:



Put students into groups of three.



Have students choose which job they'll start with (Tester, Fruit Bat, or Notetaker). Remind students that they will get to do each job at some point and that for now they are just deciding who will start in each job. (Note: To save time, you could also assign students their jobs or put the three jobs into a hat for students to choose their first job at random.)



Explain the three jobs to students, using the descriptions below:

Tester: The Tester will make sure the Fruit Bat is blindfolded and slowly move the book or pillow in front of the Fruit Bat's face.

Fruit Bat: The Fruit Bat will be blindfolded and will make noises to echolocate and guess when the book or pillow is in front of their face.

Notetaker: The Notetaker will record the Fruit Bat's name and keep track of the Fruit Bat's guesses by using a check mark for correct guesses and an "x" for incorrect guesses.



Demonstrate the process with a volunteer group.



Hand out the supplies listed above to groups when they are ready to start.

What Else Can We Learn?

If your students are eager to learn more about bats and echolocation after reading *Fiona the Fruit Bat*, use the following ideas to keep going!



Read more about echolocation and fruit bats on the last pages of the book.



Watch how some people use echolocation to see:

“Blind Boy Uses Echolocation |
Extraordinary Animals | BBC Earth”

<https://www.youtube.com/watch?v=zXtExOMCDfE>

“Online Exclusive: Blind man uses bat-like
vision - World's Weirdest Events - BBC Two”

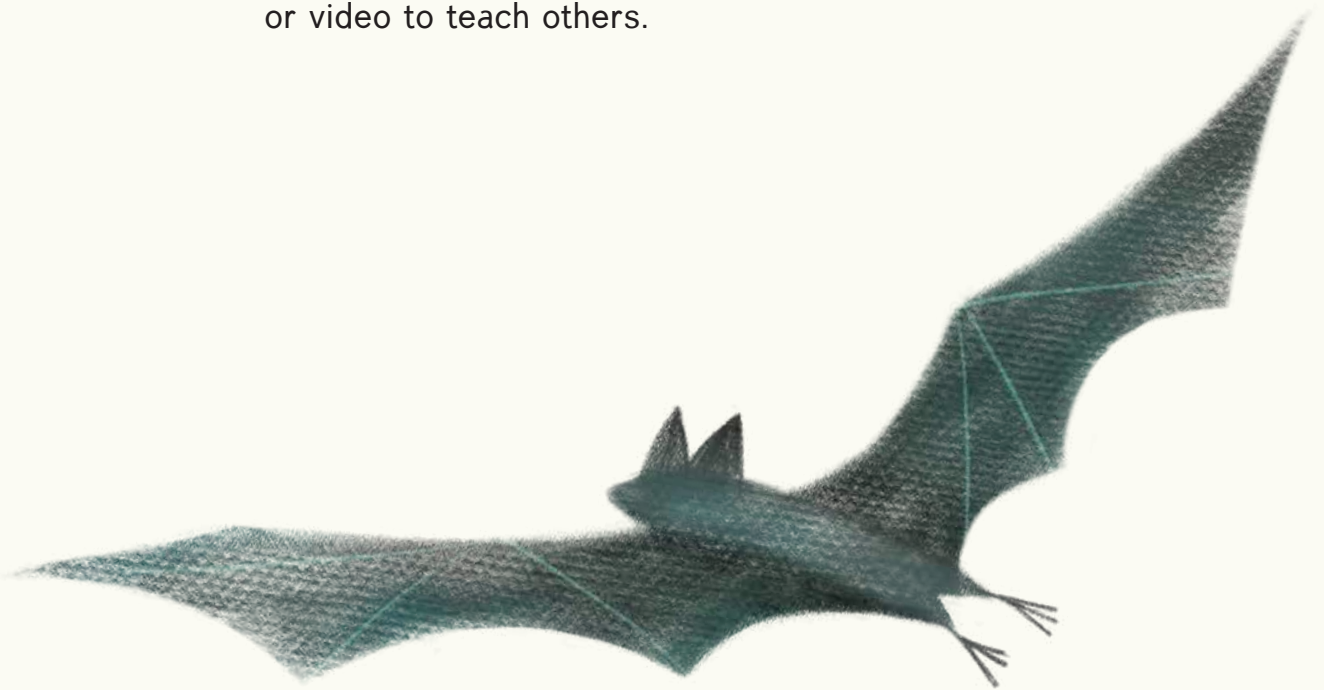
<https://www.youtube.com/watch?v=a05kgcl9D2Q>

“The World’s Best Blind Mountain Biker”

<https://www.youtube.com/watch?v=FWbWBWH8OYk>



Discover more about bats by finding other books and websites about bats. Use what you learn to make a poster or video to teach others.





Get to know the author, Dan Riskin, by visiting his website (<https://www.noctilio.com/>) and watching his bat fact videos (teachers, note the warnings for facts 3 and 5 to determine whether they are appropriate to share with your class):

Bat Week with Bat Man: Fact 1

(<https://www.youtube.com/watch?v=Fiyl3WrA0xU>)

Bat Week with Bat Man: Fact 2

(<https://www.youtube.com/watch?v=pZ36hde3yNs>)

Bat Week with Bat Man: Fact 3

(<https://www.youtube.com/watch?v=CcRcHoxff7w>)

Warning: talks about adult bats eating baby bats

Bat Week with Bat Man: Fact 4

(<https://www.youtube.com/watch?v=fd-Che66Jv4>)

Bat Week with Bat Man: Fact 5

(<https://www.youtube.com/watch?v=sYTZVL1-3rg>)

Warning: uses the phrase “shut up” and talks about vampires

Bat Week with Bat Man: Fact 6

(<https://www.youtube.com/watch?v=UHAz0Y301xE>)



Read more about other animal adaptations using books and websites.



Write a fiction story like *Fiona the Fruit Bat* that describes a different animal adaptation.

Fruit Smelling Steps



1. **Notetaker**, write Fruit Bat's name on Fruit Smelling Notes page.
2. **Tester**, cover Fruit Bat's eyes with blindfold.
3. **Tester**, make sure Fruit Bat cannot see.
4. **Tester**, choose fruit to test.
5. **Tester**, quietly show Notetaker which fruit you are testing.
6. **Notetaker**, copy name of fruit onto Fruit Smelling Notes page under "Name of Fruit."
7. **Tester**, take lid off container and hold container under Fruit Bat's nose.
8. **Tester**, ask Fruit Bat which fruit they smell.
9. **Fruit Bat**, say which fruit you smell.
10. **Notetaker**, write down which fruit the Fruit Bat says under "Fruit Bat's Guess."
11. Repeat steps 4 to 10 with the other two fruit.
12. BONUS: Ask teacher for a challenge fruit and repeat steps 4 to 10 for challenge fruit.
13. Switch jobs and repeat steps 1 to 12.

Fruit Smelling Notes



Fruit Bat's Name: _____

Name of Fruit	Fruit Bat's Guess



Fruit Smelling Notes



Fruit Bat's Name: _____

Name of Fruit	Fruit Bat's Guess





Echolocation Steps

1. **Notetaker**, write Fruit Bat's name on Echolocation Notes page.
2. **Tester**, cover Fruit Bat's eyes with blindfold.
3. **Tester**, make sure Fruit Bat cannot see.
4. **Tester**, slowly move book or pillow back and forth in front of Fruit Bat's face.
5. **Tester**, tell Fruit Bat to make sounds.
6. **Fruit Bat**, make sounds by clicking your tongue, singing, or talking.
7. **Fruit Bat**, use the change in sound to guess when the book or pillow is in front of your face.

8. **Fruit Bat**, say “now” when you think the book or pillow is in front of your face.
9. **Notetaker**, put a ✓ under “Fruit Bat’s Guess” on Echolocation Notes page if Fruit Bat is right. Put an ✗ if Fruit Bat is wrong.
10. Repeat steps 4 to 9 three times with the book and three times with the pillow.
11. BONUS: Tester, switch between the book and the pillow and see if the Fruit Bat can guess which one you chose. Fruit Bat, say “book” or “pillow.” Notetaker, follow step 9.
12. Switch jobs and repeat steps 1 to 11.



Echolocation Notes

Fruit Bat's Name: _____



	Fruit Bat's Guess		
	Guess 1	Guess 2	Guess 3
Book			
Pillow			
Book or Pillow?			



Echolocation Notes

Fruit Bat's Name: _____



	Fruit Bat's Guess		
	Guess 1	Guess 2	Guess 3
Book			
Pillow			
Book or Pillow?			