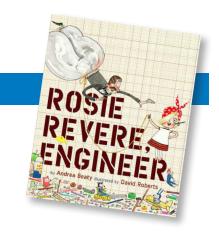
# Rosie Revere, Engineer

# RIF EXTENSION ACTIVITIES FOR EDUCATORS

# THINK-TAC-TOE ACTIVITY OPTIONS

- Individual students can choose an activity to complete.
- Student pairs or cooperative groups can work together on a choice of their own.
- Educator can assign an activity for an individual, pairs, or groups.



# **TRASH TREASURES**

Rosie Revere used garbage to build gadgets and gizmos. Collect scraps and other things you would normally throw away. (Clean things only!) Make or build something with the items you collected, like a collage, sculpture, model, or machine.

Art, Science, Engineering

# **FIRST IN FLIGHT**

Elisabeth Thible, Harriet Quimby, E. Lillian Todd, Bessie Coleman, Amelia Earhart, and Lynn Rippelmeyer were early women aviators, or pilots. Research and make a timeline that shows the important events of each woman's life. Illustrate your timeline.

> Engineering, Social Studies, Writing, Math

# **PERFECT FAILURES**

Great-Great-Aunt Rose tells Rosie to keep working on her copter even after Rosie's "brilliant first flop." Have you ever "flopped" like Rosie? Write a story or draw a comic strip about a time you had a perfect failure. What happened? What did you learn?

Writing, Science, Art

#### PAPER PLANES

Design and build a paper airplane. Test your plane. How far did it fly? Why didn't it fly farther? Redesign the plane to make it better. Repeat at least 3 times. Record each design and make notes about how each flew (how fast, how far, in what direction). Which design was best overall? Why?

> Writing, Science, Technology, Engineering

### **TOP THAT HAT**

Design a hat for a friend or family member. The hat should have a special purpose like Uncle Fred's did (to keep away the pythons). Who is the hat for? What does it look like? What is its special purpose? Write a story about the hat or make a detailed drawing or model. Label each part of the hat and explain how it works.

Writing, Engineering, Art

#### **GOAL ORIENTED**

Great-Great-Aunt Rose had a list of goals that she kept. What are your goals? Make a list of 10 things you want to learn or do by the end of the school year. Cut pictures out of a magazine or draw pictures to illustrate your list. Save your list so you can see how many goals you met at the end of the year.

Writing, Art

#### **CAREER ENGINEER**

What do engineers do? What kinds of engineers are there? How do you become an engineer? What kind of training do you need? Visit www.ionfuture.org and research to find out. Share your findings in a poster or PowerPoint. Then visit https://tryengineering.org/student/ solar-car-challenge/ to build a virtual solar car, bionic arm, or parachute!

Writing, Engineering, Careers

#### IF AT FIRST...

In Russian, there's a saying: "The first pancake is always lumpy." What does that mean? Think about Rosie's perfect failures. Can you think of another creative way to say the same thing? Make a children's book to explain your saying. Draw pictures to go with your book. Don't forget a title!

Writing, Art

#### **COPTER TIME**

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? Draw a picture of the machine or build a model using materials found in your classroom.

Writing, Engineering, Art