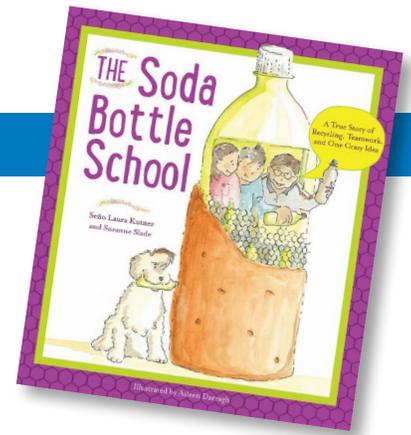


The Soda Bottle School



RIF EXTENSION ACTIVITIES FOR EDUCATORS

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

SCIENCE

SUPER SENSORY BOTTLES

Materials: plastic bottles

Create a couple of sensory bottles by placing like objects in a bottle. For example, for a fall-themed bottle you might include acorns, leaves, twigs, and nuts. Students can use the bottles for observation, writing prompts, and compare/contrast activities. For an added adventure, let students take home a bottle and create their own to be placed in the science center.



TECHNOLOGY, ENGINEERING BOTTLE BUILDING

Explore these two great sites to see other structures made from plastic bottles: <https://ecobnb.com/blog/2019/06/pet-art-plastic-bottles/> and https://puravidaatitlan.org/es_familia.html. After viewing, have students sketch their own designs that they would like to build with bottles.

ENGINEERING, TECHNOLOGY BOTTLE BRICKS

Materials: plastic bottles, non-recyclable trash Let students visit <https://www.engineeringforchange.org/solutions/product/bottle-bricks/> and watch the video on making bottle bricks. Have students collect materials to make their own bottle bricks.

ADDITIONAL TECHNOLOGY LINKS

For more information on building with bottles, visit:

- ◆ <http://hugitforward.org/>
- ◆ <http://bottleschools.org/>

ART, SCIENCE LOVELY LAYERS!

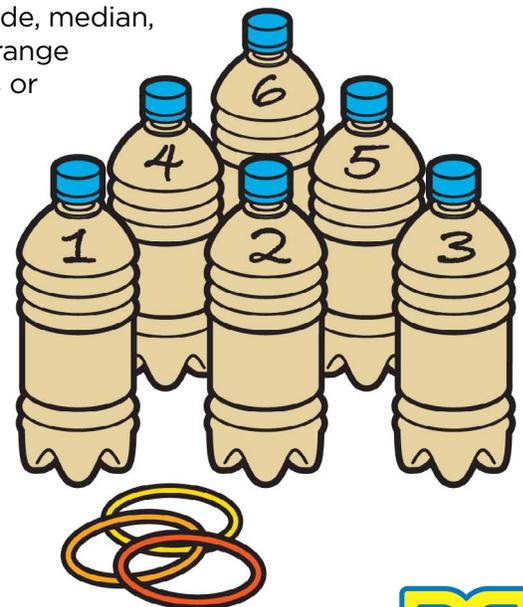
Materials: plastic bottles, colored rice

Let students use colored rice to create layers in their bottles. Will their layers be thick or thin? Will students use a pattern or make random layers? When layers are finished, attach lid. Have students compare their bottles. For a science twist, have students create layers that mimic the layers of the earth's crust, the atmosphere, etc.

MATH TOSS AND FIGURE

Materials: plastic bottles filled with rice, sand, or water for weight; permanent markers; pipe cleaners

Use marker to write numbers on bottles. Twist pipe cleaners together to make multiple tossing rings. Have students toss at least two rings onto bottles. Students should add or multiply both numbers together. Have students record their results. After 10 tosses, students should find the mode, median, mean, and range of the sums or products.



Reading Is
Fundamental