

Double-Digit Splat!

Object of the Game

Players take turns drawing two cards and multiplying the numbers together. The player with the greater product total after four rounds wins. Some cards are Splat! cards—draw one and you use it like a wild card, but draw two in the same round and you get nothing!

Materials

- 1 set of Double-Digit Splat! Cards (2 cards each of numbers 10–90 and 4 Splat! cards)
Print the cards or make your own. You can use paper, a grocery bag, or a cereal or other food box to make cards.
- 1 Double-Digit Splat Record Sheet
Print the record sheet or make your own.
- Pencils or pens

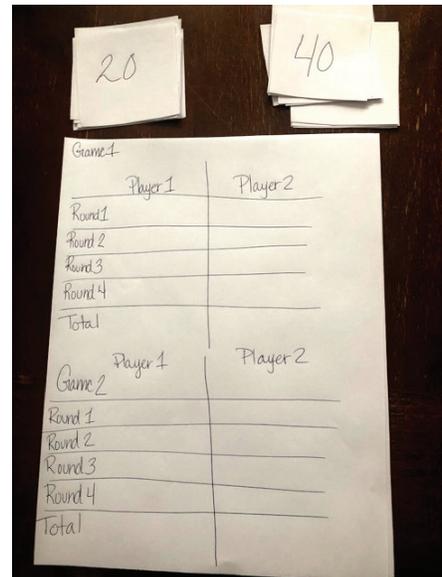
Skills

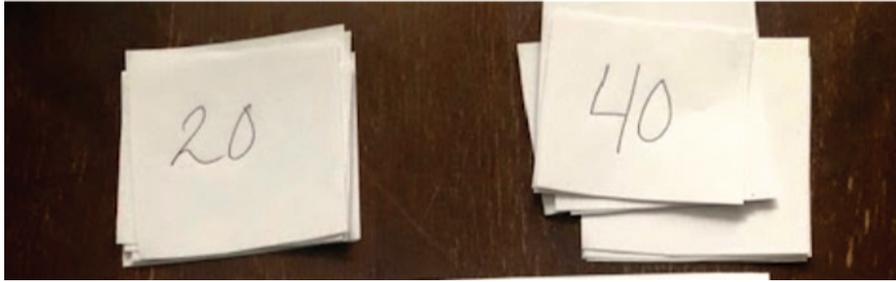
This game helps us practice

- Multiplying 2-digit numbers
- Adding multi-digit numbers
- Recognizing patterns that occur when multiplying multiples of ten

How to Play

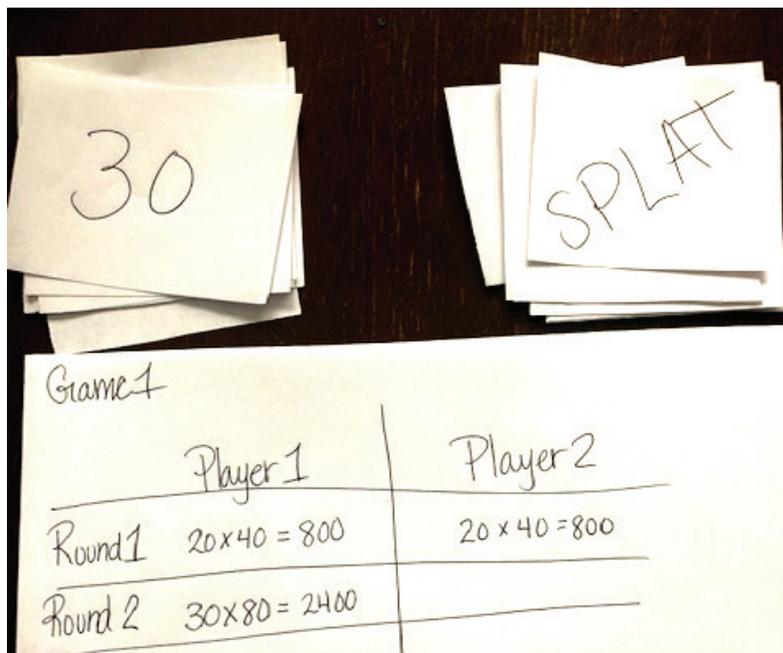
1. Get ready to play:
 - » Print or make your game cards and record sheet.
 - » Divide the Double-Digit Splat! Cards into two piles.
 - ⌘ Each pile gets one of each number card (10–90) and two Splat! cards.
 - ⌘ Mix up the cards in each pile and place them face down.
 - » Decide which player will go first.
2. Player 1 takes one card from each pile, multiplies the numbers to get the product, and records the equation on the record sheet.





Player 1: I drew a 20 and a 40. Let's see... I know that 2 times 4 is 8 and 10 times 10 is 100, so the answer must be 800 because that's 100 times as much as 8.

3. Then Player 2 takes a turn drawing two cards, multiplying the numbers, and recording the equation.
4. Each player gets four turns to draw cards, multiply, and record the product.
 - » If a player draws 1 Splat! card, they treat it like a Wild Card. They can make it worth any multiple of 10 from 10 to 90.
 - » If a player draws 2 Splat! cards in the same round, they get a score of 0 for that round.



Joelle drew a 30 from the first pile and a Splat! from the second pile. She decided to make the Splat! card worth 80. So she wrote $30 \times 80 = 2400$ for her turn.

5. After four rounds, each player adds their products. The player with the higher total wins the game.

	Player 1	Player 2
Round 1	$20 \times 40 = 800$	$20 \times 40 = 800$
Round 2	$30 \times 80 = 2400$	$50 \times 80 = 4,000$
Round 3	$40 \times 80 = 3200$	$30 \times 70 = 2,100$
Round 4	$20 \times 40 = 800$	$50 \times 50 = 2,500$
Total	7,200	9,400

Player 1: I got 7,200. **Player 2** got 9,400. Player 2 won the game by 2,200 points.

Tips for Players

Before the game:

- Think about what you know about multiplying 1-digit factors. How can this help you multiply 2-digit factors?
Examples: $3 \times 2 = 6$, $30 \times 2 = 60$, and $30 \times 20 = 600$
- Think about each factor as a 1-digit number $\times 10$. How will this help you multiply two numbers that are multiples of 10?
*Example: $30 \times 20 = (3 \times 10) \times (2 \times 10)$
Thirty times twenty is the same as three groups of 10 times two groups of 10.*

During the game:

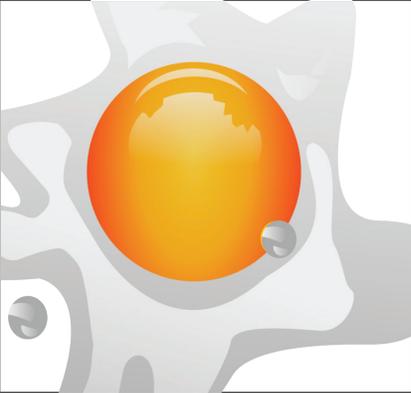
- Talk about the products. *What do they have in common with products of basic facts? What do all of the products have in common?*
- Talk about your strategy. Is there a way that you can multiply the numbers that makes it easier?

Change It Up

Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below. How did it change your strategy for winning the game?

- Make up your own numbers for the number cards. Try 2-digit multiples of 10 times 1-digit numbers, or 2-digit multiples of 10 times 2-digit numbers that are not multiples of ten.
- Change the rules so that the player with the lower total wins.



10	20	30
40	50	
60	70	80
90		

Double-Digit Splat! Record Sheet

Game 1		
	Player 1	Player 2
Round 1		
Round 2		
Round 3		
Round 4		
Total		

Game 2		
	Player 1	Player 2
Round 1		
Round 2		
Round 3		
Round 4		
Total		