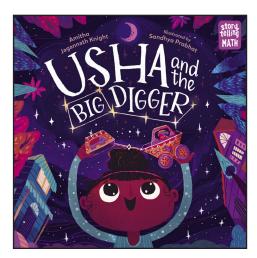


Storytelling Math celebrates children using math in their daily adventures as they play, build, and discover the world around them. Joyful stories and hands-on activities make it easy for kids and their grown-ups to explore everyday math together.

www.charlesbridge.com/storytellingmath



Math activities by Marlene Kliman, TERC



978-1-62354-202-3 HC 978-1-62354-201-6 PB e-book available



### About the Book

When sisters Usha and Aarti look up at the same seven stars, they see different things. Aarti sees the Big Dipper, but Usha sees the Big DIGGER! And cousin Gloria sees the Big Kite! What's going on?

### About the Math

Aarti, Usha, and Gloria eventually figure out that they see different things in the stars because they are looking at the sky from different points of view. As the girls turn and change positions, they explore rotation, orientation, perspective, and other geometric and spatial concepts. Young children with strong spatial skills can do better in math and science in school.

As you go about the day with children, look for opportunities to point out how perspective can affect what we see. What's right side up looks upside down when you stand on your head!

Geetha Ramani, PhD Associate Professor, Department of Human Development and Quantitative Methodology, University of Maryland

### About the Author

Amitha Jagannath Knight grew up in Texas and Arkansas and now stargazes with her family in Massachusetts. This is her debut book. www.amithaknight.com

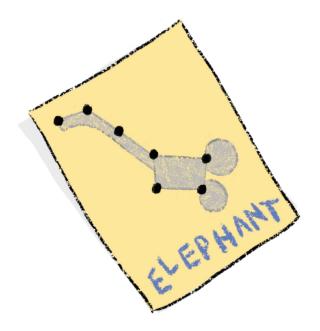
### About the Illustrator

Sandhya Prabhat has illustrated more than a dozen picture books. Originally from India, she now lives in the Bay Area of California. www.sandhyaprabhat.com



## Math Activities

Explore geometry and spatial sense with these activities!

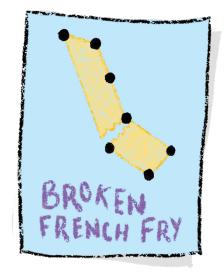


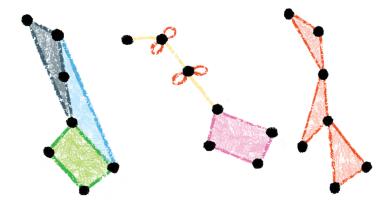
## Dipper Picture

Print a copy of "Big Dipper Dots" for each person. Ask children to connect the dots to show what they see in the stars.

## Make My Picture

Print two or three copies of "Big Dipper Dots" for each person. One person secretly draws a Dipper Picture and describes it aloud. Then everyone else tries to connect the dots from just the description. When everyone is done, show the original picture.





## The author of Usha and the Big Digger had fun finding these different pictures in the Big Dipper!

## Connect the Dots

Print two or three copies of "Lots of Dipper Dots" for each person. Ask children: "How many different ways can you connect the Big Dipper dots?" After they've tried it, have them compare with someone else. "Did you connect the dots in the same ways? Can you find more ways to connect the dots?"



# Big Dipper Dots



# Lots of Dipper Dots

•	•
•	• •
•	•
•	•
•	•
•	•
•	•
•	•