

The Game of NIM

Goal: To reason quantitatively and abstractly in order to leave your opponent with the last counter

Materials: 15 pennies or other counters

Number of Players: 2

Basic Directions:

1. Spread out the 15 pennies or other counters over the playing surface.
2. Take turns taking 1, 2, or 3 counters from the set.
3. The player who takes the last counter loses the game.

VARIATION 1: NIM Jr.

1. Start with 9 pennies or counters.
2. Take turns taking 1, 2 or 3 counters.
3. The player who takes the last counter loses the game.

VARIATION 2: NIM Pre-k

1. Start with 7 pennies or counters.
2. Take turns taking 1 or 2 counters.
3. The player who takes the last counter loses the game.

Magic 10 Game

Goal: To practice combinations that make 10

Materials: Deck of numeral cards 1-9 (4 of each) or playing cards with 10s and face cards removed (Ace=1)

Number of Players: Two players

Directions:

- ***Choose 3 cards at random to be put aside. These are your “magic” cards.*** Use the remainder of the deck to play.
- Lay out four cards face up. Place the rest of the deck face down to create a draw pile.
- Take turns pulling one card at a time from the draw pile. Use that card plus one of the cards in play to make 10. (2 addends only). Keep the two cards that make 10.
- If you cannot make 10, place the card you drew face up with the other cards in play. (In this way, you don't have to replenish the cards in play, because it will happen naturally.)
- When there are no more cards in the draw pile and no more combinations of 10 to make, you should be able to figure out what the 3 “magic” cards are. This is a cooperative game: everybody wins if they can predict what the “magic” cards are.

Variation

Because of the self-correcting feature of this game, it can be played as an individual activity.

Make a Match / Make a Number

Goals:

- Develop the big idea that quantity is an attribute of a set.
- Develop the Big Idea that small quantities can be seen and known without counting. (subitizing)
- Recognize different visual patterns and the quantities they represent.
- Find pairs of cards that combine to equal a particular number (“Make a Number” only)

Materials: *Quantity cards* with a variety of representations such as dot arrangements, ten-frames, fingers or tallies.

- With preschoolers start with 1, 2, 3, 4; add higher numbers very gradually.
- With kindergarteners, start with 1, 2, 3, 4, 5, 6; move to 10 as children are ready.
- With 1st graders, start with 1 through 10.

Number of Players: 2 to 4

Make a Match Directions

- Depending on the number of kids playing, chose 3 or 4 or 5 pairs of cards.
- Arrange the cards face up on the table in rows.
- Players take turns finding pairs that match.
- Game ends when all pairs are matched

Make a Number Directions

- Choose a target number between 4 and 10. Remove all cards that represent the target number or more.
- Place all the cards face up. Arrange the cards in rows.
- Players find a pair of cards that combine to equal the target number.
- Play continues until all cards are gone.

Variations

- If players are proficient at finding matches or combinations face up, turn cards over and play face down, like Memory.
- Play with one player (solitaire).
- For “Make a Number,” add some blank cards to represent 0, and then leave the target number in the deck.

1 Through 10

Goal: To be the first player to get your cards (1-10) placed in the correct order and position (5 on the top row; 5 on the bottom row)

Materials: Deck of playing cards (face cards removed, but leave Aces to be 1s)
Ten-Frame gameboard (optional)

Number of Players: 2

Directions:

1. Each player gets 10 cards dealt out in 2 rows of 5 (or fill the ten-frame gameboard).
2. The rest of the cards become the draw pile. The first card is turned face up.
3. The first player can either take the exposed card or chose from the draw pile. They place the card in the correct position. If you draw a 1 card (Ace), it would go in the upper left-hand position. The 10 card would go in the lower right-hand position (similar to placing objects horizontally in a ten frame).
4. As you place a card, you flip over the card that was in that position. If you can use that card, place it in the correct position. If not, discard it, and play moves to the next player.
5. The next player can take the top discarded card, or pull from the draw pile.
6. The game is over when a player places all 10 cards in the correct position.

Variation: The game can be played in rounds. The first round would end when a player places all 10 cards in the correct positions. Then in the next round, the winner of the previous round would get one less card dealt to them (They would have nine positions instead of 10). The round would proceed as explained above. Each time a player wins a round, they would decrease the number of cards they were dealt by one card. The game would end when one player no longer has any cards.

Salute

Goal: To collect the most cards by being the first player to guess the card you are holding by calling out the missing addend

Players: 3

Materials: 40 cards total - 4 each of 1- 10 (any type of quantity card)

If using deck of playing cards, take out all face cards; ace acts as 1

Directions

1. Choose a Caller. The Caller deals out the deck of cards face down to the two players equally.
2. Players 1 and 2 face each other. The Caller is off to the side so they can see both players.
3. When the Caller says “1, 2, 3, Salute!” players 1 & 2 place the top card from their deck on their forehead so that the Caller can see it, but they cannot.
4. Player 1 & Player 2 have to figure out the value of the card on their forehead by seeing the card on the other player’s forehead. The player who answers correctly first takes both cards. *Example: If player 1 is displaying a 4 and player 2 is displaying a 7, the Caller would say, “The sum is 11”. Then the two players look at each other. The first player to say their missing addend (the number they are holding on their forehead) gets to keep the two cards*
5. Steps 2 and 3 are repeated until all the cards are gone. Then players 1 & 2 count their cards to see who wins.
6. Game ends when you run out of cards. The player with the most cards is the winner. Play 3 rounds so each player has a turn at being the Caller.

Variation

Salute can be played as a subtraction or multiplication game also.