



Build a Better Birdbath



It's all in the column!

After a birdbath mishap, Ruff wonders if a different column would make it stronger. Which shape would support the most weight?

Help Ruff build a better birdbath. Using paper and books, investigate with three different birdbath models to find the strongest design.

Materials:

- Column templates
- Tape
- Books

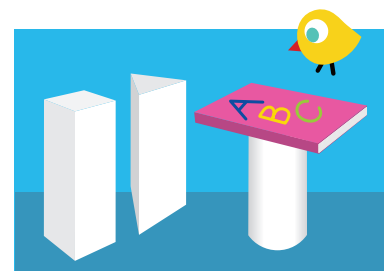
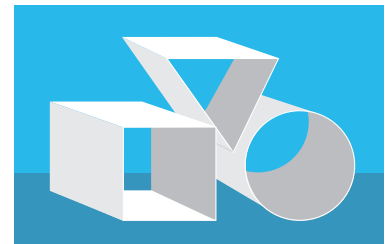
Instructions:

- 1) Print the column templates (on the following pages) and construct three different shaped columns—square, triangle, and circle.
- 2) On a hard surface, stand the three columns on end. Can you predict which shape is the strongest?
- 3) Place a book on top of the first column to create a birdbath platform. Now place that same book on the second and third columns. Did any of the columns support the book?
- 4) Now try placing two or three books on the remaining columns. To keep the weight equal, stack the same books on each column. Which was the strongest? Was your prediction correct?

REMEMBER: Columns are most stable with a balanced load. Place the books evenly on top of each column.

More Ways to Play:

- Can you build a structure that holds three or more books?
- Try using more than one column.
- Try using different types of paper.



For more fun, visit: pbskids.org/ruff



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Square Column

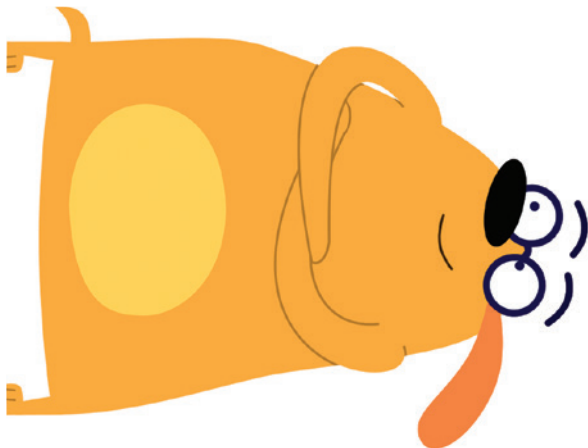
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Print page at 100%
Flap for Overlap (tape to opposite edge)

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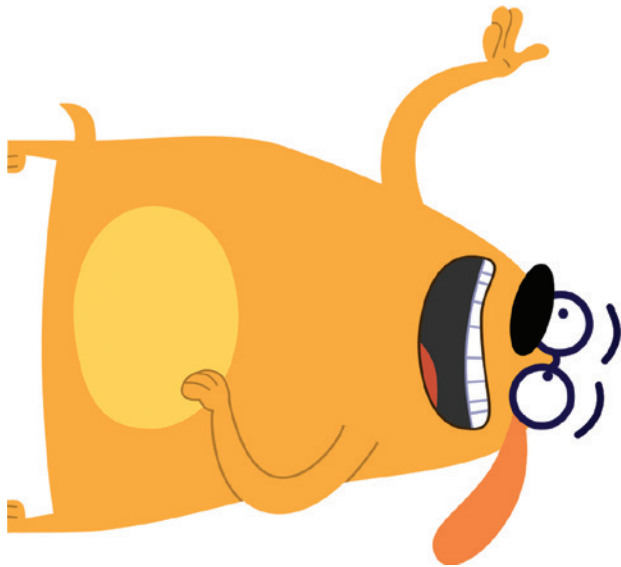
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Triangle Column

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Circle Column

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Print page at 100%
Flap for Overlap (tape to opposite edge)

