

Number Knowledge



Strands:

Number & Quantity	X
Algebra	
Functions	
Geometry	
Statistics & Probability	

Materials:

- Deck of playing cards
- Minute timer (on cell phone)
- Scrap paper
- Pencil

Where?

Outside	
Inside	X
On-line	
On-site	

Quick! you have one minute to list everything you know about a single number. Use number sense as you race to find the most unique uses of your number, in this game for ages 3 and up.

Set-Up:

- From a deck of cards, take out one card of each number 2 through 10. Shuffle these 9 cards.
- Place the deck of cards face down in the center of playing space.
- Give each player a pencil and piece of paper.
- Set a timer for one minute.

Object of the Activity: To increase number sense and expand knowledge of numbers through conversation.

Playing the Game:

1. Flip the first card over and place it face up next to the deck.
2. Start the timer.
3. List everything you know about the number on the card. For example, for the number 3, a list might include the word triplets, triangle, the number sentence $1 + 2 = 3$, and a picture of 3 hearts (♥♥♥).
4. When time ends, read your list aloud to the other players.
 - If one or more players wrote the same thing, all players must cross it off their list.
 - If an item on a list is incorrect or questionable, use a table vote to decide whether or not the item earns a point.
5. Repeat step 4 until all players have shared their lists.
6. Earn one point for each item left on your list.

To Win: The player with the most points after three rounds wins the game!

Think About It:

1. Where do you experience numbers in everyday life?
2. Which numbers were easiest to play? Why?
3. With which numbers are you most familiar? Why do you think that is?



Variations:

Double Trouble: Draw two cards to see how many different connections and relationships you can list using both numbers drawn. For example, for the numbers 2 and 6, a list might include: There are 26 letters in the alphabet, $2 + 6 = 8$, $6 \times 2 = 12$.

Four of a Kind: Using only the number drawn (a maximum of four times), how many different sums, differences, products, quotients, etc., can you create? For example, for the number 5, some possibilities are:
 $5 + 5 = 10$, $(5 \times 5) - 5 = 20$, $\frac{55}{5} + 5 = 16$.

Helpful Hints:

- Are there any commonly used words or phrases containing the number?
- How does the number relate to other numbers?
- What operations can you apply to the number?
- If you're not sure where to begin, instead of drawing the same item multiple times, try writing number sentences.