

**AUTHOR:**

Andrea Beaty

ILLUSTRATOR:

David Roberts

Ada Twist was quiet until the age of three. Then she couldn't stop asking why, how, what, and when. Ada wants to know about everything around her and she uses science to figure it all out!

Ages: 5 to 9 years**ATOS Level:** 3.4**Lexile:** AD550L**ISBN:** 9781419721373**Copyright:** 2016

Ada Twist, Scientist

What will Ada ask next?

What is STEAM? Learning through Science, Technology, Engineering, the Arts, and Mathematics. Through STEAM, children problem solve, innovate, create, and collaborate.

STEAM Topics in this Book: problem solving, cause & effect, scientific method

Activities To Do Together: Use *Ada Twist, Scientist*, to explore how questions can lead to explorations, experiments, inventions, and discoveries.

Before you read the book with your child:

- Talk about cause and effect. What does it mean? What is the effect if you shake a rattle? What might be the cause if you go outside and find that the sidewalk is wet?
- Ask, what do they notice on the front cover? What science do they see? What math do they see?

While reading the book with your child:

- Estimate how many questions Ada will ask throughout the book. Find out by keeping a tally of the questions Ada asks.
- Talk about what you think Ada is trying to discover. What do you think Ada was trying to find out about the clocks? What questions do you have about the turtle and the eggs?
- Ada is curious about the planets. What do you notice about the planets Ada's family is holding? How are they different from the planets on the floor.

When you have finished reading the story:

- How did Ada think like a scientist to determine the mystery smell? What was her question? Her research? Her hypotheses? Her experiments? What did she find?
- Encourage your child to share what they would like to know more about. Ask them if they think this is something they can test or explore further. Explore together.
- Try the soda geyser experiment with your child. What might you do differently to change the outcome?



Questions for STEAM Thinking:

1. Does it help to think about a problem and talk with others about it before trying to solve it? Why do you think so?
2. Why do you think Ada wrote things down in the story? How do you think this helped her?
3. Notice the times Ada asks “why” throughout the book. How does this help her understand the world around her?
4. Did you spot any math in the book? If so, where?
5. On the second page, Ada has labeled each animal with a different number. What do these numbers indicate? Are they all correct? Why or why not?
6. How do you know Ada was growing up in the story? How did the author and illustrator show that time was passing?

Early Math Project Resources:

Visit [Ada Twist, Scientist Activities](http://www.earlymathca.org/ada-twist-scientist) (www.earlymathca.org/ada-twist-scientist)

Vocabulary

STEAM words found in the story: all, bigger, count, four, hypothesis, more, once, question, test, three, two

Related STEAM words: cause and effect, growth mindset, scientific method

Words to build reading comprehension:

aroma, chaos, curious, frazzled, gawk, havoc, pungent, stench

Spanish Title: Ada magnífica, científica

Copyright: 2018

ISBN: 9138448849665

Related Books:

Sylvester and the Magic Pebble by William Steig, *Rosie Revere, Engineer* by Andrea Beaty, *The Most Magnificent Thing* by Ashley Spires

Click this link to the [World Catalog](http://WorldCatalog) or enter bit.ly/41WfSbp in your browser, to find *Ada Twist, Scientist* in the public library.

Age Level	Related Foundations and Standards: California Common Core State Standards Mathematics Next Generation Science Standard (NGSS)
Kindergarten	Standards for Mathematical Practice 1: Make sense of problems and persevere in solving them. NGSS Science and Engineering Practices: Asking questions and defining problems; Developing and using models; Planning and carrying out investigations; Constructing Explanations and Designing Solutions
Grade 1	Standards for Mathematical Practice 1: Make sense of problems and persevere in solving them. NGSS Science and Engineering Practices: Asking questions and defining problems; Developing and using models; Planning and carrying out investigations; Constructing Explanations and Designing Solutions
Grade 2	Standards for Mathematical Practice 1: Make sense of problems and persevere in solving them. NGSS Science and Engineering Practices: Asking questions and defining problems; Developing and using models; Planning and carrying out investigations; Constructing Explanations and Designing Solutions
Grade 3	Standards for Mathematical Practice 1: Make sense of problems and persevere in solving them. NGSS Science and Engineering Practices: Asking questions and defining problems; Developing and using models; Planning and carrying out investigations; Constructing Explanations and Designing Solutions

