

EDUCATOR'S GUIDE

THE LOVES SCIENCE SERIES
PICTURE BOOKS

BY KIMBERLY DERTING
AND SHELLI R. JOHANNES



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The activities in this guide align with Common Core Standards and fit into the curriculum for Grades K - 3.

The "Loves Science" series is about girls who love science and ask the question WHY? These STEM-themed picture books introduce readers to Cece, Libby, and Vivi. They are girls who love science, as well as basic concepts of science, technology, engineering, and math. A great choice for aspiring scientists, emerging readers, and those who love to ask questions. Perfect for fans of Andrea Beaty's *Ada Twist, Scientist* and *What Do You Do With An Idea?* The books include activities, glossaries, and experiments.

We hope this guide will help you incorporate a reader-friendly science story into your class curriculum.

Thank you!
Kimberly and Shelli

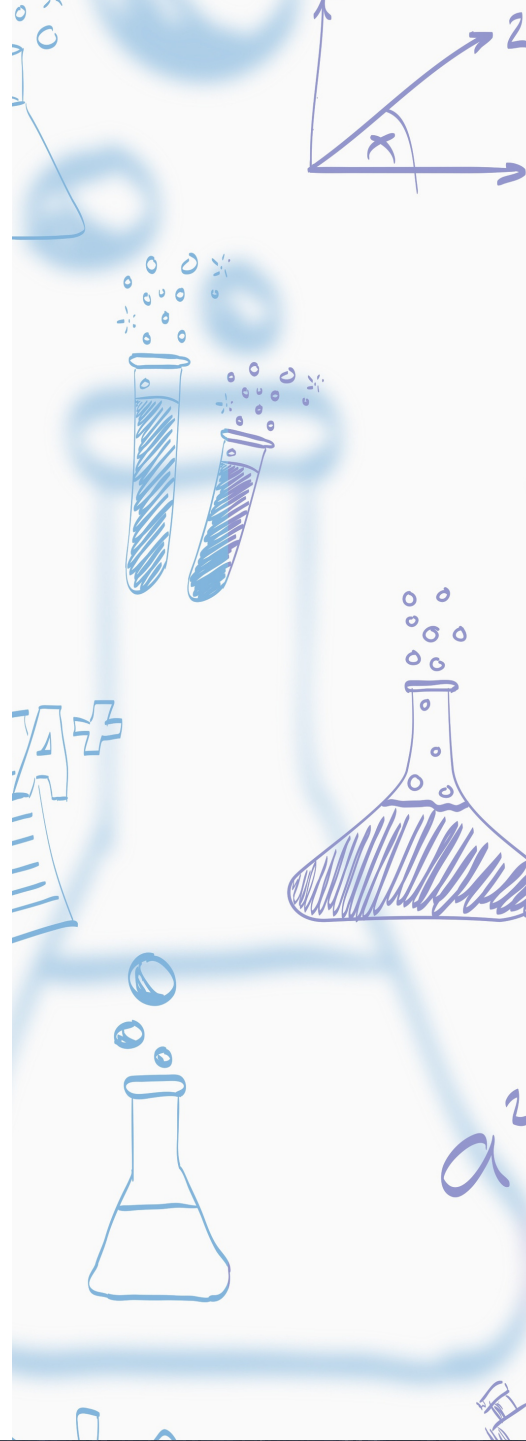


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ABOUT CECE LOVES SCIENCE

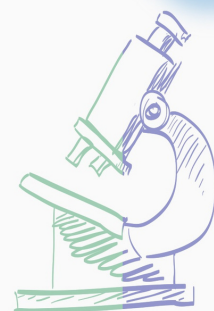
Science isn't just about asking questions, real scientists have fun finding answers too.

When Cece's science teacher, Ms. Curie, assigns a project about zoology, Cece asks the perfect question: Do dogs eat vegetables? Working from a treehouse lab, Cece and her best friend, Isaac, investigate, research, collect, and analyze data, using Cece's adorable (and hungry!) dog, Einstein, as their subject. Their conclusion may surprise you!

Hardcover ISBN: 978-0062499608

Paperback ISBN: 978-0062499615

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PRAISE

"Harrison's clean, bright illustrations add expression and personality to the story. ...this endearing protagonist earns a place on the children's STEM shelf. A good introduction to observation, data, and trying again." (Kirkus Reviews)

"Cece is a smart and curious girl who loves to get to the bottom of all her complex questions. ...Harrison's expressive digital illustrations have a lot of energy, color, and motion...A fun way to introduce scientific methods." (Booklist)

"Excited by her teacher's assignment to find and investigate a question, [Cece] pairs up with a partner, Isaac, to brainstorm ideas...The story includes images of an inviting science classroom and mentions a variety of sciences and a range of scientists diverse in race and gender. ... Words and pictures combine to make smooth blend of entertainment and education." (School Library Journal)

DISCUSSION QUESTIONS

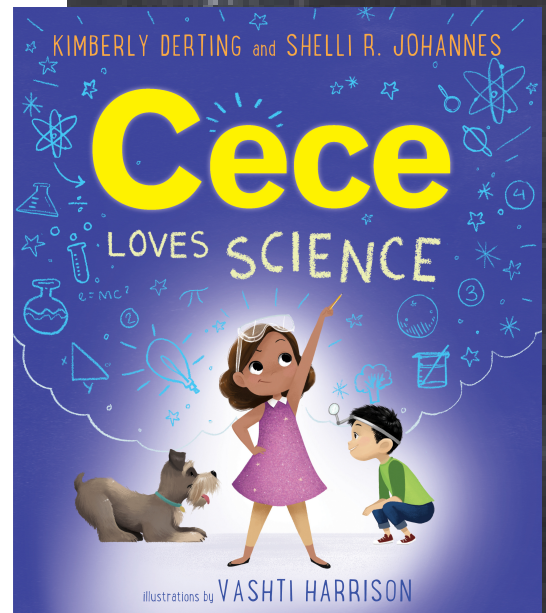
Hint: Make sure you read Cece's Science Facts too!

1. What is Cece's favorite question?
2. Name the three scientists that Ms. Curie teaches in class. (**Bonus:** Do you know what they studied?)
3. In the "CANIS" classification, which two animals are related to a dog?
4. Describe the science assignment from Ms. Curie. What is their scientific question?
5. What science do they choose to study?
6. What did Cece and Isaac observe?
7. What variables (aka. veggies) do Cece and Isaac test on Einstein first?
8. How do those variables change the experiment?
9. How do Cece and Isaac interpret results?
10. In the end, what is the most extraordinary observation Cece makes?

STANDARDS

ELA READING

CCSS.ELA-LITERACY.RL.1.1
CCSS.ELA-LITERACY.RL.1.3
CCSS.ELA-LITERACY.RL.2.3
CCSS.ELA-LITERACY.RL.3.1
CCSS.ELA-LITERACY.RL.K.1
CCSS.ELA-LITERACY.RL.K.3
CCSS.ELA-LITERACY.RL.K.7





ABOUT CECE LOVES SCIENCE AND ADVENTURE

Solving problems is always easier when you have a team!

Cece loves being an Adventure Girl almost as much as she loves science, which is why she can't wait for her troop's camping trip. Nature is full of science for Cece to explore! Along with her friends, her mom, and her dog, Einstein, Cece learns how to pitch a tent, set up a campsite, and document landmarks on the trail. Then thunder booms in the distance! Cece and her Adventure Girls troop use science, technology, engineering, and math to solve problems and earn their camping pins.

Hardcover ISBN: 978-0062499622

Paperback ISBN: 978-0062499639

PRAISE

"A worthy message about girls embracing science." (Publishers Weekly)

"The array of adept female characters are sure to become reader favorites...perfect for a STEM read-aloud." (School Library Journal)

"Smart girls, friendship, and fun: a winning combination." (Kirkus Reviews)

STANDARDS

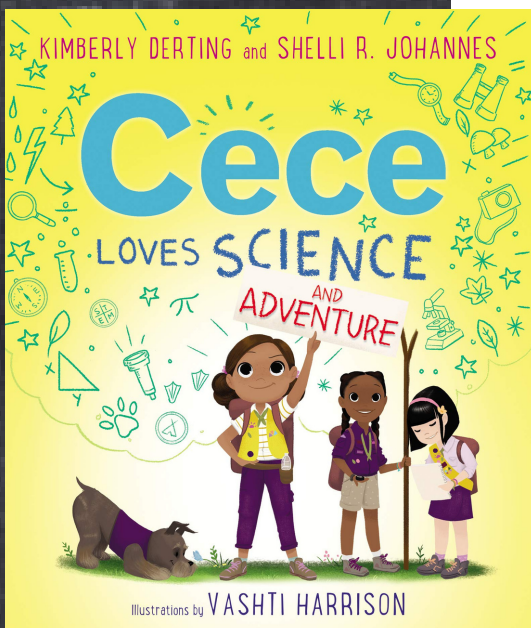
ELA READING

CCSS.ELA-LITERACY.RL.1.1
CCSS.ELA-LITERACY.RL.1.3
CCSS.ELA-LITERACY.RL.2.3
CCSS.ELA-LITERACY.RL.3.1
CCSS.ELA-LITERACY.RL.K.1
CCSS.ELA-LITERACY.RL.K.3
CCSS.ELA-LITERACY.RL.K.7

DISCUSSION QUESTIONS

1. What Adventure Girls' pin is Cece trying to earn?
2. What specific science does Cece use to see if a storm is coming?
3. What technology does Cece use to help them get back to camp?
4. What do the girls engineer (or build) to protect them from the rain? What materials do they use?
5. How do they use math to find out how far away campsite is?
6. What animal do you think stole the marshmallows?
7. What two extra pins do the Adventure Girls get in the end?
8. What does STEM stand for?

BONUS – What else does Cece think STEM stands for?



ABOUT LIBBY LOVES SCIENCE

Solving problems is always easier when you have a team!

Cece loves being an Adventure Girl almost as much as she loves science, which is why she can't wait for her troop's camping trip. Nature is full of science for Cece to explore! Along with her friends, her mom, and her dog, Einstein, Cece learns how to pitch a tent, set up a campsite, and document landmarks on the trail. Then thunder booms in the distance! Cece and her Adventure Girls troop use science, technology, engineering, and math to solve problems and earn their camping pins.

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DISCUSSION QUESTIONS

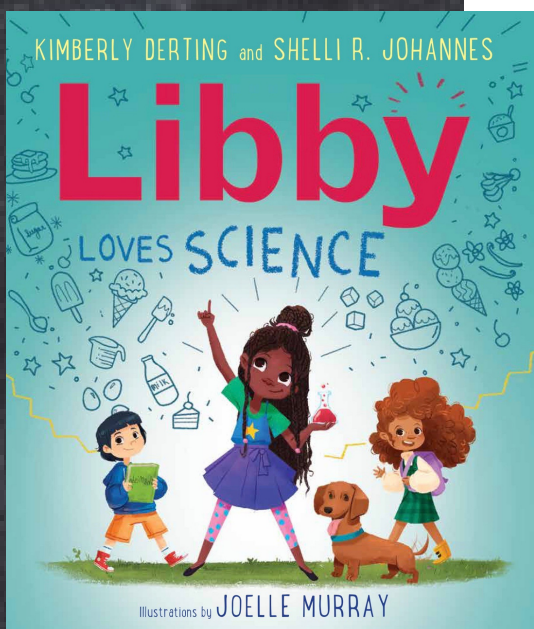
STANDARDS

NSS: K-2
5: STRUCTURE AND
PROPERTIES OF MATTER
K-PS1-1 MEASURE AND
GRAPH QUANTITIES
K-PS1-2 MAKE
OBSERVATIONS AND
MEASUREMENTS TO
IDENTIFY MATERIALS BASED
ON THEIR PROPERTIES

ELA STANDARDS FOR K-3
CCSS.ELA-LITERACY.RL
CCSS.ELA-LITERACY.RI.
CCSS.ELA-LITERACY.RF.

Hint: Make sure you read Libby's Science Facts too!

1. Which two actions help Libby make the perfect cupcake?
2. Explain "mixing". Give an example.
3. Explain "measuring". Give an example.
4. What are Libby and her friends making? And why?
5. Name two things Libby and her friends use to MEASURE ingredients.
6. Name two things Libby and her friends use to MIX ingredients.
7. Why was the baking powder so important?
8. If you need to double a recipe, what do you need to do?



ABOUT VIVI LOVES SCIENCE

Vivi loves science!

In this STEM-themed picture book, part of a series about girls who love science, Vivi and her classmates go on a field trip to the ocean to investigate tide pools. With help from her teacher and a park ranger, Vivi and her friends make aquascopes, participate in a marine-inspired scavenger hunt, and learn about different species that call the ocean home. A must-have for fans of *Rosie Revere, Engineer* and *What Do You Do with an Idea?* and anyone who loves to ask questions and learn about the world. Features a glossary and fun tide pool activity to do at home.

Hardcover ISBN: 978-0062946065



PRAISE

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DISCUSSION QUESTIONS

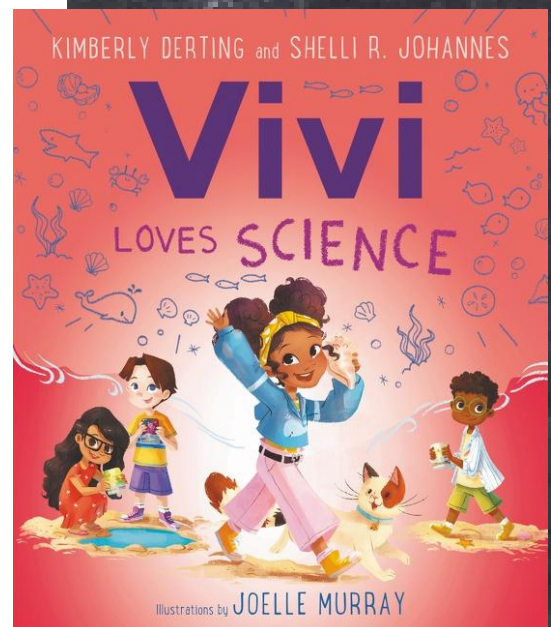
1. What is the study of the ocean called?
2. Where is Vivi's class going on their field trip?
3. What are the four things Vivi wants to find on her "Beach Wish List"?
4. How long have jellyfish been on Earth?
5. Are sharks a fish or mammals? What about dolphins? Why?
6. What do you call a scientist who studies marine life?
7. What are tide pools and what are examples of animals you can find living in them?
8. What are the first three things Vivi and Graeme find during their scavenger hunt?
9. What kind of fish was hiding under the rock?
10. Do jellyfish sting or bite?

BONUS – Who is Jacques Cousteau?

STANDARDS

ELA READING

CCSS.ELA-LITERACY.RL.1.1
CCSS.ELA-LITERACY.RL.1.3
CCSS.ELA-LITERACY.RL.2.3
CCSS.ELA-LITERACY.RL.3.1
CCSS.ELA-LITERACY.RL.K.1
CCSS.ELA-LITERACY.RL.K.3
CCSS.ELA-LITERACY.RL.K.7



ABOUT THE AUTHORS

KIMBERLY DERTING SPENT HOURS AS A CHILD DRAWING INTRICATE “WORM CITIES” BECAUSE HER ART SKILLS DIDN’T ALLOW HER TO DRAW ANYTHING WITH ARMS OR LEGS. IN COLLEGE, SHE STUDIED BIOLOGY, BUT HER REAL EXPERIMENTS ARE DONE IN THE PACIFIC NORTHWEST, WHERE SHE WRANGLES THREE KIDS, ONE HUSBAND, TWO DOGS, TWO CATS, AND A RABBIT NAMED THUMPER—SERIOUSLY, SHE’S PRACTICALLY A ZOOLOGIST! YOU CAN FIND HER OTHER BOOKS AT **KIMBERLYDERTING.COM.**



SHELLI R. JOHANNES NEVER WARMED UP TO CREEPY CRAWLY BUGS, BUT SHE HAS ALWAYS LOVED ZOOLOGY AND BIOLOGY. IN FACT, SHE CAN OFTEN BE FOUND SAVING STRAYS AND OTHER JAYWALKING CRITTERS, OR VOLUNTEERING WITH ANIMAL CONSERVATION GROUPS. SHE LIVES IN ATLANTA WITH HER HUSBAND, TWO KIDS, ONE BIRD, ONE FISH, AND TWO CRAZY-HAIRED DOODLES WHO, JUST LIKE EINSTEIN, SEEM TO LOVE FRUIT AND DESSERT BUT NOT VEGGIES. YOU CAN FIND HER OTHER BOOKS AT **WWW.SRJOHANNES.COM.**



AUTHOR VISITS

In-Person or Virtual School Visits:

At your school, there is a young reader who wants to write. We hope to have the opportunity to tell that young reader that he or she can do it, too. We can offer discounted rates if you have our books available for sale prior to the event. Please let us know if you need other ideas on how to make an author visit affordable and/or effective! If you're interested in either bringing us in to meet your students, or in hosting a virtual visit, shoot us an email. You can contact Shelli at shelli@srjohannes.com or Kimberly at kim@kimberlyderting.com to discuss further.

Mention this study guide for a discount!



"YOU KNOW YOU HAD A SUCCESSFUL ASSEMBLY WHEN A WEEK LATER THE STUDENTS AND TEACHERS ARE STILL TALKING ABOUT IT AND ASKING WHEN THE AUTHOR IS COMING BACK!" **-JULIE STOKES**
(LITERARY COORDINATOR, DALTON MS)

"KIM DERTING WAS FANTASTIC! SHE'S ENGAGING, AUTHENTIC, AND FUNNY. SHE KNOWS HOW TO RELATE TO KIDS, AND SHE THOUGHTFULLY ENCOURAGES YOUNG WRITERS." **ERICA SAGE**
(NORTH TAPPS MIDDLE SCHOOL, WASHINGTON)

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READERS TOO!