



## **Reading Use Your Math Power Books:**

### **A First Reading of Monkeys for the Zoo**

Goal: Students will enjoy and retell the story.

#### **Book Summary**

In Monkeys for the Zoo, the characters work together to solve a “Put together” problem where both addends are unknown. As her classmates work to understand the problem, Mia quietly thinks to herself about her confusions and her ideas. As Mia listens to her classmates express their confusions and take risks, she gradually works up the nerve to add her own ideas to the conversation.

#### **Before Reading**

If your students have never worked on a similar type of problem, you might give them a problem like this to work on in pairs prior to reading the story. A bit of time working together to make sense of this problem will prepare students to understand the thinking of the characters in the book. This can help them focus on the interactions and thinking of the characters in the story.

*Ms. Green’s class saw 10 birds in the yard. Some of them had pigeons and some of them were cardinals. How many of each could they have seen?*

If your students are already comfortable with this type of problem, ask them the following prior to reading the book:

*Think about a time when you were working on a math problem you hadn’t seen before. What was that like? What helped you?*

#### **Read and Discuss**

Read the story. Have students retell the story building on each other’s ideas. This is a chance for your students to tell what they noticed about how the characters worked together without being told how to solve the problem by the teacher. Prompt with questions such as:

*What happens in this story? What happens next? Did anything surprise you? What did the characters do? What were the characters feeling? Why?*



## **Monkeys for the Zoo: Gaining Confidence to Share Your Ideas**

Goal: Students will gain insight into how they can gain confidence about sharing their ideas by examining what helps other children.

Prior to this lesson: A first and perhaps a second reading of Monkeys for the Zoo.

### **Rereading the book:**

Reread the book Monkeys for the Zoo to focus on how Mia gains confidence and begins to share her thinking. Stop at key points and use questions such as:

*Page 4: How does Mia feel at the beginning of this book?*

*Page 6: How does Mia feel when she works with Ben?*

*Page 10: How do you know that Mia understands some things about the problem?*

*Page 16: What do you think Mia does that helps her understand the problem?*

*Page 19: Why does Mia volunteer to share? How do you think she feels?*

*Page 23: How would you feel if you were Mia at this point in the story?*

*Page 29: What did Mia do in the story to help her feel more confident?*

### **Class Reflection on Gaining Confidence and Sharing Your Thinking**

Ask students to think of a time when they were not sure about how to solve a problem or how to share their math ideas. Have a class discussion about why students might lack confidence in math class and what helps them gain confidence and take risks.

Prompt with questions such as:

*Have you ever felt like Mia in math class? Do you think any of your classmates have ever felt like Mia? What can make students feel uncomfortable about sharing confusions and questions? How can we help each other feel more comfortable so that everyone will take risks and share their thinking?*

### **Choices for Reflection**

Have partners work on one of the following:

- Have students work with a partner to design a poster that encourages students to share their ideas and questions in math.
- Have individuals write a reflection about what helps them feel more confident in math.
- Have students write Mia's reflection on what helps her use her math power.



## **Monkeys for the Zoo: Having Productive Math Discussions**

Goal: Children will gain insight into how to communicate their thinking and questions in math class.

Prior to this lesson: A first and perhaps a second reading of Monkeys for the Zoo.

### **Rereading the book:**

Reread the book Monkeys for the Zoo to students. Stop at key points to discuss how the characters have discussions as a class. Prompt with questions such as:

*Page 9: Ms. Green says the class can act out the problem. What does Carlos do help the class get started?*

*Page 10: How does Tyler's question help Mia and perhaps other students?*

*Page 14: How does Ellie's idea help?*

*Page 16: How do you know that Rosie understood Ellie's idea?*

*Page 18: How do you know that students understood Rosie's idea?*

*Page 24: How do you know that students understood Mia's idea?*

### **What Can We Do To Be Sure Everyone Learns From Our Discussions?**

Use the Reader's Theater script (following this lesson) to act out the class discussion on pages 12 - 24. Give out the roles for narrators, students and the teacher. Ask everyone to look and listen for evidence of careful listening and explaining.

Discuss the evidence. Prompt with questions such as:

*What evidence did you see that characters were listening to each other and thinking about each other's ideas? What evidence did you see that characters tried to help each other understand their ideas? What did they do if they didn't understand or disagreed with each other?*

### **Class Reflection and Choices for Reflection**

Reflect on how your class can use the ideas from Ms. Green's class. Prompt with questions such as:

*How did the characters listen, speak and think with each other? What can we try to do in our class to be sure everyone learns from our discussions?*

Have students work on one of the following:

- Have students work with a partner to list ideas for how your class can communicate about math in ways that help everyone learn.
- Work with a partner to make a poster to encourage classmates to do one of the following:
  - Ask questions to help you understand
  - Listen well to others so you understand their thinking
  - Explain your thinking clearly

**READER'S THEATER SCRIPT: MONKEYS FOR THE ZOO (pp. 12 - 24)**

The parts: Narrator for Actions, Ellie, Carlos, Rosie, Tyler, Jayden, Zoe, Ben, Kayla, 6 unnamed children for spiders, Ms. Green, Narrator for Thoughts, Mia  
Have two signs, one that says HOWLERS and one that says SPIDERS.

**NARRATOR FOR ACTIONS:** Ellie gets 13 children to stand up.

**ELLIE:** Three of you can stand on one side and be howler monkeys. And 10 of you can stand on the other side and be spider monkeys.

**NARRATOR FOR ACTIONS:** Carlos, Rosie and Tyler stand on one side with the HOWLERS sign. Jayden, Zoe, Ben, Kayla, and 6 other children stand on the other side with the SPIDERS sign.

**MS. GREEN:** What is Ellie's idea? Will it work?

**NARRATOR FOR THOUGHTS:** "I guess that could work," thinks Mia. "But I'm thinking of something different!"

**ROSIE: (quietly)** Ellie wants the zoo to buy 3 howler monkeys and 10 spider monkeys. But I think we could do it another way.

**NARRATOR FOR ACTIONS:** The class holds their hands to their ears because they can barely hear Rosie, so Ms. Green reminds her to use a big voice.

**ROSIE:** (almost shouting) I agree that the zoo could buy 3 howler monkeys and 10 spider monkeys. But why couldn't it buy 3 spider monkeys and 10 howler monkeys?

**NARRATOR FOR THOUGHTS:** "That's exactly what I was thinking!" thinks Mia.

**ZOE:** Please don't make me a howler. I love spider monkeys!

**NARRATOR FOR THOUGHTS:** "Silly Zoe!" thinks Mia. "It's only pretend!"

**NARRATOR FOR ACTIONS:** The howler monkeys and the spider monkeys trade their signs.

**NARRATOR FOR THOUGHTS:** "Wow, two different ways!" thinks Mia. "Maybe there are even more ways to do this!"

READER'S THEATER SCRIPT: MONKEYS FOR THE ZOO (CONTINUED)

CARLOS: Wait! Which answer is right? There can only be one right answer!

MS. GREEN: Calm down, Carlos. What do you think class? Can there be two right answers?

NARRATOR FOR THOUGHTS: "I have an idea," thinks Mia. "What if I'm wrong? But I've been thinking hard about this one. I'll be sad if I don't try."

NARRATOR FOR ACTIONS: Mia takes a deep breath. Then she raises her hand. Then she pulls it down.

MS. GREEN: Mia, how nice of you to volunteer. What do you think?

NARRATOR FOR ACTIONS: Mia remembers to believe in her math power. Ms. Green always tells her students to believe in their math power!

MIA: (quietly) I don't agree with Carlos.

CARLOS: What did she say?

MS. GREEN: Everyone wants to hear you, Mia. Try to use a louder voice.

MIA: I think that both answers could work. I also think it could be four spider monkeys and nine howler monkeys. One of the 10 howler monkeys can move over to be a spider monkey.

NARRATOR FOR ACTIONS: This time everyone can hear her.

ZOE: (shouting) Great, I can be a spider monkey again.

NARRATOR FOR ACTIONS: Zoe moves over to be with the spider monkeys.

NARRATOR FOR THOUGHTS: "**I did it!**" thinks Mia. "I explained my idea!"

JAYDEN: Or we can move another howler into the spiders and have eight howler monkeys and five spider monkeys.

CARLOS: Now I get it. We just keep finding more and more ways!