Math Games with Gards





SKILL: Numbers & Place Value

How to Play:

- 1. Divide the deck equally between two players.
- 2. Both players simultaneously flip three cards over and place them on the table (in order) to create a three-digit number.
- 3. The player who created the largest number gets to add all the cards to their pile.
- 4. Continue playing until one partner has no cards left.

- Play with 3 or 4 players
- Complete the same process, but flip four cards to make a four digit number.
- Allow players to rearrange the cards to create the biggest number possible.



Addition / Subtraction War

SKILL: Addition & Subtraction

How to Play:

- 1. Divide the deck equally between two players.
- Both players simultaneously flip one card over and place them on the table. Players compete to correctly calculate the total of the two numbers when added together (or subtracted).
- 3. The player who answers correctly first gets to add those cards to his/her pile.
- 4. Continue playing until one partner has no cards left.

Variation:

Play with 3 or 4 players to increase the challenge.



Multiplication Practice

SKILL: Multiplication

How to Play:

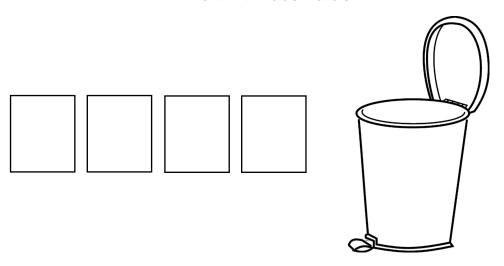
- Take the face cards out of the deck and place to one side.
 You won't need them for this game.
- 2. Find a "2" card (any suit) and place it face up on the table. Shuffle the remaining cards.
- 3. Flip the cards over and multiply that card by the "2" that's already face up on the table. E.g. If you flip a 10, you'll see a 2 and a 10 on the table. $2 \times 10 = 20$.
- 4. Continue until all cards have been flipped.

- Play 2 player by competing to see who can calculate the answer quickest.
- Practice multiplying by 5 and 10 (or any other number).



Garbage Can Math

SKILL: Place Value



Objective: To create a larger number than your partner.

How to Play:

- Take the face cards and 10s out of the deck and place to one side. You won't need them for this game. Shuffle the remaining cards.
- 2. Each player will need to set up a station/game board (similar to the one pictured above) on a piece of paper.
- 3. Player 1 draws a card. He/She can choose to place it in one of the rectangles to create a 4-digit number or place it in the garbage can. Once a card has been placed, it can not be moved. A maximum of two cards can be placed in the trash can.

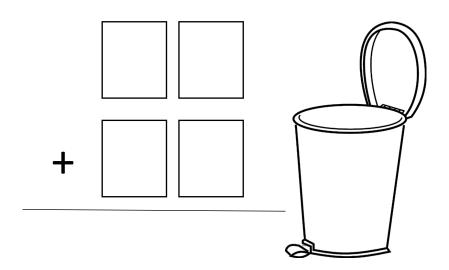
HINT: Since you are trying to create the largest number, place lower numbers in the trash can in hopes that you will pull a larger number from the deck on your next turn. Place higher digits where they hold the most value (e.g. a 9 in the thousands spot is worth more than a 9 in the ones spot).

4. Take turns drawing cards from the deck and placing them on your board. The person with the highest four digit number wins!



Garbage Can Math

SKILL: Addition / Subtraction



Objective: To create a math problem with the biggest sum.

How to Play:

- 1. Take the face cards and 10s out of the deck and place to one side. You won't need them for this game. Shuffle the remaining cards.
- 2. Each player will need to set up a station (similar to the one pictured above) on a piece of paper.
- 3. Player 1 draws a card. He/She can choose to place it in one of the rectangles to create an addition problem or place it in the garbage can. Once a card has been placed, it can not be moved. A maximum of two cards can be placed in the trash can.
- 4. Take turns drawing cards from the deck and placing them on your board. Once all players have drawn six cards, calculate your sum. The person with the biggest sum wins!



Ten or Twenty

SKILL: Addition Facts

Objective: Use exactly three cards to total 10 or 20.

How to Play:

- 1. Deal five cards to each player. Put the remaining cards face down in the middle of the table. Flip the top card from this pile; this will be the start of the discard pile.
- 2. On each player's turn, the player may pick up the top card in the face-down pile or one card from the discard pile. If exactly three cards add up to 10 or 20, the player can place down that set on the table and pick up three new cards. To end their turn, the player will discard one card.
- 3. The player with the most sets at the end of the game wins.



Make 25 with 5

SKILL: Addition Facts

Objective: Use exactly five cards to total 25.

How to Play:

- 1. Deal five cards to each player. Put the remaining cards face down in the middle of the table. Flip the top card from this pile; this will be the start of the discard pile.
- Players go round in a circle and on each turn, they pick up a
 new card either from the face-down pile or the discard pile.
 Players are trying to use all five cards to create a sum of exactly
 Players discard one card to signal the end of their turn.
- 3. The first payer to create a sum of 25 wins.

Variations:

- Make the game more challenging by allowing subtraction as well as addition (e.g. 10 + 7 + 7 + 3 - 2 = 25).

Closest To

SKILL: Place Value

Objective: To be the player who creates the number closest to the target number.

How to Play:

- Deal three cards per player. Each player takes the cards in their hand and rearranges the digits to create a number that is closest to the target number (e.g. 500).
- 2. Players each show their hands. The player who is closest to 500 wins the set of all the players' cards.
- 3. Deal another round of three cards to each player and repeat. Continue until the deck is exhausted.
- 4. The player with the most number of sets at the end of the game wins.

- Try a different target number (e.g. 800 instead of 500)
- Try a 2-digit or 4-digit target number. Don't forget to deal the correct number of cards to each player.



Math Boggle

SKILL: Addition, Subtraction, Multiplication, Division (with older students)

How to Play:

- 1. Remove face cards from the deck. Aces are 1.
- 2. Lay an array of 16 cards on the table (4 x 4).
- 3. Give each player a pencil and pen pad. Set a timer for 5 minutes. Players look on the boggle board to see where they can make equations. For example, if a 3, 4, and 7 are next to each other, the player could write 3 + 4 = 7 and 7 4 = 3).
- 4. When the timer goes off, compare notepads to see which player was able to find the most equations.

- Increase or decrease the timer depending on difficulty.
- Add the Jack, Queen, and King (J=11, Q=12 and K=13) to make the game more challenging.

