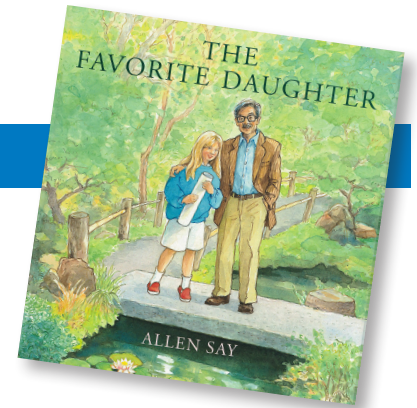


# The Favorite Daughter



## RIF EXTENSION ACTIVITIES FOR EDUCATORS

STEAM-THEMED: SCIENCE, TECHNOLOGY, ENGINEERING, ART, MATH

### SCIENCE

#### DRUM BRIDGE

Materials: 2-liter plastic bottle of soda (empty and rinsed out), scissors, cardboard

Put students in teams of two and have them cut the bottle's neck and bottom off to make a cylinder. Then cut length-wise to have two semi-circle halves. Challenge students to make a drum (moon) bridge like the one in the story.



How can students reinforce the bridge so it does not collapse when weight is applied? Students should present their bridges to the class and explain their design process and choices.

### TECHNOLOGY

#### JAPANESE LOGIC PUZZLES

Challenge students to play different types of Japanese logic puzzles available online. You can print examples or have students play online. Here are a few:

- ◆ [www.funbrain.com/sudoku/Sudoku.html](http://www.funbrain.com/sudoku/Sudoku.html)
- ◆ [www.brainbashers.com/logicpuzzles.asp](http://www.brainbashers.com/logicpuzzles.asp)

### ENGINEERING

#### STICK BRIDGE

Materials: chopsticks or popsicle sticks, glue

Research a famous or interesting bridge in your town, city, or state. Use sticks to build a model of this bridge. Create a base for your bridge and on it label your name, the bridge's name, and the location of the bridge. Students may present their work and take a gallery walk of their peers' work.

### ART

#### WHAT'S IN A NAME?

Materials: white paper, index cards, pencil, crayons or markers

Give each student a sheet of white paper and an index card. Have them draw a nameplate or create a design using their name. (For examples of creative name art ideas, visit [www.incredibleart.org/files/names.htm](http://www.incredibleart.org/files/names.htm).) On the index cards, each student should write the meaning of or the story behind their names. Display the name drawings and matching index cards on a wall or bulletin board.

### MATH

#### YES, YOU KENKEN!

Students will learn how to play this Japanese numbers puzzle. Print sample games or have the students work online at a computer to play the game.

Extension: have students create their own KenKen puzzle (provide blank copies or show them how to make their own—see sample below).

[www.teacher.scholastic.com/scholasticnews/magazines/junior/pdfs/JUNIOR-051010-KENKEN.pdf](http://www.teacher.scholastic.com/scholasticnews/magazines/junior/pdfs/JUNIOR-051010-KENKEN.pdf)

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