

# EDUCATOR'S GUIDE

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THE LOVES SCIENCE SERIES  
I-CAN-READS

BY KIMBERLY DERTING  
AND SHELLI R. JOHANNES



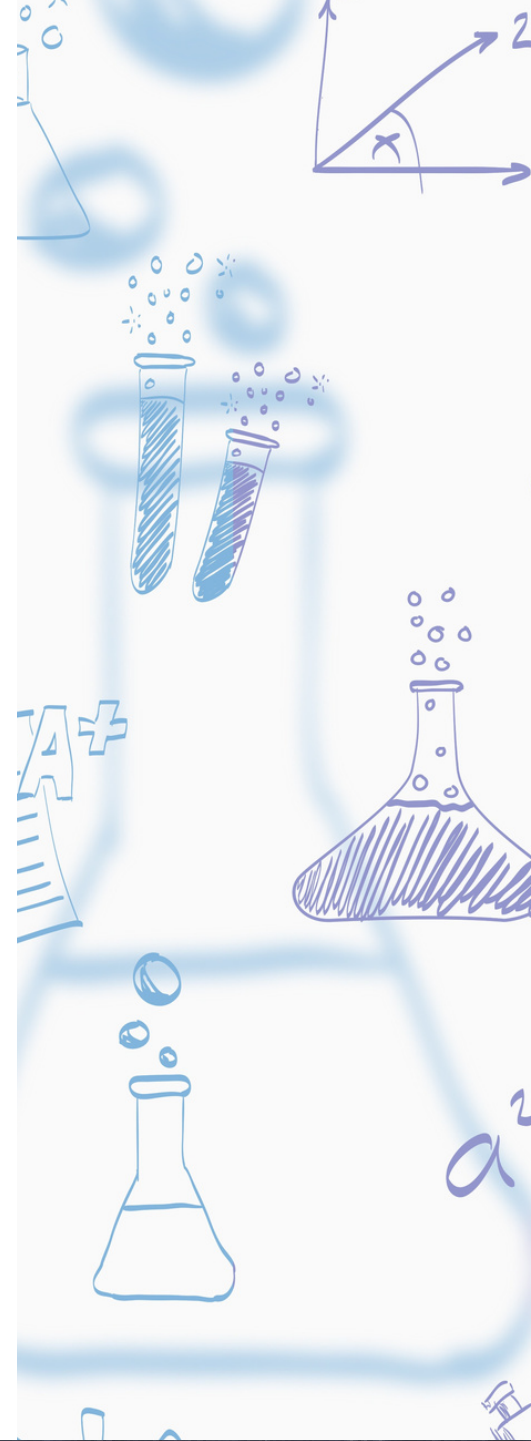
# EDUCATOR'S GUIDE

**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 asking the question WHY? These STEM-themed early readers 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: PUSH AND PULL

## Cece loves science!

In this STEM-themed Level 3 I Can Read! title, Cece and her friend Isaac learn about the opposite forces of push and pull, and use their new knowledge to create a treat dispenser for Cece's dog, Einstein. Cece and her classmates rely on science, creativity, and teamwork—and they learn a lot along the way. This Level 3 I Can Read! focuses on basic scientific vocabulary and includes a glossary of terms and fun activities for readers to try on their own. A great pick for beginning readers!

**Paperback ISBN : 978-0062946089**

**Hardback ISBN: 978-0062946096**



## I-CAN-READ!

*The Cece Loves Science books introduce readers to basic concepts of science, technology, engineering, and math, and are perfect for the classroom. This Level 3 I-Can-Read focuses on basic scientific vocabulary and includes a glossary of terms and fun activities for readers to try on their own. A great pick for beginning readers!*



# DISCUSSION QUESTIONS

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1. What two forces does Cece have to demonstrate in her project?
2. Explain the force of PUSH.
3. Explain the force of PULL.
4. What are Cece and her friends making during their experiment?
5. Name two ways Cece and her friends use the force PUSH in their experiment.
6. Name two ways Cece and her friends use the force PULL.
7. Name three ways you can use the force PUSH at home.
8. Name three ways you can use the force PULL at home.

## STANDARDS

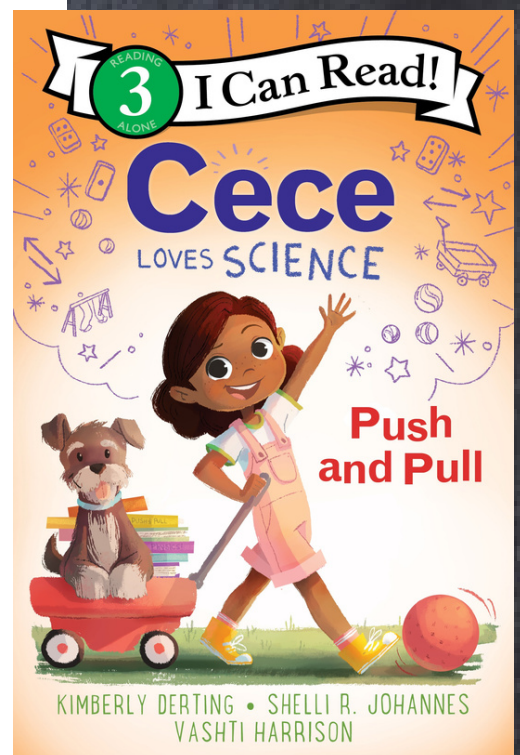
### NSS: K-2

K-PS2-1 MOTION AND STABILITY:  
FORCES AND INTERACTIONS

K-PS2-2 MOTION AND STABILITY: FORCES AND INTERACTIONS

### ELA STANDARDS FOR K-3

CCSS.ELA-LITERACY.RL  
CCSS.ELA-LITERACY.RI  
CCSS.ELA-LITERACY.RF.







# ABOUT LIBBY LOVES SCIENCE: MIX & MEASURE

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## **Libby loves science!**

In this STEM-themed Level 3 I Can Read, Libby and her friend Rosa learn about mixing and measuring to bake a delicious treat for a puppy party. With the help of her friend Rosa and little brother, Libby decorates, stuffs goody bags, and bakes delicious cupcakes. But when they realize they've forgotten an important ingredient, they use science to solve the problem—just in the nick of time. This Level 3 I Can Read focuses on basic chemistry and friendship. A great pick for newly independent readers and an ideal companion to Cece Loves Science: Push and Pull.

**Paperback ISBN : 978-0062946119**

**Hardback ISBN: 978-0062946126**

## **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)*

# 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: SINK OR FLOAT

## **Vivi loves science!**

Vivi and her friends visit the aquarium and are introduced to the concepts of density and buoyancy. They learn about the creatures living in the big display tank. But why do some fish swim while others bury themselves in the sand? Vivi will have to experiment to find out! This Level 3 I Can Read! explores swimming, sinking, floating, and density, and includes an experiment to try at home. An ideal companion to Cece Loves Science: Push and Pull and Libby Loves Science: Mix and Measure.

**Paperback ISBN: 978-0063116566**

**Hardback ISBN: 978-0063116573**



## **I-CAN-READ!**

*The Cece Loves Science books introduce readers to basic concepts of science, technology, engineering, and math, and are perfect for the classroom. This Level 3 I-Can-Read focuses on basic scientific vocabulary and includes a glossary of terms and fun activities for readers to try on their own. A great pick for beginning readers!*



# DISCUSSION QUESTIONS

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1. Where do Vivi and her classmates go?
2. What is the name of the flatfish they find in the large tank?
3. What kind of scientist is Dr. Fisher?
4. What two things do they investigate?
5. What organ helps a fish sink or float?
6. Whether an object sinks or floats depends on what?
7. Give an example of an object with low density and one with high density.
8. What happens when the bottle fills with water? What happens when it fills with air?
9. Do all fish have swim bladders? Name a few that don't.
10. Are seahorses fish?

**Bonus: What is the name of Vivi's pet fish?**

## STANDARDS

### NSS: K-3

2-LS4-1 BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

2-LS2-1 ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS

3-LS3-1 HEREDITY: INHERITANCE AND VARIATION OF TRAITS

### ELA STANDARDS FOR K-3

CCSS.ELA-LITERACY.RL

CCSS.ELA-LITERACY.RI

CCSS.ELA-LITERACY.RF



# ABOUT VIVI LOVES SCIENCE: WIND & WATER

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## **Vivi loves science!**

In this STEM-themed Level 3, I Can Read! Vivi loves science! In this STEM-themed Level 3 I Can Read! title, Vivi helps her community clean up the beach after a big storm hits her town. But why does the beach look so different than before? Vivi learns how wind and water shape the landscape in different ways. She and her friends will have to ask questions, learn about erosion, and conduct experiments to find out!

**Paperback ISBN : 978-0063116597**

**Hardback ISBN: 978-0063116603**

## **PRAISE**

*"Pair this with nonfiction books for the same reading and comprehension level, including EagleCloud's Future Scientist: Awesome Science Experiments for Kids." (School Library Journal)*

# DISCUSSION QUESTIONS

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## STANDARDS

### NSS: K-5

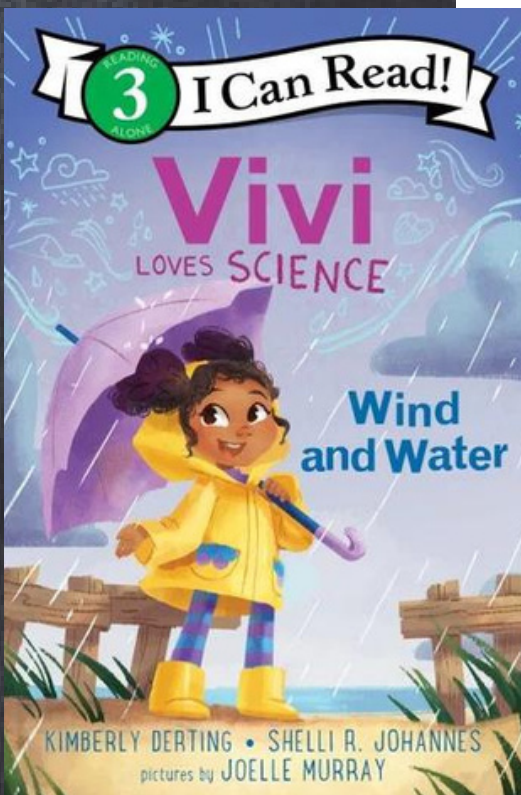
2-PS1-1 MATTER AND ITS INTERACTIONS  
2-ESS2-3 EARTH'S SYSTEMS  
2.EARTH'S SYSTEMS: PROCESSES THAT SHAPE THE EARTH  
2. STRUCTURE AND PROPERTIES OF MATTER  
4-ESS2-1 EARTH'S SYSTEMS

### ELA STANDARDS FOR K-3

CCSS.ELA-LITERACY.RL  
CCSS.ELA-LITERACY.RI.  
CCSS.ELA-LITERACY.RF

1. What woke Vivi up at night?
2. Who do Vivi and Graeme help clean up the beach?
3. What was the beach covered in? (besides sand!)
4. What happened to the tide pools?
5. What is erosion?
6. Give an example of a famous landmark that was caused by erosion?
7. What is Earth Science?
8. What are two different forces that cause erosion?
9. What things do water erosion create? What about wind?
10. What are some other examples of erosion?

**Bonus: Would we have beaches without erosion? What else wouldn't we have?**





# ABOUT LIBBY LOVES SCIENCE: STATES OF MATTER

## **Libby loves science!**

Libby and her classmates are excited to welcome a new student into their classroom. But first, they learn about the three states of matter. When the ice cream for the welcome party melts, Libby is curious to see how solids, liquids, and gas can save the celebration. Experiment with Libby and find out! This is a great choice for aspiring scientists, new readers, and fans of Andrea Beaty's *Ada Twist, Scientist*. It includes activities, a glossary, and a fun science experiment to do at home.

**Paperback ISBN: 978-0063116627**

**Hardback ISBN: 978-0063116573**



## PRAISE

*"A recommended resource for educators and a delightful read for young science enthusiasts. Ideal for science units, this book successfully combines informative content with fun." (School Library Journal)*

*"Science made clear—and fun." (Kirkus Reviews)*

# DISCUSSION QUESTIONS

1. Why do Libby and her friends want to throw a party?
2. What do Rosa, Finn, and Libby each bring to the party?
3. What is the science lesson of the day?
4. What are the three states of matter?
5. What is a solid? What are some examples of a solid?
6. What is a liquid? What are some examples of a liquid?
7. What is a gas? What two main gases make up the air we breathe?
8. How do Libby and her friends solve the problem?
9. What are the three states of matter in the cocoa treat they make?
10. What can be all three states of matter?

**Bonus: Is a popsicle a solid or liquid? Which two states of matter can it be?**

## STANDARDS

### NSS: K-3

2-PS1-1 MATTER AND ITS INTERACTIONS

2-ESS2-3 EARTH'S SYSTEMS

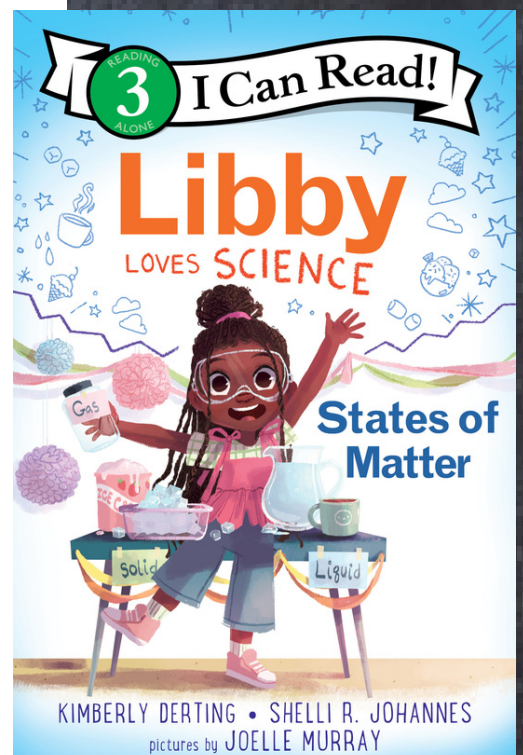
2. STRUCTURE AND PROPERTIES OF MATTER

### ELA STANDARDS FOR K-3

CCSS.ELA-LITERACY.RL

CCSS.ELA-LITERACY.RI

CCSS.ELA-LITERACY.RF





# 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](http://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](http://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](mailto:shelli@srjohannes.com) or Kimberly at [kim@kimberlyderting.com](mailto: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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