

Additional Games for Continued Meaningful Practice of Multiplication Facts

Memory with Array Cards

The popular children’s Memory game can be adapted to help children practice recognizing array models of multiplication facts.

- Create a set of twelve array cards, each of which includes an array and expression for a multiplication fact but not the product.
- Create a separate set of twelve numeral cards containing products that correspond to each of the array cards. Copy these on a different paper color so that the cards are easy to distinguish.
- Place each group of cards in separate, side-by-side, 4×3 arrays.



Students take turns turning over one array card and one numeral card. If the cards match, the student keeps the pair and takes another turn. If the cards do not match, the turn is over. Play continues until all the matches have been found.

Differentiate this game

Increase or decrease the number of pairs used or modify the difficulty level of the arrays used on the cards.

Array Bingo

Array Bingo (Bell et al. 2012) also helps children practice recognizing array models of multiplication facts, and can use the same sets of array and corresponding numeral cards created for the Memory with Array Cards mentioned above.

To play, children select nine cards from their set of array cards, each of which includes an array and expression for the multiplication fact but not the products. They arrange these

cards faceup in a 3×3 array in front of them. Players then take turns turning over one numeral card at a time, and if they have an array card to match it, they turn their array card facedown. The first player to get three in a row (horizontally, vertically, or diagonally) wins.

Differentiate this game

Increase to a 4×4 array or modify the difficulty level of the arrays used on the cards.

Salute!

This classic, three-person game is appropriate for addition/subtraction facts or multiplication/division fact practice (for details, see Bay-Williams and Kling 2014).

Each round, children rotate roles, with one student as the “leader” and the other two as “players.” The leader carefully gives

each player a card so that the players cannot see their own cards. Both players place their cards on their foreheads with the numbers facing out, so the opposing player can see the card. The leader, who is the only one who can see both cards, determines and says the product of the two numbers on the players’ foreheads. The players then try to be the first to determine the number (factor) on their own forehead (based on the number—factor—they see on their opponent’s forehead). The winning player takes both cards (although you can choose not to do this part if you wish the game to be less competitive).

The beauty of this game is that it focuses on multiplication and division simultaneously. Students are either the leader and therefore stating the multiplication fact, or a player and therefore finding the missing factor (the related division fact).

To maximize the value of the game, rather than stop when the first player says the correct factor, wait until both players

tell their factor. Then, players explain how they determined their factor before rotating to the next round, reinforcing their understanding of fact strategies. When students are expected to describe how they got their answer, this game reinforces the relationship between multiplication and division, a CCSS cluster in grade 3 (CCSSI 2010).

Differentiate this game

Remove or add different cards to the game. For example, use only cards between 0 and 5.

Multiplication Top-It

This two-player card game is played like War, with modifications to allow children to practice their basic facts (Bell et al. 2012). Both players turn over two cards and say the product of the two cards. Whoever has the larger product wins the cards. A nice aspect of this game is that each partner has a different product to find, removing any pressure to get the answer first. Like many games, it can be adapted by selecting specific numbers for the deck rather than using all factors 0–10.

