

# CECE LOVES SCIENCE

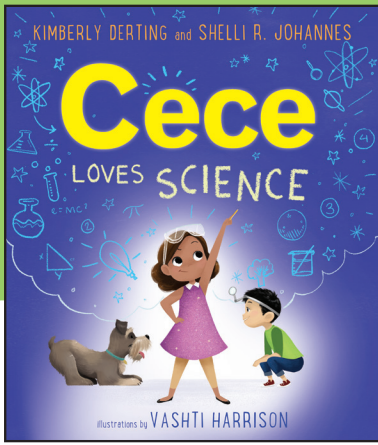
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## ABOUT THE BOOK

Cece loves science! This STEM-themed picture book introduces the inquisitive Cece, her curious best friend Isaac, and her pup Einstein, and poses one of life's most pressing questions—will a dog eat vegetables?

## STORYTIME ACTIVITIES

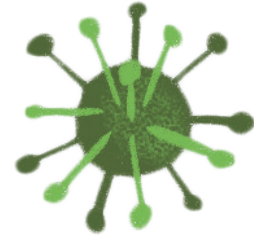
- **THE MAGIC CUP:** Sometimes science seems like magic! For young children, an adult should model this experiment, but older children can try it themselves. Take a plastic cup and a piece of card stock. Cut the card stock into a square large enough to entirely cover the top of the cup. Fill the cup with water. Place the card stock on top of the cup. Hold the bottom of the cup with one hand and press the card stock onto the top of the cup with the other hand. Then, slowly turn the cup upside down. Predict and then observe what happens when you gently remove the hand that was pressing down on the card stock. Does the water spill out? Why or why not? (Air pressure on the card stock keeps the water in. It does not spill out.)
- **FLYING COLORS:** Cut off the scalloped edge of an uncoated white paper plate. Divide the plate into six equal sections, using a ruler to draw straight lines. Children should use markers or crayons to color each section a different color, using the following six colors: red, orange, yellow, green, blue, and violet. Remove an eraser from a pencil. Stick a pushpin through the center of the plate (color side up) and into the eraser. Then, holding the pushpin, spin the circle. What colors do you see? Why? (When all of the colors are combined, it creates white light.)
- **WHAT'S INSIDE? WILL IT GROW?:** Show the children a lima bean seed. Ask them to imagine what is inside the seed. Have them fold a piece of paper in half to make a crease in the center. On one half, they should draw what they think the inside of the seed looks like. Then give them each a lima bean seed that has been soaked in water for at least six hours. Have them peel off the seed coat and open up the seed. Using a hand lens, can they see the tiny plant that is inside? Have them draw what they observe on the reverse half of their paper.
- **CAN YOU HEAR ME NOW?:** Create a telephone for pairs of children to try. Use two large paper or plastic cups, two paper clips, and a piece of cotton string or fishing line 10–20 feet long. An adult should poke a hole in the center of the bottom of each cup. Then, thread one end of the string through the bottom of each cup. Tie the string to a paperclip inside each cup so that the string will not slip out through the bottom. Then each partner should take a cup and walk away from each other until the connecting string is straight and taut. Have one child talk into the cup while the other child places the cup over his/her ear. Take turns with each role. Ask the children the following: Can you hear your partner? If the string is loose instead of taut, can you hear? Discuss how sound waves travel to make the cup telephone work.
- **LIQUID OR SOLID?:** Discuss the qualities of a solid and a liquid. Then tell the children they will be creating a substance, and their challenge is to determine if it is a solid or a liquid. To make this substance, pour 1 cup of dry cornstarch into a bowl. Then add  $\frac{1}{2}$  cup water and stir. The children can use their fingers to mix the cornstarch and water together, and food coloring can be added if they wish to color the substance. If needed, keep adding water until the substance feels like a liquid when mixing it. If it is too powdery, add more water; if it is too watery, add more cornstarch. When it is mixed correctly, the substance will feel solid when the children squeeze it, but it will drip through their fingers when they stop squeezing. Ask the children if they think the substance is a solid or liquid. Discuss how liquids are viscous, and that viscosity doesn't change with most liquids. In this case, the viscosity changes when pressure is applied.



# MATCHOLOGY!

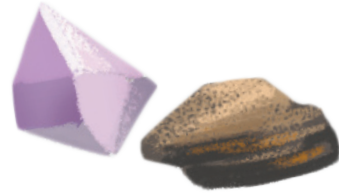
Cece likes learning about things around her. Did you know there's an ending to words that people use to show things they really like learning about? -OLOGY which means 'the study of! Look below at the different -ologies below and match them to their picture!

1.) BIOLOGY



A

2.) ENTOMOLOGY



B

3.) ZOOLOGY



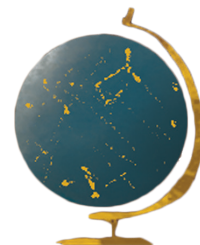
C

4.) GEOLOGY



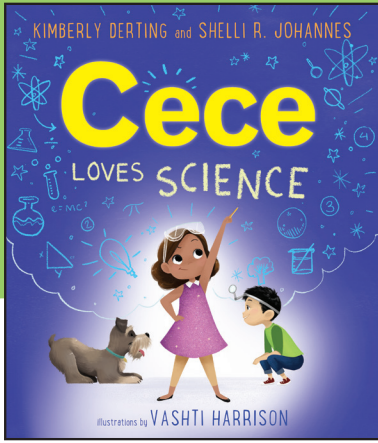
D

5.) PLANETOLOGY



E

Answer Key: 1A, 2B, 3D, 4B, 5E



# FLYING COLORS!

Let's do our own experiment! You will need the eraser from the top of a pencil and a push pin.

The circle below is divided into six sections. Color each section with one color of the following: red, orange, yellow, green, blue, and violet. After you color it, cut the circle out and stick the push pin through the middle so that the colored side is facing up. Stick the pin down into the eraser.

Spin the circle wheel! What happens when you spin it?

