

This version of *Breakfast Moon* is a research tool for sole use by the Astronomical Society of the Pacific (ASP) and members of the ASP's My Sky Tonight\* program.

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For more information about My Sky Tonight and access to astronomy activities for young children, visit: www.astrosociety.org/MySkyTonight

# BREAKFAST

Written by Meg Gower
Illustrated by David Barker





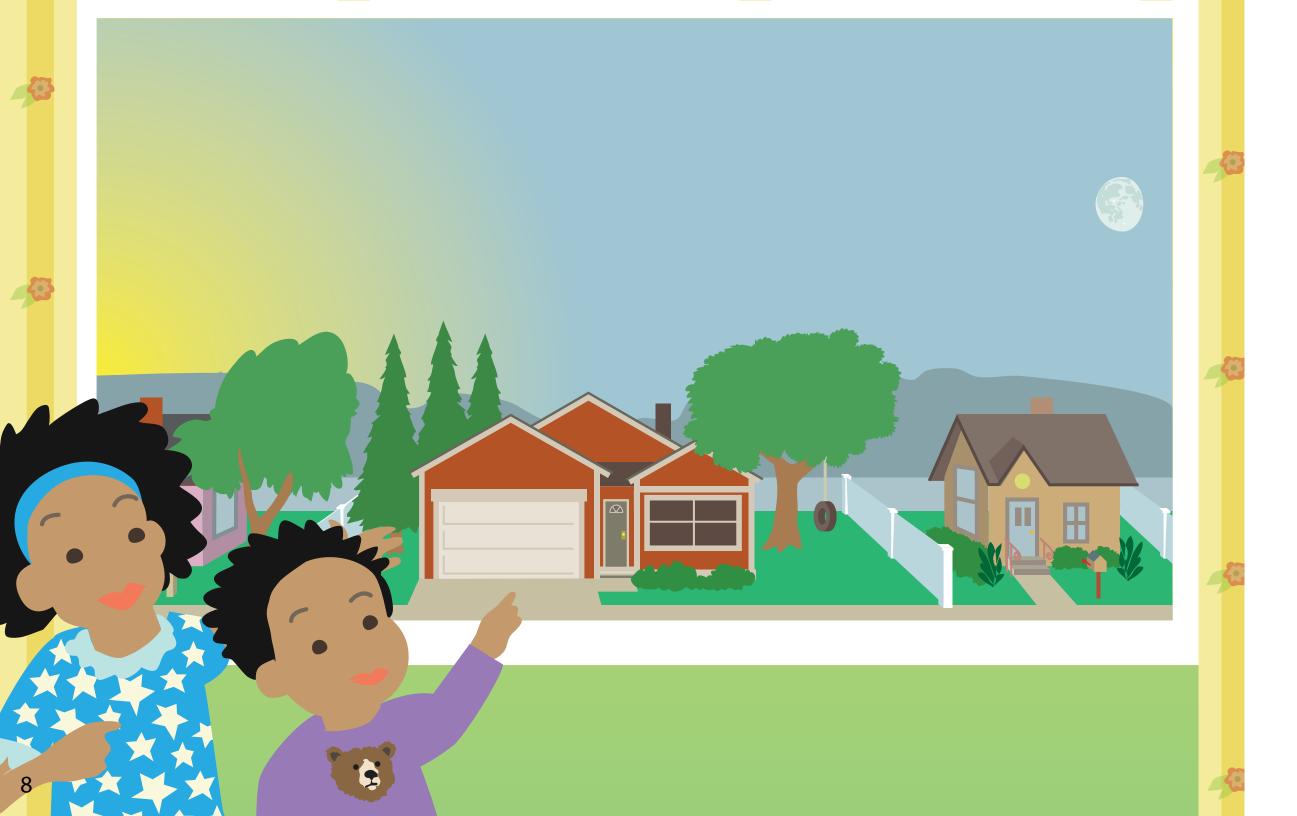
# Day 1 TUESDAY

"Wake up, Mae!"
my little brother
shouted."The
breakfast moon
is here!"



I jumped up to find the moon. I wondered what shape it would be.

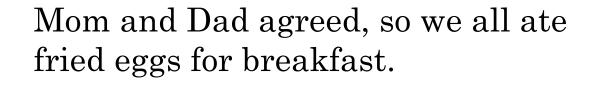
The moon had been full a few nights ago. Now it would be in the morning sky.



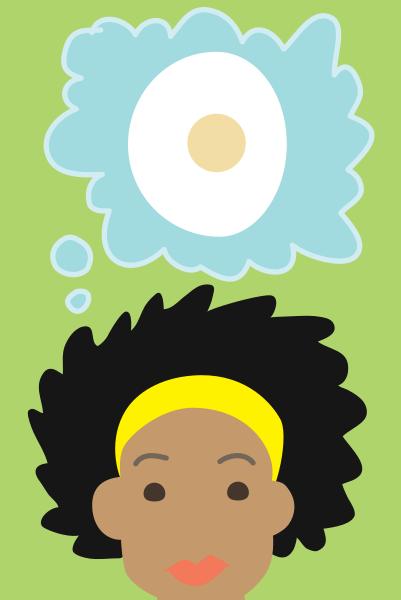
I saw it right away.

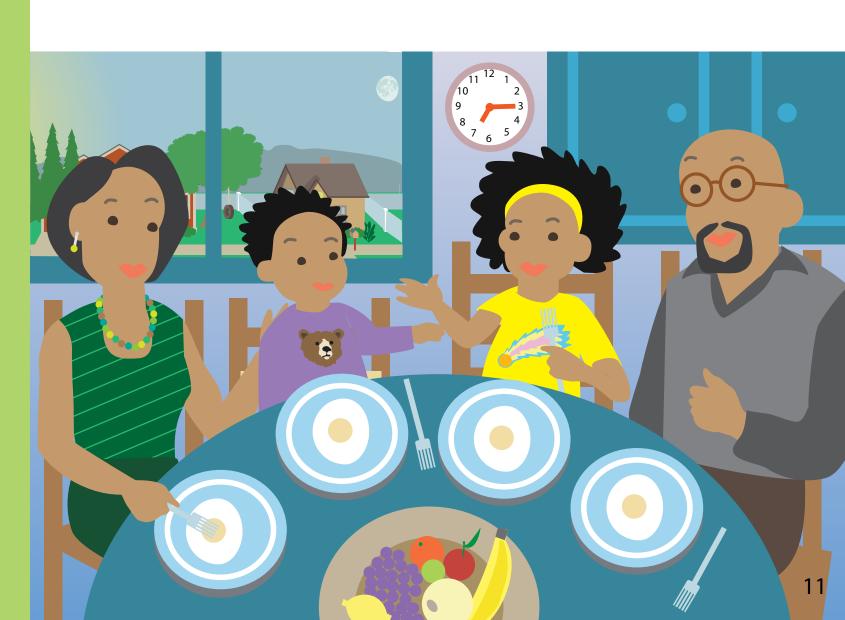
"What breakfast food does it look like, Arthur?" "It's a hat!" said Arthur.

"You can't eat a hat,"
I said. "It looks more
like a fried egg to me."









"Let's make a breakfast moon journal!" I said.

"What's a journal?" Arthur asked.

"It's a notebook where you write and draw what happens every day," I explained.







"I found the breakfast moon!"
Arthur called out before I was
even out of bed.

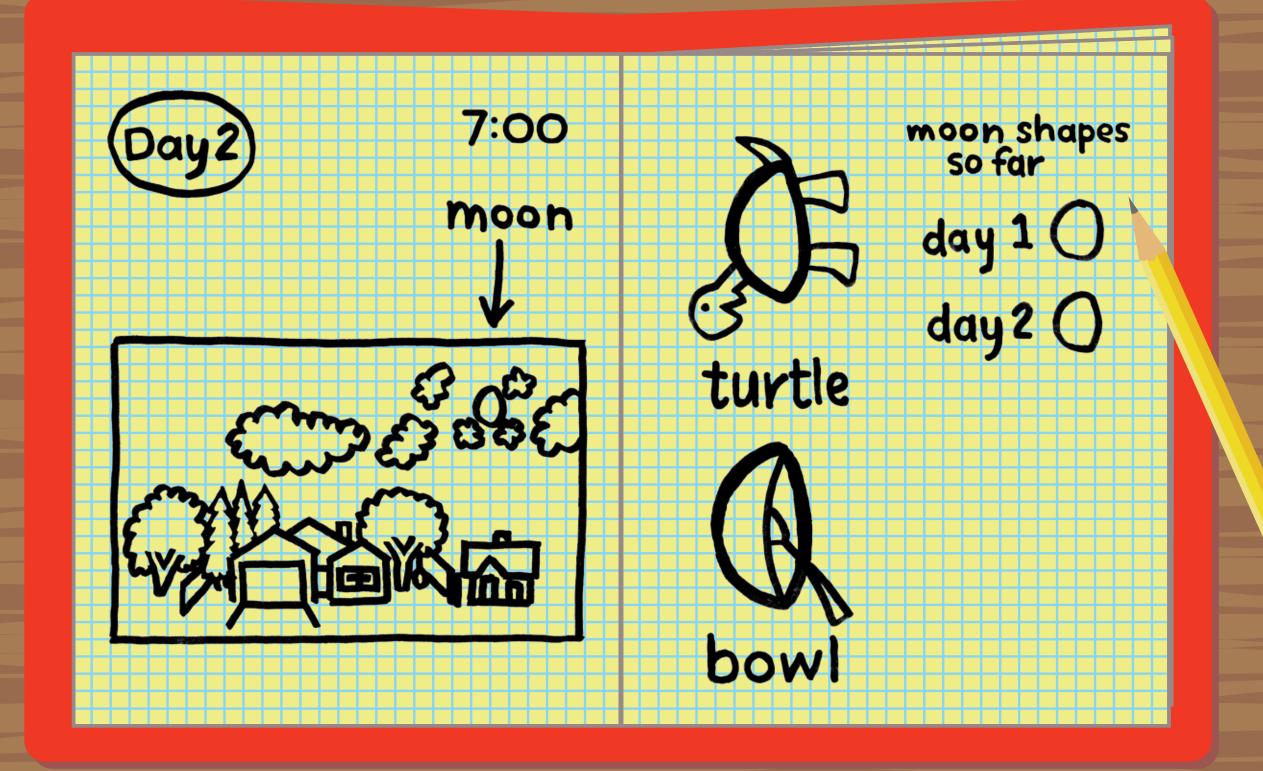
I didn't see it right away because the sky was dotted with clouds. The moon was playing hide-and-seek. Arthur pointed at what I thought was a cloud. "There," he said. "It looks like my turtle." "We're not eating your pet

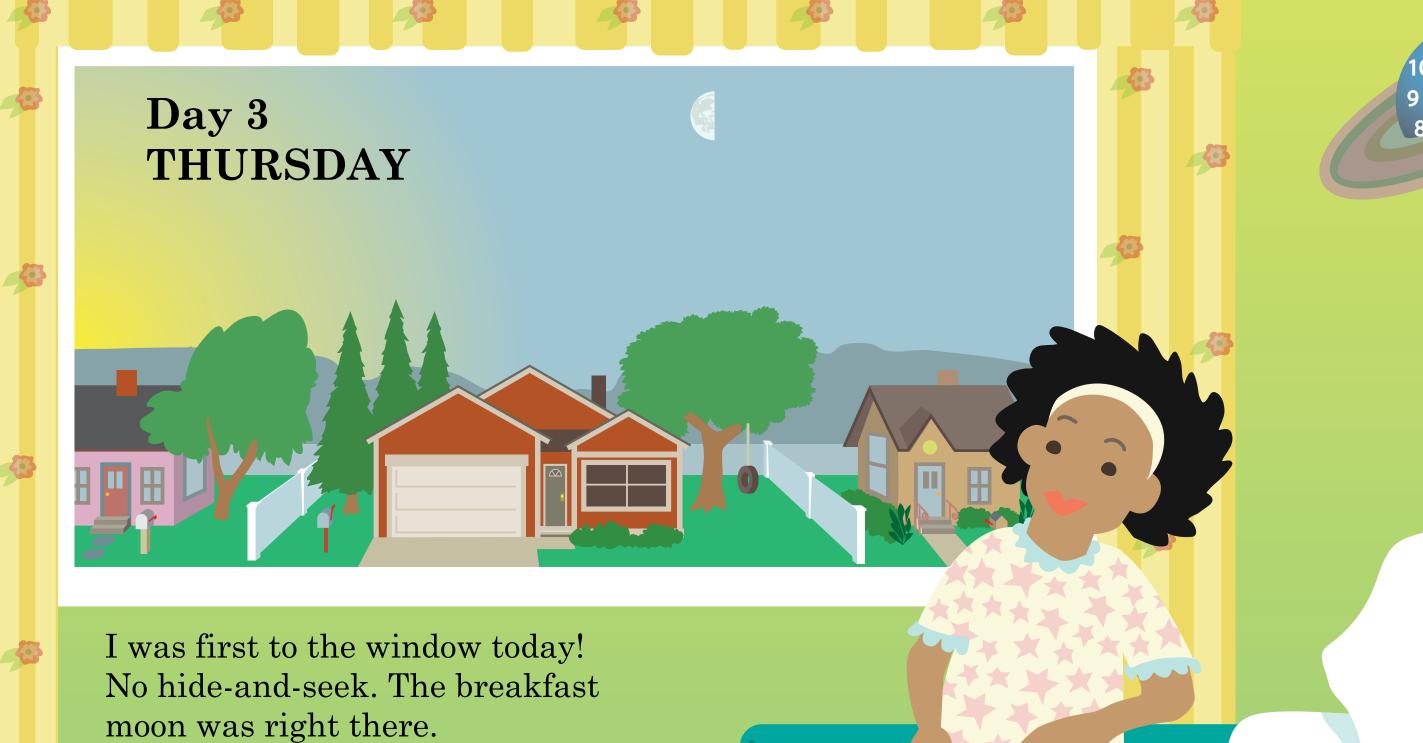
for breakfast," I said.

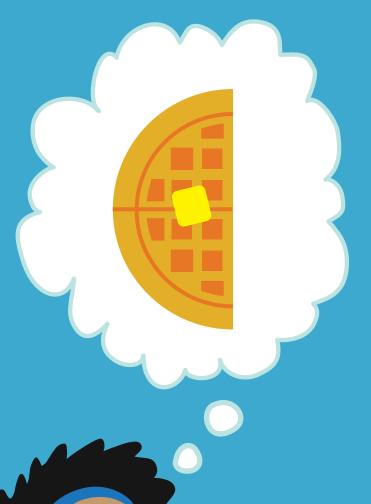
I tipped my head. The moon looked like a bowl to me.

"What's for breakfast, Mae?" asked Dad.









It looked like half of something.

"Waffles!" I shouted.

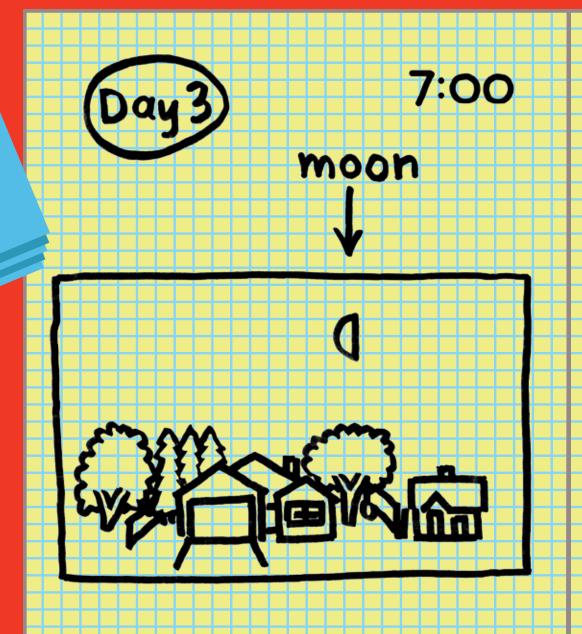


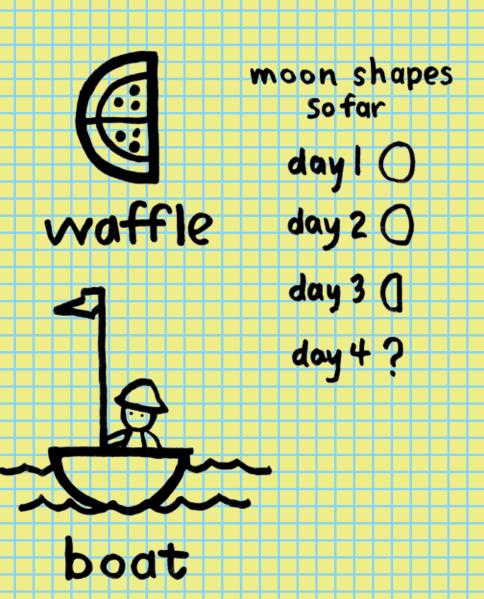




But Arthur had a different idea.

I was starting to see a pattern. Can you tell what it is?







"Yay! My boat has a sail," Arthur giggled.



Toasted warm.

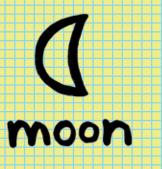
Creamy and buttery.

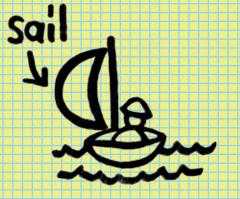
I wonder what it will look like tomorrow.

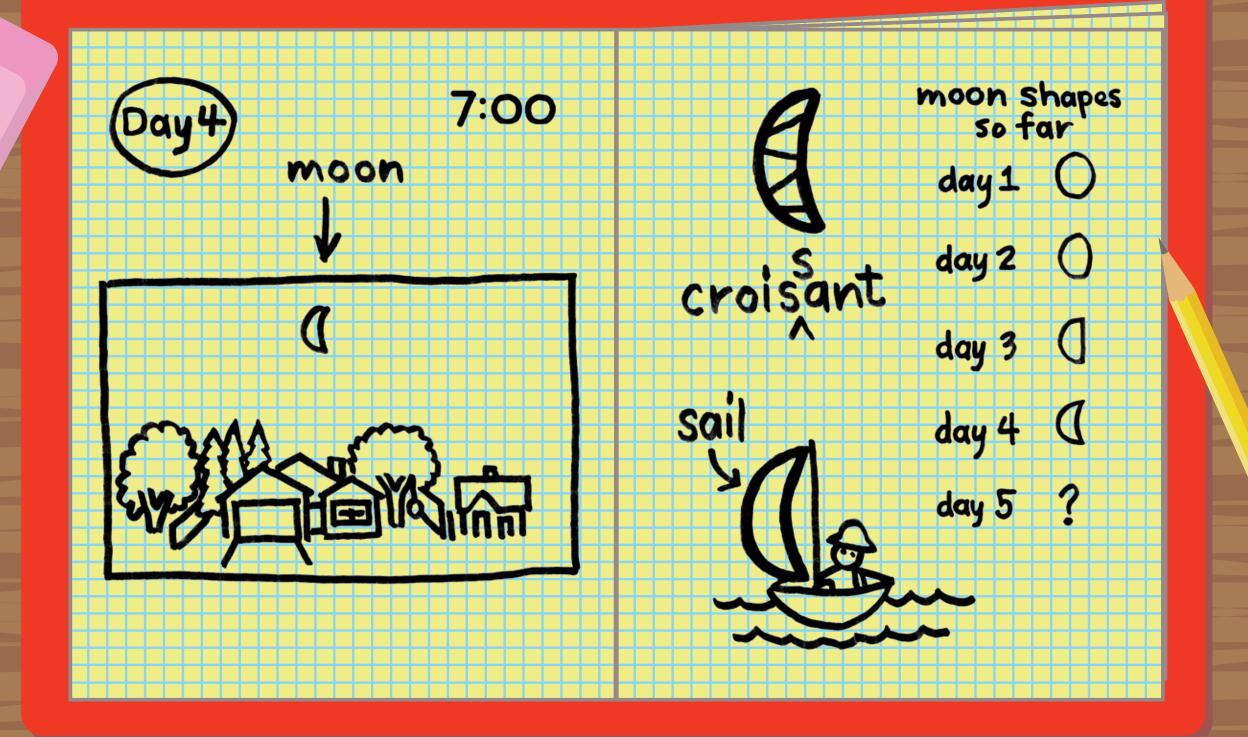


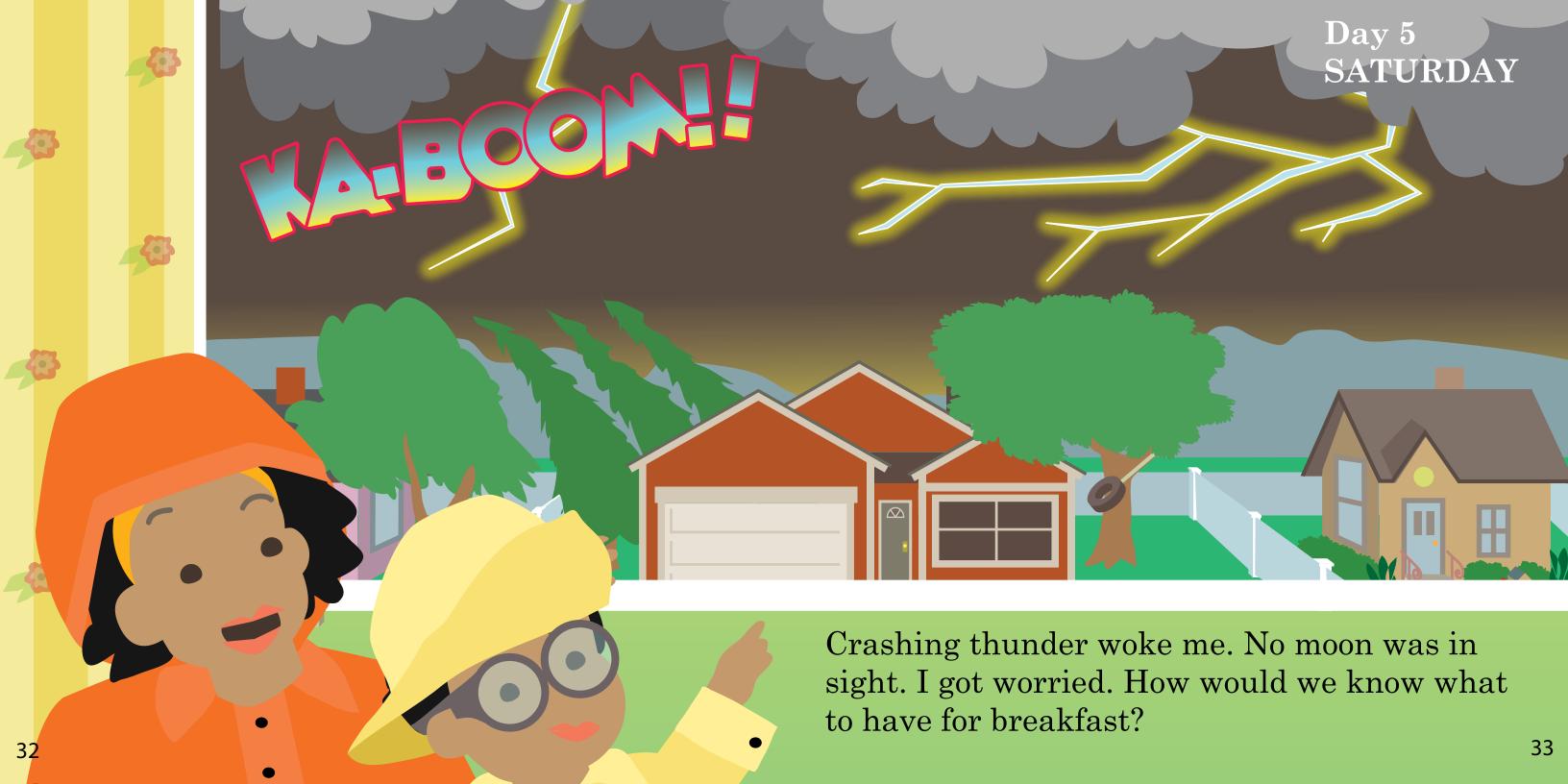


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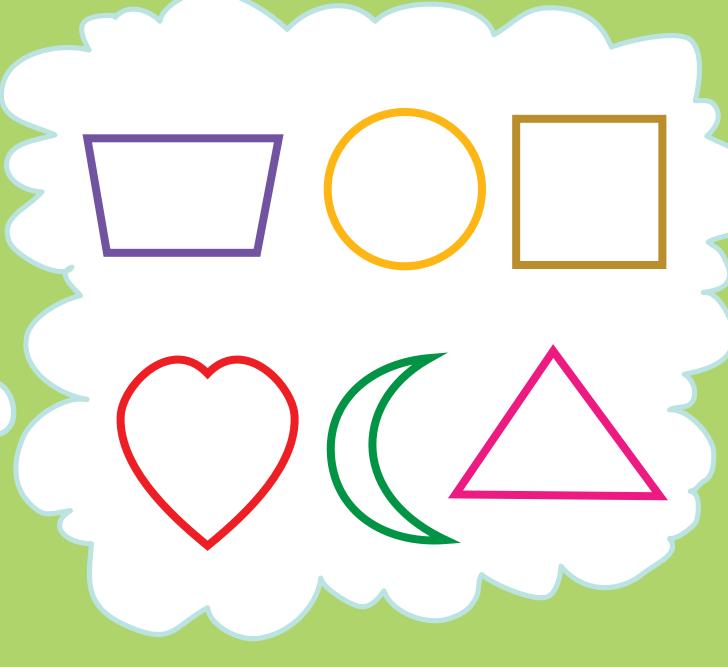




# moon shapes so far day 1 day 2 day 3 day 4 day 5

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But then I remembered the pattern.



So I made a guess.

Do you know what shape I chose?



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I chose the crescent shape. And yummy cantaloupe for breakfast!

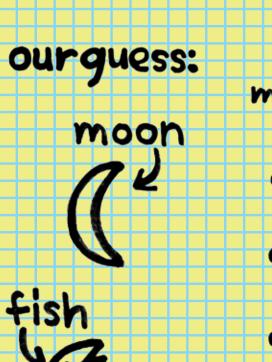






7:00

Rainy day. Couldn't see the Moon. so we guessed. Turns out we were right!



melon

moon shapes so far

day1

day 2

day 3

day 4 (

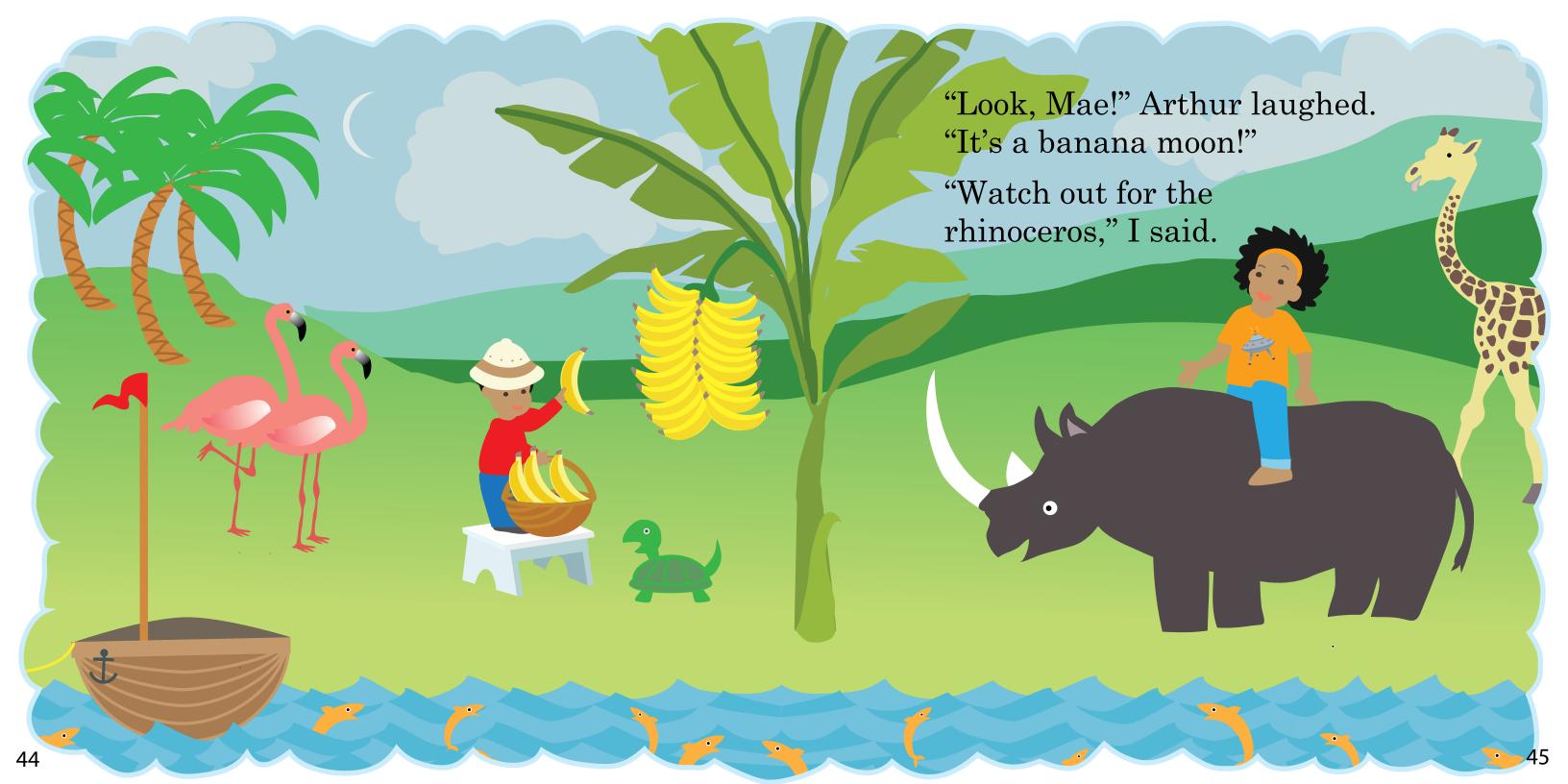
day 5 (

day 6 ?

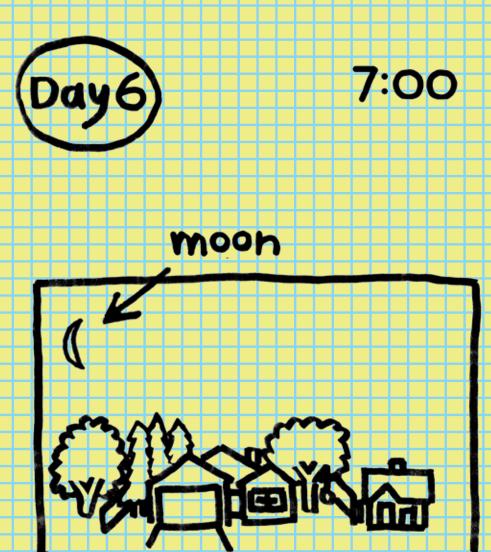


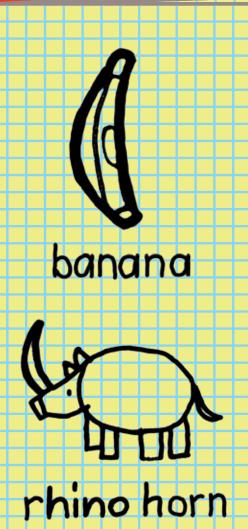
I was glad the sun was shining today. I could see the crescent moon up high in the sky. It was even skinnier than yesterday.

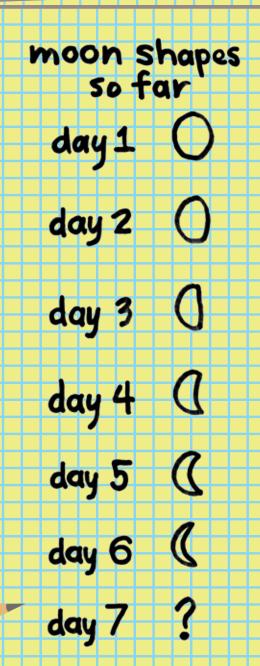
But why did Arthur have a basket?













# Day 7 MOON-DAY

My brother and I both frowned. No breakfast moon.

"Did it go away?" Arthur asked.

"No, honey," said Dad. "It's still there. We just can't see it anymore."

"Why not?" I asked.

Mom said, "Let's see your journal. What did you notice?"



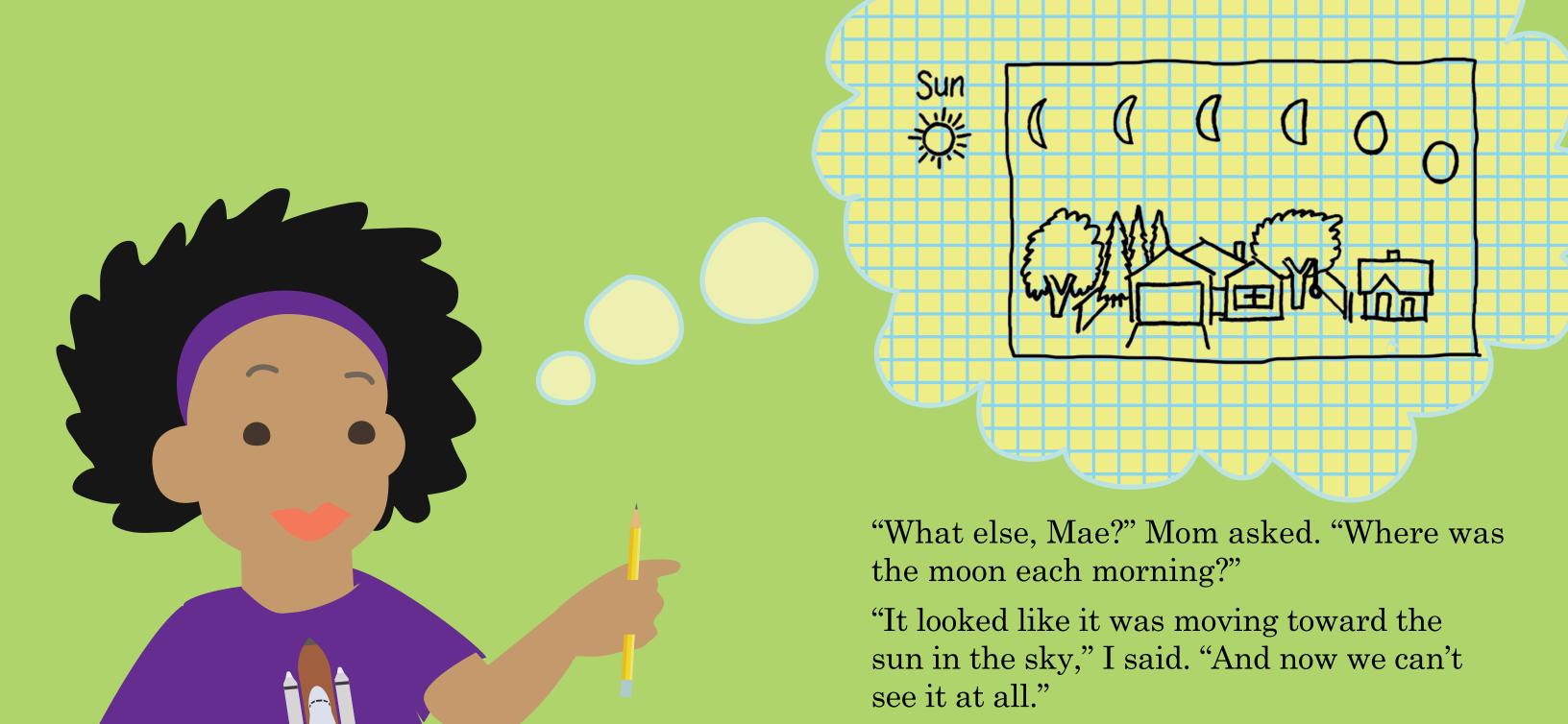
"The moon got skinnier," said Arthur.

"Do you think it was really getting smaller?" Dad asked.

"No," we both said.

We knew the moon was a big rock that didn't really change size. We were just seeing less of it.

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"But it *will* come back again." This much I knew.
"Of course!" said Dad.

"In a few days we can look for the new crescent moon in the evening sky."

"Yay!" said Arthur. "Then we'll eat the supper moon."

"Or go on another adventure," I said with a wink.



# Supper Moon



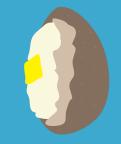
**Waxing Crescent** 





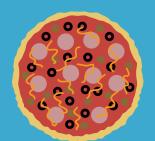
First Quarter





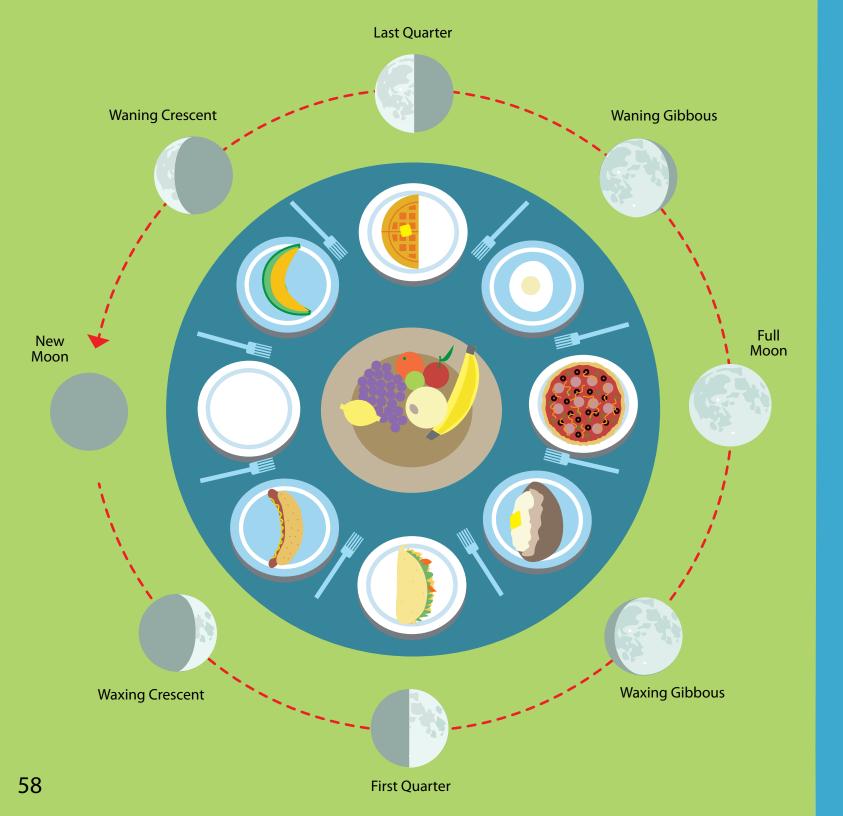
**Waxing Gibbous** 

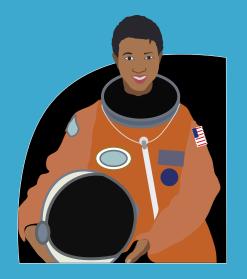




Full Moon







### **Dr. Mae Jemison**

Our character, Mae, is named in honor of Dr. Mae Jemison: chemical engineer, medical doctor, Peace Corps officer, professor, dancer, innovator, and NASA astronaut on the space shuttle Endeavor. She was the first African-American woman in space.

She gives inspirational speeches promoting science, technology, and the value of education and wonder. She has written a book about her life to inspire young people called *Find Where The Wind Goes: Moments From My Life*.

Dr. Jemison says, "Growing up... I loved space, stars, and dinosaurs. I always knew I wanted to explore... My parents were the best scientists I knew, because they were always asking questions."



# **Dr. Arthur B.C. Walker**

The little brother in our story is named in honor of solar physicist Dr. Arthur B.C. Walker of Stanford University. Professor Walker built instruments to study the Sun that were launched in spaceships. He especially enjoyed studying the high energy part of light: ultraviolet and x-rays!

He also loved to mentor other learners; he supported famous students such as America's first female astronaut, Sally Ride, and Dr. Hakeem Oluseyi, astrophysicist and popular TV science host.

Dr. Walker once told a close friend, "...(A)|| I ever wanted to be was a physicist. I've had a good life, and I wanted to help students see the marvel of physics. And I've done both."

## Try This!

In our illustrations, while the position of the moon is accurate, it appears larger than it would actually appear in the sky. We intentionally made this choice because one of our main goals is for our readers to notice the shape of the moon together with Mae and Arthur. Sometimes when you see the full moon rising or setting, it may seem really huge in the sky. But, if you close one eye and stretch out your arm, you can actually cover the moon with the tip of your pinky finger! This works no matter what phase the moon has or where it appears in the sky. Try it next time you see the moon!

