# educator's guide

Curriculum connections

- Adventure
- Science Fiction
- Astronomy

Ages 6 to 10

By Wendy Mass & Michael Brawer



FAXI



# **ENGLISH LANGUAGE ARTS**

### COMPREHENSION CONNECTION

#### Same and Different

Archie gets to go with his dad as part of Take Your Kid to Work Day. There is a real Daughters and Sons to Work<sup>®</sup> program that is held annually on the fourth Thursday in April. The website **daughtersandsonstowork.org** has information about the event. If students have already participated, they can share their own experiences. If not, looking at the FAQ on the website provides many ideas regarding what the experience might be like. As a class, create a list of the types of activities that are USUALLY included. Then, after reading, discuss how Archie's experience was the same as or different from the class list.

### SUMMARIZING

#### Summary Tweets

Sometimes it only takes a few words to make a big statement. Many students are familiar with Twitter and tweeting. For any who are not, begin by explaining that this form of social media uses only a few words to express an idea and often categorizes the ideas using hash tags (number signs). Show a few examples to students to help them understand. Next, ask students to imagine that Archie is tweeting from space during his taxi ride adventure. Ask students to work with a partner and write a tweet related to each chapter. Each tweet should help summarize how Archie was feeling or help explain the main idea of the chapter. Students can be creative with their tweets and hash tags, but each one should show an understanding of the chapter.



#### Character Sketch Portrait

Space Taxi: Archie Takes Flight is the first book in a series of adventures. Books in a series are often great for students just getting used to reading chapter books because the familiar characters and settings provide a level of comfort that allows them to jump right into the story. After traveling through space with Archie, students learn quite a bit about him. As a way to summarize this information and practice gathering text-based evidence, students can create a "Character Sketch Portrait." First, they gather information from the book focusing on Archie's physical description. Then, they create a picture of Archie based on what they learned. Next, they should look for personality traits. They should find evidence from the book, and then take this evidence and reduce it to a one or two word description. For example, Archie is brave because he rescued Pockets. The evidence is he rescued Pockets. The personality trait can be written around the picture of Archie. Upon completion, students should have a poster with a picture of the character, words that describe him, and a list of evidence to support everything in the poster.

#### Taxi Design Contest

Although there is an illustration of the space taxi on the front cover, students will likely have their own ideas about what a space taxi should look like. Ask them to pretend Archie's dad is hoping to buy a new space taxi. Their job is to design a taxi that will help Archie, his dad, and Pockets on their future missions. Students should be allowed to use any available materials to create a design or build a model of their idea. Students will try to persuade the Intergalactic Security Force (ISF) to purchase their design for Archie and his dad to use, so careful thought should be given to each detail. As a culminating activity, students can orally pitch their designs to the class or a panel of ISF representatives (perhaps teachers from another classroom). The presentation should point out all of the features that make it a great taxi for intergalactic security work.

### WRITING

#### Secret Journal

It will be difficult for Archie to keep his adventures a secret. Imagine if he could write about them! Tell students they will have the chance to pretend they are Archie. They will create a journal from Archie's perspective. They should relate their favorite parts of the adventure and include details from the text to support their descriptions. Since this has to be kept



a secret, they should make a cover for their journal that is decorated to either warn people from opening it or to blend in with the surroundings.

#### Please Let Him Stay...

Although Archie's mom knows about Dad's taxi business, it is possible she will not be too pleased to have a talking cat living with them. Begin by reviewing opinion writing with students, reminding them the purpose is to convince or persuade others with strong arguments supported by reasons. Next, tell students it is their job to convince Mom to let Pockets stay. Students should think about all of the reasons why Pockets would make a great addition to the family, using evidence from the book when possible. Then, ask students to write a letter to Mom designed to convince her to let Pockets stay.

#### Suggestion Box

When students can write for an authentic purpose, learning becomes much more meaningful. *Space Taxi: Archie Takes Flight* is only the first of Archie's adventures. Ask students to think



about ideas they wish they could suggest to the authors. Then, using a friendly letter format, have them write a letter to the authors. Students may also want to include what they liked (or didn't like) about Archie's first adventure too. Since they are trying to persuade the authors to consider their opinions, students should support their ideas with solid reasons.

## QUESTIONING

Students can move toward more independently asking and answering text-based questions through the use of partner activities. The following can be used throughout the book as structured and engaging ways to practice questioning and discussion techniques:

#### Partner Prove It

In this activity, Partner 1 asks a question about the chapter or the assigned reading. Partner 2 answers the question to the best of his or her ability. Then, Partner 1 says, "Prove it." Partner 2 must find the answer in the book and show the evidence that supports his or her thinking. If Partner 2 cannot find the evidence, then Partner 1 should try to help. If the evidence cannot be found, then Partner 2 should decide if the original answer given is incorrect or if it is simply an opinion, not text-based. Partners should switch roles, taking turns asking and answering questions.

#### **Respectful Disagreement**

Learning how to disagree respectfully is a life skill. In this partner activity, students practice how to agree or disagree. It begins with Partner 1 asking a question. Partner 2 should answer the question and support his or her thinking with evidence or examples from the text. Partner 1 should consider whether or not he or she agrees or disagrees with the answer. Then, Partner 1 can either say, "I agree with your thinking. I would also like to add..." or they can say, "I like your idea, but I disagree. I think ... " Partner 2 should also use text-based evidence to support his or her thinking. For younger students, this activity can be modeled as a whole group lesson. The teacher can write different opinions on chart paper, and students can take turns agreeing and respectfully disagreeing. It is very helpful during the modeling phase if there are a few outlandish claims that will guarantee there will be some disagreement.





Merry-Go-Round Partners

In this activity, students have the opportunity to practice their discussion techniques with a variety of partners. Students create two circles, one on the outside and one on the inside. The inside circle faces the outside circle; the students directly

facing one another become partners. Students discuss one question, and then when music is played, the outside circle moves one direction and the inside circle moves another direction. When the music is stopped, students partner up with the person directly across from them. In order for this to work well, it must be established from the beginning that every partner must be welcomed warmly. There is some judgment involved in who is directly across from another, so if there is any concern that certain students may not be immediately accepted, then it is important to either firmly establish the warm welcome rule, or choose an activity that has predetermined partners (such as Down the Line).

#### Down the Line

This is another discussion activity that requires partner rotation, but it is firmly established. Students form two lines, facing one another. Partners discuss one question, and then when signaled, students on one side move to the right. The other side of the line does not move. The student at the end of the line moves to the front. The discussion continues until everyone has a chance to discuss questions with each classmate.

#### **Question Creation Station**

It takes time and practice to be able to answer questions, but it is even more difficult to develop the skill of asking higherlevel questions. This activity allows students to practice writing their own questions. It can be used as a partner activity or as an independent Center activity. On a table in a quiet area, set out index cards, pencils, copies of *Space Taxi: Archie Takes Flight*, and a set of dice. When students come to the table, they should roll the dice. If they get a number that is 6 or less, then they should write a question that can be answered using chapters 1-4. If they get a number more than 6, then they should write questions using chapters 5-8. If they get doubles, then their question can be about any chapter. Students should write their questions on index cards, write the number they rolled, and also write their name. After all students have visited the Question Creation Station, then it can be transformed into a Discussion Station. The questions submitted can be retyped (if necessary) and each one assigned a number. Students come to the table with their partner and roll the dice. The number on the dice indicates which question they should discuss.

# SCIENCE AND SOCIAL STUDIES

#### Three Science Facts to Impress Your Friends

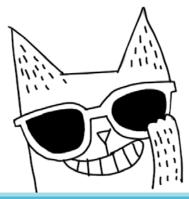
Before reading the information about gravity, wormholes, and exoplanets included on the last pages of the book, briefly write down anything you know or think you know about the topics. After reading, compare what you knew with the information. What did you already know? What information was new? What do you still want to know?

#### Keep Archie Grounded

On Delta Three, Archie floats away like a balloon, but the gravity balls keep him on the ground. Students can experiment with this idea by conducting a simple experiment. Divide students into small groups and give each group a balloon inflated with helium. They can decorate the balloon to represent Archie. Then, give each team a roll of masking tape and several weights. Challenge each team to use the tape and the weights to keep "Archie" from floating away. How much weight is needed to keep the balloon (Archie) on the ground? How much weight is needed to keep the balloon at eye level? Have students collect data on their trials and then compare with the rest of the class. Did each group's balloon require the same amount of weight to keep it eye level? Did each group's balloon require the same number of weights to keep it on the ground? As a class, graph the results of the experiment and encourage students to draw some conclusions.

#### **Exoplanet** Tour

Scientists are discovering many new exoplanets, planets that orbit a star other than our own sun. One of the observatories with telescopes and instruments powerful enough to identify possible exoplanets is the Gemini Observatory.

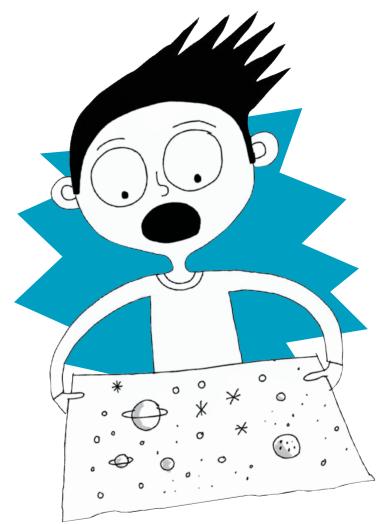




Located in Hawaii (Northern Operations) and Chile (Southern Operations), the Gemini Observatory regularly makes news for its discoveries. The Gemini website (www.gemini.edu) offers an educators' page with information on facility tours, virtual tours (the tour can be downloaded) and even videoconferencing for classes with a deep interest in learning more. Since astronomy is appealing to all ages, but the concepts can be difficult to understand for younger students, one way to make these tour options accessible is to pair an elementary class with a high school physics class. Multi-age groups can work together to take notes, ask questions, and make meaning of the tour information. After the tour or videoconference, small groups can create a short presentation to share the information they learned.

#### THIS is Why We Have Maps...

Archie discovers he has the ability to read maps, a talent he inherited from his grandfather. Luckily, this is a skill that can be taught to the rest of us. Help students gain important



map reading skills with this activity. Begin by hiding an object somewhere on school grounds. Explain to students that they will have to work together in complete silence to find the object. They also have to all stay together. Give them a few minutes to try to figure out a plan. Are they going to use hand signals? Will they choose one person to be the leader? Encourage them to problem solve. Then, tell them they have 10 minutes to find the object. Set a timer and let them try to find it. Remind students this must be done without making any noise, so they can't communicate with their voices. After 10 minutes, gather students together and tell them they can now use a map. Provide a map of the school with a highlighted route that will direct them to the object. Once again, remind them they must stay together and they must not talk. Time them to see how guickly they can find the object. After the object is found, gather together again and talk about which trial was easier. Why was it difficult to find the object the first time? How did the map help? Connect back to the book by asking students to think about why it is a great gift for Archie to have the ability to read maps. This interactive activity is a fun way to launch a map-reading unit. It can be repeated after the unit by using unmarked school maps, a compass, and cardinal directions.

#### What's in an Address?

Archie reads the address of their first customer in order to find out where they are going. Begin by reviewing with students how to write an address. Explain how the address (in the United States) starts with the street, then the city, then the state, and then the zip code and country. It begins with the local information and then expands to cover a bigger and bigger area. Write the school's address on chart paper (including the country) and have students use different colors to circle or highlight the street address, town or city, and country. Next, write the address for Mr. Ramsey Fitch (found in Chapter 2) and have students try to identify the different parts of the address. Which do they think is bigger, Cygnus Galaxy or South Quadrant? Have them explain their answer, using their understanding of the way the school address is written to support their thinking. As an extension, have students address an envelope with their own home address. Next, ask students to write a prediction about what will happen in the book and place it in the envelope. Mail the envelopes to their home addresses and ask students to bring them back to school once they receive them. Discuss as a class whether or not their predictions were correct and talk about the amount of time it took for the letters to be delivered. Did the letters take less time or more time to arrive than students thought?



# **DISCUSSION GUIDE**

#### Chapters 1 and 2

- 1. Why is Archie excited?
- 2. What is the one thing Archie never leaves home without? What do you think it could be?
- 3. How does Archie's mom react to him leaving to go with his dad? Why do you think she behaves this way?
- 4. What seems strange about the people in Barney's Bagels and Schmear?
- 5. Where does Archie think he is going with his dad? Why is he excited?

#### Chapters 3 and 4

- 1. What clues do the authors give that this will be no ordinary taxi ride? When does Archie first begin to realize this? When does he know for sure?
- 2. What special talent does Archie discover he has? How does he discover this ability?
- 3. What does Archie discover about his grandfather? How do you think he feels to learn this information? Why do you think that?
- 4. What does Archie notice about the people on Delta Three? In what ways are they similar to people on Earth? In what ways are they different?
- 5. What happens to Archie when he steps out of the taxi on Delta Three? Using your background knowledge, what might be the reason for this?

#### Chapters 5 and 6

- 1. What does Archie see on the way down the tree? What emotion does he feel at first when he sees the creature?
- 2. What does Archie's dad give Archie? How does this help while on Delta Three?
- 3. Compared to Delta Three, how is Delta Nine different? Be sure to use evidence from the text to answer the question.
- 4. Why does Archie's dad say, "You really do attract cats wherever you go." What does he mean?

- 5. Archie goes off to explore. What does he discover during his exploration? Describe what he found. What do you think it could be?
- 6. What is the scuffling sound that Archie hears? How does Archie try to help? Would you make the same decision if you were Archie? Why or why not?

#### Chapters 7 and 8

- 1. What does Archie suggest as a nickname for Pilarbing Fangorious Catapolitus? Which name does the cat finally accept? Do you think this is a good nickname? Why or why not? What would you name him if you had the chance?
- 2. In what ways is Pockets human-like and in what ways is he cat-like? Use evidence from the text to support your thinking.
- 3. What does Pockets suggest as a way for Archie and his dad to help bring down BURP? What does it require Archie to do? What does Archie's dad think of the plan?
- Do you think Archie's mother will agree to the plan? Why or why not? Use evidence from the story to support your thinking.
- 5. Why did Archie's dad wait to tell him everything? What reason does he give?
- 6. Archie finally discovers a use for the tube his grandfather gave him. What is it for?
- 7. In the beginning of the story, Archie seems embarrassed about his last name. How does his opinion change by the end of the story? Why does he feel this way?





# Meet WENDY MASS & MICHAEL BRAWER, authors of SPACE TAXI: ARCHIE TAKES FLIGHT, the first adventure in a truly interstellar chapter book series.



Greetings Wendy and Michael! Your new series, SPACE TAXI, follows the adventures of Archie Morningstar (great name!), what was the inspiration for Archie?

When our son was six, each night before bed he would come up with craziest

questions about the universe. (This may have been a ploy to delay bedtime, but we prefer to think he was really interested!) We were always going online to find videos for him of what a nebula looked like, or images of what goes inside of an atom. He may be the only first grader who watched the live news feed of scientists announcing they'd found the Higgs Boson! Children have such an extraordinary sense of wonder, and we wanted to write a story that would capture that. When the book opens, Archie's world is pretty small—just a few city blocks—but in an instant all that changes and his world is now the whole universe. He rushes out to meet it with open arms and an open mind. Our hope is that young readers will respond in a similar way.

# Wendy, you've written for both middle grade and YA readers, did you find any special challenges in writing for a younger audience?

Writing for this younger age is very freeing, in a way. The storyline, language, and emotional depth is certainly simpler, but it's still all there. One thing that helped a lot while we were trying to get our footing was to read the pages out loud. If we couldn't picture a class of second graders following along, we knew we had to fix it. Mike has been reading to our own kids every night since birth (seriously, he's fanatical about it), so I think he innately understands the rhythm of stories for this age group. Wendy, several of your books have involved a math or science theme? Do you have a secret life as a nuclear physicist we should know about? What is your attraction to science stories?

I admit, after researching and writing *Pi In The Sky* and *Every Soul a Star* and now SPACE TAXI, I could probably teach Astrophysics 101 at my local university! To me, it all boils down to the age-old question: "Why is there something, rather than nothing?" I have relatives who are chemists and mathematicians and physicists, but my brain isn't wired to be a scientist on the front line of discovery. One thing I CAN do is research the heck out of the subject and then incorporate the theories and facts into stories for kids. I love it when I hear that after finishing one of the books a young reader has gone on to find out more about whichever scientific aspect of the story fascinated him or her. Maybe one day one of them will grow up to answer that big question for me!

# Michael, this is your debut project: do you have more ideas for stories?

Most of my story ideas these days are for Space Taxi plot lines. I keep a file of ideas as they pop into my head. That said, I am also working on some adult science fiction short stories.

#### Wendy, this is the first time you've written with a co-author. What was that experience like for you?

It's a lot of fun being partners in this endeavor and our kids enjoy putting their two cents in, too. As an English teacher, Mike has always helped me both with the brainstorming and then the editing process of my own books. So easing into writing SPACE TAXI together wasn't too much of a leap. It's the first time I get to drop a work-in-progress on someone else's desk and say, "Your turn, I'm going to sleep!"



## about the book



HC 978-0-316-24319-3 Also available in downloadable audio and e-book formats

#### Archie Morningstar learns a big family secret and helps save the universe. All before breakfast!

It's not every day a regular kid like Archie gets to wake up at midnight. But today is Take Your Kid to Work Day, and Archie is finally allowed to ride along in his dad's taxi cab. He has been waiting eight years, eight months, and eight days for this moment to arrive.

But he's about to discover his dad is no ordinary cab driver...In fact, he drives an intergalactic space taxi! All night long, he shuttles aliens from one

corner of the universe to another. And being a space taxi copilot is no easy task: Archie must steer them into wormholes, keep them from crashing into planets, deal with a very unusual cat...and save the universe from an evil mastermind!

SPACE TAXI marks the debut of a brand new chapter book series from bestselling author Wendy Mass and teacher Michael Brawer, filled with humor, adventure, and plenty of science to impress your friends and teachers!

# Coming September 2014!



HC 978-0-316-24323-0 Also available in downloadable audio and e-book formats

> LITTLE, BROWN AND COMPANY BOOKS FOR YOUNG READERS

A brand new adventure in this intergalactic series

In the second book in this series, Archie, his dad, and Pockets fly to a planet in peril – the water is quickly disappearing! Can Archie and Pockets save the day? "The plotting never overdoes it, the surprises are gentle, and the humor is always on target for a young demographic. This reads like the beginning of a story with legs (or perhaps wheels), so prepare your cab fare for future installments."

–Booklist

"Zany adventures, a wacky plot and plenty of slapstick humor make this a quick, enjoyable read. Simple illustrations and a trio of scientific definitions add to the narrative. A solid start to a new chapter-book series." *—Kirkus* Reviews

"The emphasis is on out-of-this-world fun, but Mass and Brawer give the Morningstar family a warm, jokey closeness, while also including scientific information (about gravity, wormholes, and exoplanets) that complements the action."

-Publishers Weekly

# about the authors



Wendy Mass is the New York Times bestselling author of The Candymakers, the ALA Schneider Family Award winner A Mango-Shaped Space, Leap Day, Pi in the Sky,

Jeremy Fink and the Meaning of Life, Heaven Looks a Lot Like the Mall, and Every Soul a Star. Her website is WendyMass.com.

Michael Brawer spent 15 years as a high school English teacher. As an avid reader of science fiction, he has written curricula for courses on the subject. Wendy and Michael live with their family in New Jersey.



