

MATH FACT FLUENCY GAMES

PIG (1 or more players)

Materials: two 6-sided dice, paper, pencil

Goal: Be the first player to score at least 100 points!

How to Play:

- Roll the 2 dice, add the digits together and record the sum on a scoresheet.
- Roll the 2 dice again. Add the digits you rolled to your sum from the previous round. Record the new total as your Round 2 score.
- Continue this process your total sum reaches 100 or more.

Variations:

- Multiple players - race your opponents to reach 100
- Subtraction Pig - start with a score of 100 and subtract the digits from your dice until you get down to zero
- Multiplication Pig - Multiply the digits instead of adding them and be the first player to reach 500

FLIP FLOP (1-2 players)

Materials: two regular 6-sided dice

Goal: Race to see how quickly you can alternate between math operations

How to Play:

- Roll the dice. Add the digits shown, then subtract them as fast as you can.
 - Ex: with a roll of 5 and 3, say “8, 2” then roll again.
- 1 player: Challenge yourself to see how many rounds you can solve correctly in 2 minutes.
- 2 players: Race to see who can add, then subtract fastest. Award a point to the first player who solves both equations correctly. First player to get 20-points wins!

Variations:

- Increase the challenge by using one 12-sided die and one 6-sided die, then two 12-sided dice to practice math facts through 12.
- Multiplication/Division - Using the same rules as above multiply, then divide the two digits shown on the dice. If the digits cannot be divided to a whole number quotient, say “not evenly divided” or round your answer the the nearest whole number.

TWINKS! (2-6 players)

Materials: 1 deck of cards with 10s and face cards removed (Ace = 1)

Goal: To win more cards than the other players by game's end

How to Play:

- The dealer lays out 4 cards face up
- The first player to find an equation that equals 12 (using 2, 3, or all 4 cards) announces “Twinks!” and then says the equation aloud. If their equation is correct, the player collects all cards used in the equation and any cards underneath.
 - Ex: Dealer turns over 8, 4, 2, and 5. Player #1 calls “Twinks!” and says, “ $8 \times 2 - 4 = 12$ ” and collects the 8, 2, and 4 (plus any cards piled under them). The 5 card remains on the table. When the new round of cards is dealt, the 5 is covered by a new card.

- If a player calls “Twinks!” incorrectly and is challenged, they player gives all the cards used in the mistaken equation to the challenger, but not the cards piled underneath.
- Tie breaker: If 2 players call “Twinks!” at the same time, the player with the correct equation that uses the greatest number of cards wins the round.
- Cards not used in the equation are left on the table and the deal places a set of 4 new cards on top.
- The player with the most cards at the end of the game wins!

Variation:

- Add the 10s and face cards back into the deck and look for equations that equal 50. (Jack = 11, Queen = 12, King = 13)

Tens Go Fish (2+ players)

Materials: 1 deck of cards with 10s and face cards removed (Ace = 1)

Goal: To create more pairs of 10 than your opponents

How to Play:

- Deal 5 cards to each player.
- Each player looks for pairs in his/her card that add to make 10. Players put down the pairs of cards that add to 10 in their bank, and draw new cards to replace them.
- Players take turns asking each other for a card that will make add to make 10 with a card in their own hand.
 - If a player gets a pair that makes 10, he/she puts the in their bank and draws new cards from the deck.
 - If a player does not get the card that makes 10, he/she must “Go Fish” from the deck until finding a pair that adds to 10.
- The game is over when there are no more cards in the deck and no more pairs of 10. The player with the most pairs of 10 wins!

Math War (2 players)

Materials:

- Younger students: Use 1 deck of cards with the face cards removed. Aces will have a value of 1
- Older students: Use 2 decks of cards, but remove the aces, 2s, 10s, and face cards. Shuffle both decks together to create a special math deck of 56 cards

Goal: To capture more cards in your pile than your opponent

How to Play:

- Each player turns up two cards and adds them. The player with the highest sum wins the round.
- When there the 2 sums are equivalent, the players battle: each players lays 3 cards face-down, then two new cards face-up. The greatest of sum of these new cards will capture all cards used in the battle.
- The player who has captured the greatest number of cards at the end of the deck wins!

Variations:

- *Subtraction War* - Each player turns up 2 cards and subtracts the smaller number from the larger. The greatest difference wins the round.
- *Multiplication War* - Follow the same guidelines as Math War, but multiply the two cards. The greatest product wins the round.
- *Fraction War* - Each player turns up 2 cards and makes a fraction, using the smaller number as the numerator. The greatest fraction wins the round.

- *Improper Fraction/Mixed Number War* - Each player turns up 2 cards and makes a fraction, using the larger number as the numerator. Each player converts their improper fraction to a mixed number. The greatest fraction wins.

Integer War Variations:

- Black cards are positive numbers; red cards are negative. Remember that -2 is greater than -7!
- *Greater/Less Than* - each player turns up 1 cards, the greatest number wins.
- *Addition* - each player turns up two cards and adds them. The player with the highest sum wins.
- *Multiplication* - each player turns up two cards and multiplies them. The player with the highest sum wins.
- *Absolute Value* - each player turns up two cards and adds/multiplies them. The player whose sum/product has the highest absolute value wins.

Wild War

- Players turn up 3 cards and may do whatever math manipulation they wish with the numbers. The greatest answer wins the round.

Looking for even more fluency games?

Check out: <https://zenomath.org/toolbox/dice-games/> and <https://zenomath.org/toolbox/card-games/>