

Zeke the Weather Geek – Classroom Activities

About the Book

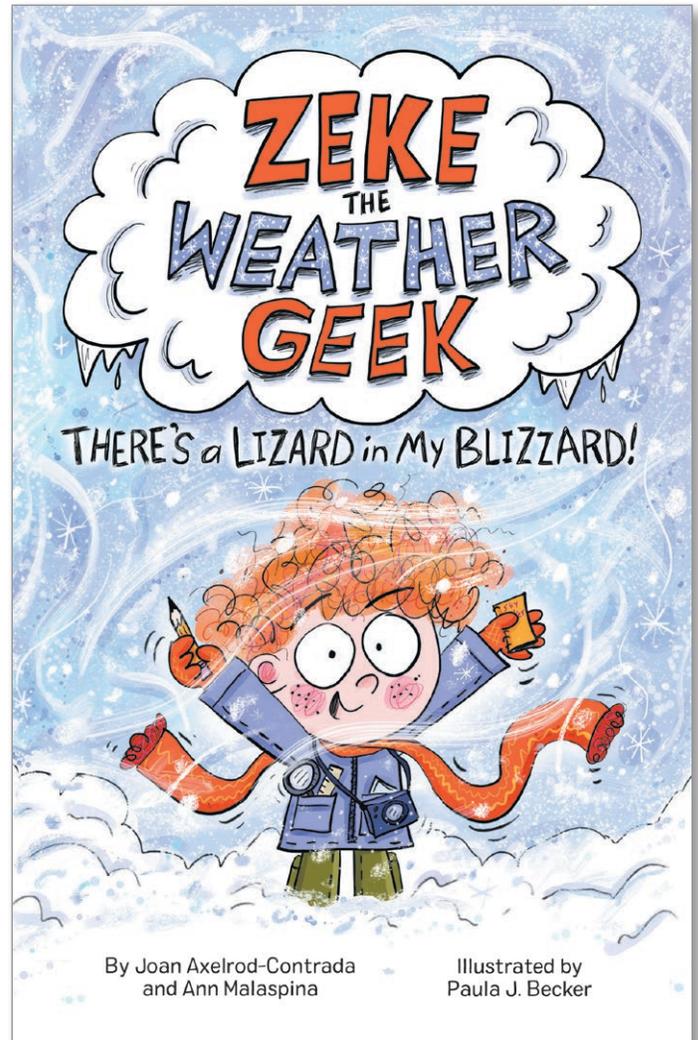
Zeke the Weather Geek wants to be just like his hero, Freeze Jones, the meteorologist for WXYZ-TV — and winning the fourth-grade winter photo contest is a big part of the plan. So far though, none of his photo ideas have worked out. To make matters worse, his birthday surprise is a pet lizard and not the Saint Bernard puppy he was expecting. Zeke's Mood Meter is at negative 100 degrees. But a blizzard is coming! Zeke's sure to get his winning photo now, right?

This fun early chapter book has loads of STEAM content on the science of weather, both in the story and in informational comics between chapters. Readers will learn about snow and how snowflakes are formed, other winter precipitation, the water cycle, meteorology, blizzard safety and climate change. A glossary of weather words, instructions for an experiment, tips on keeping a weather journal and ideas for action to fight climate change will also inspire young readers. They may even become weather geeks like Zeke!

About the Authors

JOAN AXELROD-CONTRADA grew up as a weather geek in the Boston area, watching TV meteorologist Dick Albert, who, along with the *Today Show's* Al Roker, helped inspire the character of Freeze Jones. Joan met **Ann Malaspina** as a young newspaper reporter and remains passionate about the role journalism, with its five *Ws* and one *H* (who, what, where, when, why and how), can play in helping young people tap into their natural sense of curiosity. This collaboration with Ann has been a dream come true.

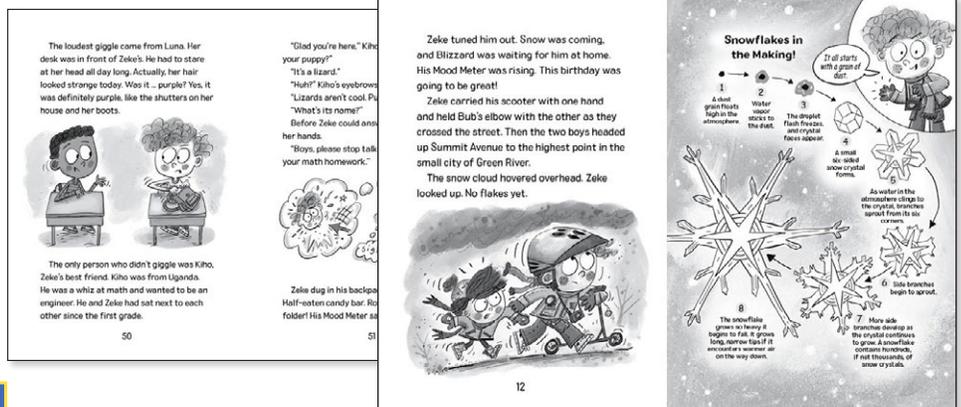
ANN MALASPINA knew she wanted to be a writer after her fourth-grade teacher asked the class to write without stopping for five minutes each morning. While working as a newspaper reporter in Boston, she was sent on a whale watch in Boston Harbor, and another reporter, **Joan Axelrod-Contrada**, came along. A storm blew in, and they both got seasick. If only Zeke had forecasted the windy weather for them! They didn't see any whales, either. Spring is Ann's favorite season in New Jersey, where she writes children's books and poetry.



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About the Illustrator

PAULA J. BECKER is a Texan/Quebecer who is as at home with the armadillos as she is with poutine! She's illustrated and cartooned for many years. She enjoys watching baseball, bicycling and birdwatching.



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About This Resource

The following educational activities are for children from 7 to 10-years-old. The activities can be adapted for other ages and student needs.

Pre-Reading Discussion Questions

Before reading the book, ask the students to flip through the pages and look at the illustrations and comics. Discuss the following questions.

1. What do you think the story is about?
2. Why did the authors choose this title?
3. What motivates the main character, Zeke?
4. Pick one illustration and guess what's happening at that point in the story.
5. Is a blizzard a good place for a lizard? Why or why not?

Post-Reading Discussion Questions

1. Why is weather important to our daily lives?
2. What makes you better able to cope with a blizzard than a cold-blooded animal like a lizard?
3. How is climate change affecting your community? Talk to some older people to learn about changes they've seen over the years.
4. How can friends and neighbors help each other during a weather emergency?
5. Have you ever been in a blizzard? What do you remember most about it?

Activity I. Be a Weather Geek for a Week!: Tracking the Weather

Zeke tracks the weather using his backyard weather station and writes the statistics in his weather journal. Have the class track the weather for a week by watching or listening to their local weather reports. Ask them to look for patterns, changes and extreme weather events like high winds or storms.

GET STARTED

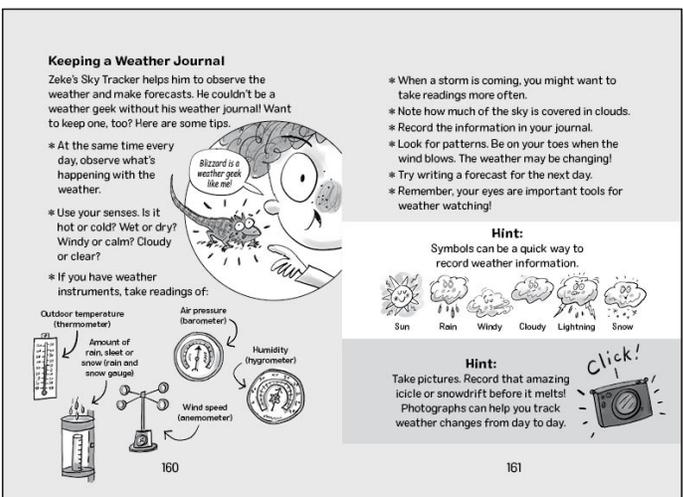
Divide the class into groups of four or five. Tell each group to keep track of four aspects of the weather for a week:

1. Record the temperature every day.
2. Check the accuracy of the weather forecast. Did it rain on Tuesday as the forecast said it would?
3. Watch the sky. Is it sunny, partly cloudy or overcast?
4. Write down the amount of precipitation and/or humidity level each day.

At the end of the week, have each of the groups present their information as if they're giving a weather report on TV. "Live from Class X is The Weather Week in Review from Group XI!" Ask the students to note any discrepancies between their reports.

Activity II. Creative Writing: Weather Stories or Comics

In Chapter 14, Zeke's lizard is in danger when the power goes out during the blizzard. She's a cold-blooded reptile and relies on external warmth to regulate her body heat. Zeke needs to find a way to keep her warm. Encourage students to write their own story, in paragraphs or as a comic, using weather-related prompts. Here are two prompts to help students think up their own stories about the issues raised in this chapter.



Keeping a Weather Journal

Zeke's Sky Tracker helps him to observe the weather and make forecasts. He couldn't be a weather geek without his weather journal! Want to keep one, too? Here are some tips.

- * At the same time every day, observe what's happening with the weather.
- * Use your senses. Is it hot or cold? Wet or dry? Windy or calm? Cloudy or clear?
- * If you have weather instruments, take readings of:

Outdoor temperature (thermometer) Amount of rain, sleet or snow (rain and snow gauge) Air pressure (barometer) Humidity (hygrometer) Wind speed (anemometer)

Hint: Symbols can be a quick way to record weather information.

Sun Rain Windy Cloudy Lightning Snow

Hint: Take pictures. Record that amazing icicle or snowdrift before it melts! Photographs can help you track weather changes from day to day.

Click!

160

161

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Option A: Pets in a Storm: Write a story about a pet during a weather emergency. Maybe choose to write from the animal's point of view. Think about how a pet owner can help protect their pet during severe weather:

- Make a pet evacuation plan or a stay-safe-at-home plan for severe weather situations.
- How will the pet stay warm and dry?
- Can they help other pets in the neighborhood?

Option B: Cold-Blooded Humans: What would happen if humans suddenly became cold-blooded? Like Zeke's lizard, people would no longer be able to regulate their body temperatures.

Write a science-fiction story about what would happen to these new humans. Some things to think about:

- People might move from colder climates to warmer climates near the equator — how might that change life on Earth?
- What kinds of heating sources might people require to survive?
- What advantages might being cold-blooded offer to humans?



Activity III. Science Experiment: Water Cycle in a Bottle

Zeke shares a fun experiment about air pressure, the egg-in-the-bottle trick, with Bub on page 122. Students can learn about the water cycle (page 67) with another fun experiment using a bottle.

The water cycle is the constant movement of water on the earth and in the atmosphere. Water has three states: solid, liquid and gas. Liquid water in rivers and lakes evaporates and becomes water vapor. As the water vapor cools in the atmosphere, it condenses into droplets, forming clouds. Clouds become saturated, creating rain, snow and other precipitation that falls back to the earth. And the cycle begins again.

SUPPLIES

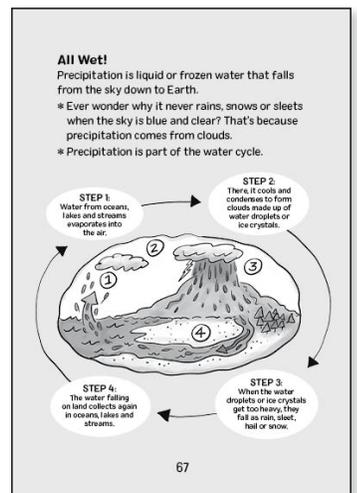
- Plastic bottles (get them from the recycling bin!)
- Clear glass jars or cups
- Blue food coloring
- Water
- Ice cubes
- Permanent markers

EXPERIMENT

- Add a drop of blue food coloring to each bottle.
- Fill about one-third of each bottle with warm water.
- Put the caps on and screw tightly.
- Let students use permanent markers to decorate bottles with clouds, rain drops and water.
- Turn each bottle upside down in a clear jar or glass.
- Put an ice cube on top of each bottle.
- Place bottles in a sunny spot.
- Check bottles in about an hour.
- Look for condensation, clouds and even rain, or falling droplets, that form inside the bottles.

THINK ABOUT

- What happens if the bottles are in the shade instead of the sun?
- How long does the mini water cycle take from start to finish?



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Activity IV. Social-Emotional Learning: Making a Mood Meter

A mood is a temporary state of mind or feeling. A person's mood can change like the weather. Zeke keeps track of his mood with his mood meter. For example, on page 27, his mood meter goes up because TV meteorologist Freeze Jones is predicting a possible blizzard and Zeke loves winter storms. Playing soccer or eating ice cream can make a mood meter rise, while losing something or getting a cold can make a mood meter fall.

ACTIVITY

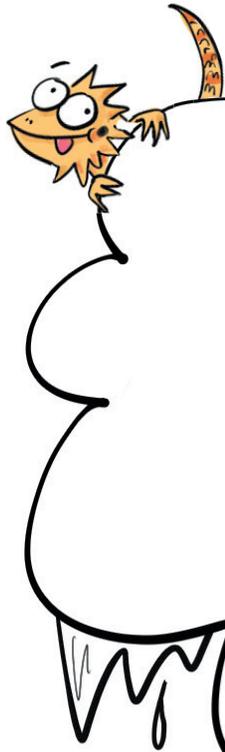
- In a group, students talk about their moods and why their moods go up or down.
- To learn more about their moods, they can draw a mood meter every day for a week.
- When did the mood meter go up? Explain why in a speech bubble.
- When did the mood meter go down? Explain why in a speech bubble.

QUESTIONS FOR DISCUSSION

- Is it helpful for people to be aware of their moods and what triggers the ups and downs?
- What are some of the students' guaranteed mood boosters?



Word Search



X S Q B Y L W P G U V K U D C
N N Y A C F V X D O Y E W V K
Z O V R T Y A W A X E X J R R
V W M O R H Q H U L A F W P L
L Q E M G X E V R Y I H E F H
C Z T E O S E R U E C F A N U
E U E T Y X T I M Y N Z T H M
L J O E B V J W C O H H A I
S T R R D R F Q N L M S E W D
I E O H F G D Y W P S E R I I
U Y L A I V N E L E P V T B T
S D O G B L I Z Z A R D P E Y
C Q G L H I Q L P G F X J X R
U T Y C L I M A T E X V U C W
T S L Q O C E R S M B F W C A

Find these weather words from
Zeke the Weather Geek: There's a Lizard in My Blizzard

BAROMETER

CLIMATE

SNOW

BLIZZARD

FAHRENHEIT

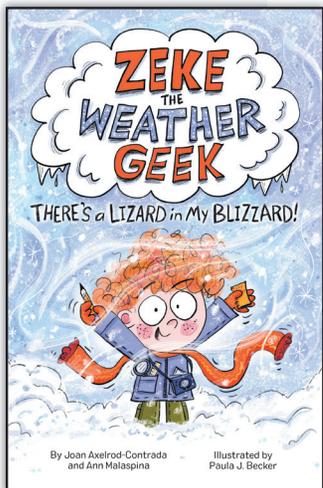
THERMOMETER

CELSIUS

HUMIDITY

WEATHER

METEOROLOGY



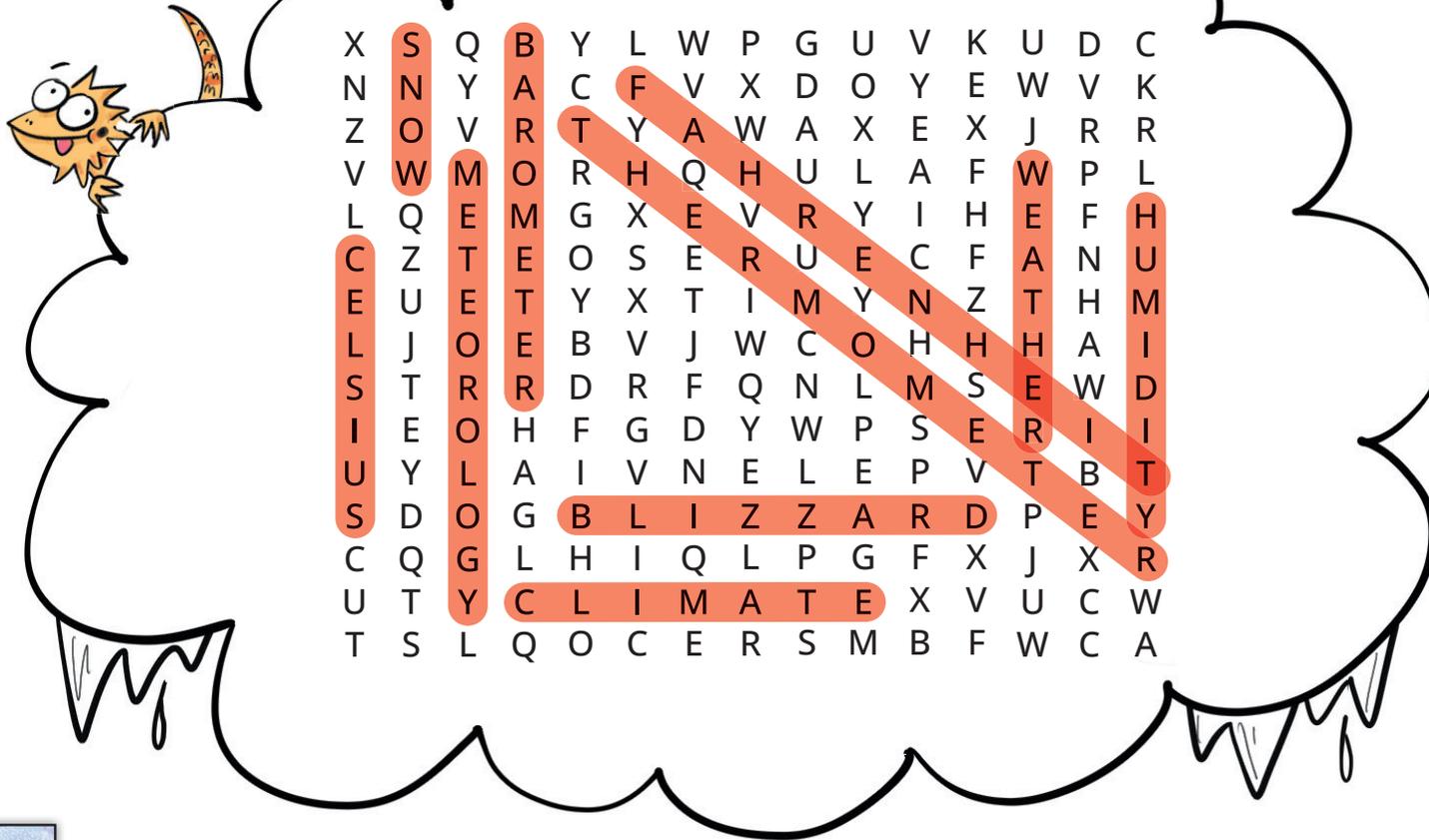
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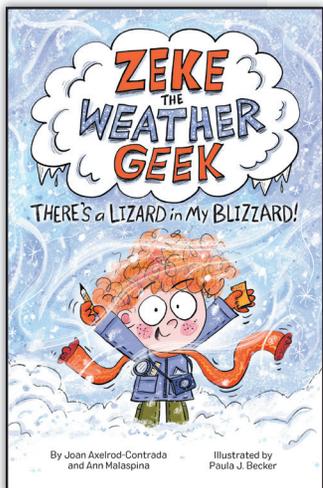
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