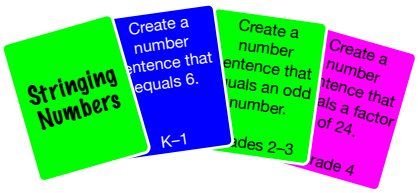
Stringing Numbers



Strands:

Number & Quantity	X
Algebra	
Functions	
Geometry	
Statistics & Probability	

In this game for grades K through 4, players create number sentences in order to reach a goal.

Materials Needed:
- Playing cards, 1 deck
- *Stringing Numbers* cue cards

Set-Up:
- Remove Jacks, Kings, and Jokers from the deck of playing cards.
- Queens represent 0, Aces represent 1. All other cards represent the number on the card.
- Play in teams of two or three members.
- Use the *Stringing Numbers* cue cards appropriate for the grade levels of the players.
- Deal 2 playing cards to each player. If one team has more players than the other, deal the same number of cards to both teams, 2 cards at a time.

Object of the Game: Create a number sentence that equals the goal on a *Stringing Numbers* cue card (even, odd, composite, etc.).

Pre-Game Activity: Look over cue cards to familiarize each player with the vocabulary. Review vocabulary as needed.

Playing the Game:
1. Flip over the top *Stringing Numbers* cue card. Read it out loud.
2. With your team, use as many of your team's playing cards as possible to create a number sentence that satisfies the goal on the cue card.
3. Share at least one way your team solved the problem.
4. If other teams agree that your solution is correct, keep the playing cards your team used in a pile in front of you. Each card counts as one point.
5. Replace the playing cards so each group has the number of cards provided at the beginning of the game.
6. Repeat from Step 1 until each team has earned at least 10 points.

To Win: The team with the highest score at the end of the game wins.

Think About It:

6. a. What does it mean to be a multiple of a number?
   b. What does It mean to be a factor of another number?
   c. Are multiples and factors related? How?
7. a. What is a composite number?
   b. What is a prime number?

Where:

Outside	
Inside	X
On-line	
On-site	

Variations:

Stringing More Numbers: Use two- or three-digit numbers. For example, if a player is dealt a 3 and a 7, the player can use either 37 or 73. If a player is dealt a 10 and a 6, the player can use either 106 or 610. In this version, teams try to get as close to a specific goal number as they can if they cannot make the goal exactly. Teams of 3 or 4 work best for this version.

Stringing Numbers Extended: Use exponents, square roots, factorials, and other more advanced operations. Play using 1, 2, or 3-digit numbers.

Helpful Hints:
- Negative numbers are allowed (if players are familiar with them).
- Any operation can be used. Sometimes you have to get creative!