

Finding Missing Factors

Set of Array Cards – Use 2 cm grid paper
Missing Factor Recording sheet

Directions:

1. Students work in teams to make array cards for multiplication facts: 3s, 4s, 6s, 7s, 8s, 9s
2. Each student selects 5-10 cards to make. Each member of the team should select different array cards to make.
Students create an array card by cutting out a grid, using dimensions to match the multiplication fact.

Example for 3×8
Cut out the matching array. Label the array.
Show the commutative property.

			3	x	8		
			8	x	3		

On the back of each card, record one factor on the dimension that matches that factor and the creator of the card records his/her initials on the other dimension. Write the product for the fact on the back of the card.

	TA
3	24

Finding Missing Factors (continued)

3. To play "Finding Missing Factor", mix up all cards and turn over all cards so the array grid is not showing.
4. In turn, draw a card. Your job is to say what the other dimension is. The dimension is the *Missing Factor*.

For example: If you drew the card above, the missing Factor is 8. Turn the card over to check your answer.

5. If the player names the correct missing factor, the player keeps the card. If the answer is not correct, return the card to the bottom of the deck, factor side up.
6. On a blank sheet of paper, write 2 equations, one multiplication and one division equation to go with each array card you keep. $3 \times 8 = 24$ $24 \div 3 = 8$

Variation:

Spread out cards with only factor side showing. Take turns pointing to a card and saying what is on the other side (total number of squares). If your answer is correct, keep the card.

Player with the most cards wins.