AUTHOR:

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Rosie Revere dreams to become a great engineer, however is fearful of what others think of her gizmos. With the help of a great-great-aunt she will get the confidence to show her gizmos.

Ages: 5 to 8 years

Interest Level: Kindergarten to 3rd Grade

AR Reading Level: 4.2

Lexile: AD780L

ISBN: 9781419708459

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Genre: Fiction

Classification: Picture Story Book

Rosie Revere, Engineer

With a little inspiration Rosie can build endless gizmos, what will happen when Rosie has a perfect failure?

Topics: engineering, construction, measuring, shape

Math Connections: Use *Rosie Revere, Engineer* to introduce engineering and what engineers do. Ask your child if they know what an engineer is and what their job is. If they don't know, look it up.

Talk with your child about how design and building works. As shown in the book Rosie would think of an idea, plan, design, and then test her invention. When they didn't work as she thought she would try again. Discuss how failures can teach the engineer new information and help create a better invention. The "perfect failures" Rosie experiences help her become successful even if she had to try over and over again.

After reading the book talk with your child about building a hat for a friend or family member. The hat should have a purpose like the hat Rosie made for her uncle, Zookeeper Fred. What would the purpose of the hat be? What materials would they need? How would they put the materials together? After they come up with a plan ask them if they can think of other ways to build a hat with the same purpose as their creation.

Extension Questions:

1. What did Rosie make her gizmos and gadgets out of?
2. Have you ever built something? How did you put the items together?
3. When the plane failed, what did Rosie do? What did her Great-Great-Aunt Rose do?
4. Design and build your own flying machine for Rosie's Great-Great-Aunt Rose. How would you build it? What materials would you use? How would Great-Great-Aunt Rose fly it?
5. Have you created something that didn't work how you expected? What did you do?
6. Why do you think it is important to have support while creating new inventions?

Vocabulary for Building Math Concepts	engineer, half, one
Vocabulary for Extending Math Concepts	measurement, ratios, shapes, weight
Vocabulary for Reading Comprehension	autumn, baffled, cockpit, doohickeys, dismayed, embarrassed, gizmo, perplexed

Early Math Project Resources:

Paper Airplane Engineer (English)

Paper Airplane Engineer (Spanish)

Paper Airplane Engineer Samples (English)

Paper Airplane Engineer Samples (Spanish)

Online Resources:

Rosie Copter Activty

Rosie Revere Rolling Robot

Age Level	Related Preschool Foundations and CA State Standards
Kindergarten	**Measurement and Data K. MD.1** Describe and compare measurable attributes. **Geometry K.G.4** Analyze, compare, create, and compose shapes.
Grade 1	**Geometry 1.G.1** Reason with shapes and their attributes.
Grade 2	**Measurement and Data 2.MD.1** Measure and estimate lengths in standard units. **Geometry 2.G.1** Reason with shapes and their attributes.
Grade 3	**Geometry 3.G.1** Reason with shapes and their attributes.

Spanish Title: Not available

Related Books: *The Most Magnificent Thing* by Ashley Spires, *Ada Twist, the Scientist* by Andrea Beaty

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