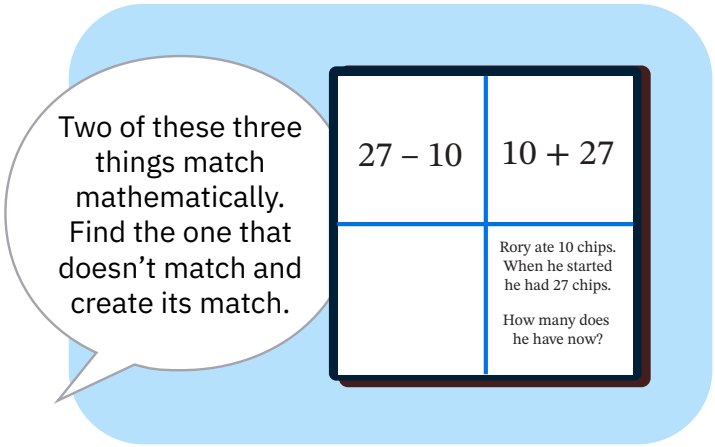
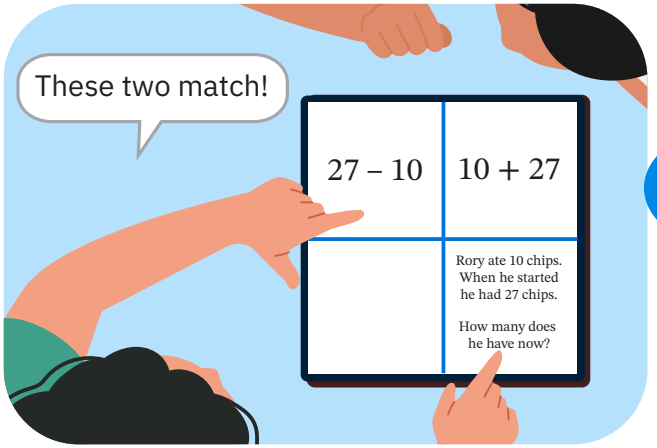
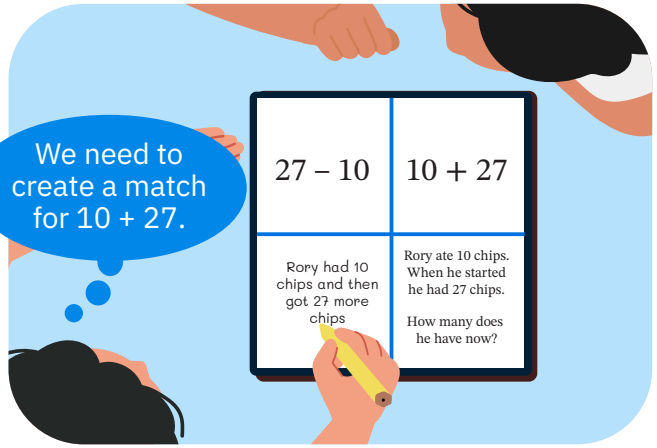
Four the Win

Find the match and create the missing entry.

Give students a 2x2 game board containing two matching elements, one unmatched element, and a blank space. Students identify the matching pair and then create a new match for the unmatched element.







Why Try It

*This nudge encourages students to look across representations and **make connections** based on mathematical structure. It also **promotes creativity** by asking students to **produce their own mathematical elements**, based on structural features as prompted by the game.*

MLR 5: Co-Craft Questions and Problems

Students engage in writing mathematical problems or situations, co-crafting questions that emphasize structure and connections. This game provides a structured approach, encouraging collaboration and deeper thinking as they create mathematical objects tied to meaningful relationships and concepts.

Teacher Notes

- Students can work individually or in groups to complete the game board.
- This activity is more engaging with multiple correct answers for the missing box.
- You can use various mathematical objects (e.g., numbers, expressions, equations, story problems, shapes, graphs, tables) but should specify the acceptable range for student creations for the blank space.

Caution

When you make a game board, make sure one of the elements is definitely separate from the two that match.

Kelemanik, G., Lucenta, A., & Creighton, S. J. (2016). *Routines for reasoning: Fostering the mathematical practices in all students.* Heinemann.

Zwiers, J., Dieckmann, J., Rutherford-Quach, S., Daro, V., Skarin, R., Weiss, S., & Malamut, J. (2017). *Principles for the design of mathematics curricula: Promoting language and content development*. https://ul.stanford.edu/resource/principles-design-mathematics-curricula-and-mlrs

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