

# Top hat organizer

**Graphic organizers** are as common in classrooms as books and desks; however, they are a valuable resource that is often underused in mathematics. A rich resource for engaging students in the Common Core's Standards for Mathematical Practice (SMPs), the Top Hat Organizer allows students to visually organize and structure information to see connections, patterns, and relationships between concepts. To use this organizer, set up two concepts against each other on the top of the hat. Each concept serves as a frame of reference for examining the other, which allows students to engage deeply with the topic of focus. With the descriptions complete, students can write powerful comparisons in the hat brim.

To set up the activity, select the criteria for your students to analyze or allow older stu-

dents or students familiar with the organizer to come up with their own criteria for comparison. Allowing students to complete a top hat before a concept is taught can help uncover students' background knowledge and possible misconceptions. Use the organizer during or after concepts are taught to make connections among topics.

This organizer can be adapted across grades and can be used to relate concepts and procedures. Fifth-grade students used the organizer to discover the thinking and problem-solving demands behind two related problems. Younger students can share pictures and words to complete a whole-class organizer. Challenge students to use their comparisons to form conclusions and explore the causes and effects behind key similarities and differences.

Michelle Pace, [michelle\\_pace@scps.us](mailto:michelle_pace@scps.us), teaches K–grade 5 mathematics problem solving at Goldsboro Elementary Magnet School. She is interested in real-world, project-based problem solving. Edited by Martha Hildebrandt, [mhildebrandt@chatham.edu](mailto:mhildebrandt@chatham.edu), who teaches undergraduate and graduate mathematics education and mathematics courses at Chatham University in Pittsburgh, Pennsylvania; and Cathery Yeh, [catheryy@uci.edu](mailto:catheryy@uci.edu), a graduate student in the School of Education at the University of California–Irvine. Submit your quick game, puzzle, activity, or instructional strategy along with suggestions for how teachers of different grade bands (K–1, 2–3, 4–6) can use this idea. Send submissions of no more than 250 words to this department by accessing [tcm.msubmit.net](http://tcm.msubmit.net). See detailed submission guidelines for all departments at [www.nctm.org/tcmdepartments](http://www.nctm.org/tcmdepartments).

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A Top Hat Organizer template and an example of a completed fifth-grade organizer are appended to this article online.



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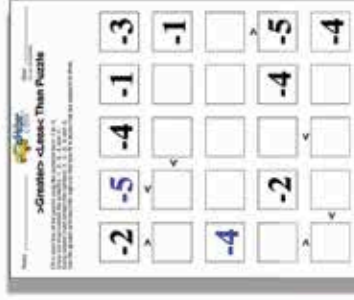


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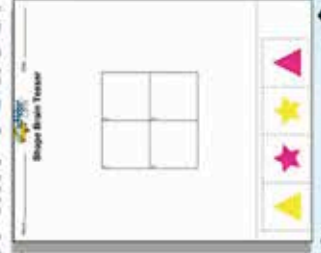
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