

Summarized from Everyday Mathematics Teacher's Guide to Games, Part 2

Addition Card Draw: *GM's 1 and 2, EM deck, scratch paper, 1 calculator*

Shuffle cards and place face down. P1 draws top 3 cards, records numbers, discards all 3 cards, and finds the sum. P2 does same. After 3 sets of turns, P's check each other's work with a calculator. Highest total wins.

Addition Spin: *GM 3, 1 paper clip, 1 pencil, 1 calculator, 2 sheets scratch paper*

P1 spins twice, writes down both numbers, and finds sum. P2 checks with calculator. P2 spins, records, and adds. P1 checks. Highest score after 5 rounds wins.

Addition Top-it: *Top-it game board, Everything Math deck, calculator*

Each player draws 4, make two 2-digit numbers, add mentally, partner check with calculator, high number takes all 8 cards

Algebra Election: *A.E. game board, First to 100 cards, 1 die, four counters, calculator*

2 teams start at Iowa, one team rolls die and moves that number using contiguous states, draw a card, use state's electoral votes for x, other team checks answer with calculator, correct answer takes votes for that state, incorrect answer leaves those votes in play, first to 270 wins

Angle Race: *A.R. game board, A.R. degree measure cards, straight edge*

Shuffle cards, place facedown, connect center of circle with 0° , draw card, use last line placed for one side of angle, connect center to place on circle which forms that angle, may not exceed 360° , lose turn if angle isn't possible, first to complete 360° wins

Animal Weight Top-It: *Top-It game board, GM's 14 and 16*

Shuffle all cards and place face down. P1 draws top 2 cards and adds the weights. P2 draws 1 card. Player with highest total weight takes all 3 cards. Switch roles and repeat until deck is used. Most cards wins.

Angle Tangle: *protractor, straight edge, 10 blank sheets of paper*

P1 use straight edge to draw an angle, P2 estimates angle, P1 measures angle, P2's score is difference, low score wins

Array Bingo: *A.B. cards (multiplication), EM deck 1-20 or 20 sided die*

Each player arranges A.B. cards into 4x4 array, EM cards face down in central pile, draw a EM card, turn over A.B. card with corresponding array, no matching card ends turn, complete row, column or diagonal is Bingo

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Summarized from Everyday Mathematics Teacher's Guide to Games, Part 2Attribute Train Game: *GM 22, 1 set attribute blocks*

Place blocks in center. P1 takes one block and puts it down to start train. P2 chooses a block which differs in one attribute and adds it to the train. Take turns until block are gone..

Base-10 Exchange: *GM 23, 2 dice, base-10 blocks (1 flat, 20 longs, 20 cubes)*

P1 rolls, announces total of dice, takes blocks from bank, and places on game sheet. Trade when 10 or more blocks in a column. P2 checks accuracy. Switch roles. First to 100 wins.

Baseball Multiplication: *B.M. game board, 2 dice, 4 counters*

Batter puts counter on home plate, pitcher rolls dice, batter multiplies the two numbers, look up answer in Hitting Table or Scoring Chart, hit moves any counters on base, no hit is 1 out, 3 strikes is 1 out, tally runs for 3 innings

Basketball Addition: *GM 28, 3 dice.*

Each player on team 1 rolls a dice. Team 1 combines dice and records total. Team 2 repeats. Highest points at end of game wins.

Beat the Calculator (multiplication): *B.T.C. game board, EM deck 1-10, calculator*

P1 is "caller" P2 is "calculator" P3 is "brain", caller takes two cards off face down deck and says them aloud, P2 and P3 race to correct solution, caller acts as judge, switch every 10 turns

Before and After: *GM 31, EM deck (all 0-10 cards)*

P1 shuffles and deals 6 to each player. Each P places 2 cards side by side face up and holds other four in hand. Rest of cards go face down in middle. P's take turns placing as many cards as possible from hand which are +1 or -1 to own face up cards. P1 draw 2 new cards and plays more if possible. Game over when stack is gone or no player can put down a card. Fewest cards wins.

The Block-drawing Game: *paper bag, 7 blocks in 2-3 different colors*

P1 is "director", director secretly places 3-5 blocks in bag and tells others how many blocks are in bag but not the colors, others take turns drawing one block from bag and showing it to others, director tallies color after each draw, others may guess at any time, incorrect guess puts player out of game, first correct wins

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Broken Calculator: *B.C. record sheet, calculator*

Select one calculator key as "broken", P1 says any number, P2 tries to make it without using "broken" key, 1 point for each key pressed, low score wins

Build-it: *B.I. cards, B.I. game board*

Each player has a game board, P1 deals one face down card to each space on both game boards, both players turn over cards without changing the order, each turn draw 1 card from face down deck or discard pile, replace or discard 1 card, first smallest to largest wins

Buyer and Vendor Game: *vending machine poster, 5 nickels, 10 dimes, 2 quarter*

Take turns being "buyer" and "vending machine", buyer selects item and gives correct coins to vending machine who checks coins

Buzz Games: *none*

Sit in circle, choose leader who names any whole number 3-9 as buzz number and names one stop number >30, player left of leader says "1", next player says "2", etc. saying "buzz" instead of the selected number or any multiple of that number, error restarts game with next player until stop number is reached

Calculator 10,000: *calculator*

P1 picks number 1-12, cubes that number to make the starting number, picks another number and uses it to +, -, x, or ÷ with the first number, chooses a different number and use a different operation with the answer from the preceding step, each number and operation may only be used only once, difference between final number and 10,000 is score, low score wins

Clock Concentration: *GM's 36 and 37, time card deck (or GM 38)*

P1 shuffles and places all cards face down in an array. P's take turns matching a clock card to a time card. Play until all cards are gone. Most cards wins.

Coin-Dice: *60 pennies, 12 nickels, 6 dimes, 2 dice*

P's take turns rolling dice and taking pennies. Trade pennies as possible. Pennies must exactly match total of dice. Most money wins.

Coin Exchange: *20 pennies, 10 nickels, 10 dimes, 2 quarters, 2 dice*

P's take turns rolling dice and collect matching amount of money. Games ends when quarters are gone. Most money wins.

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Coin Top-It: *Top=It game board, money card deck, (or 2 copies GM 29)*

Place all cards face down on game board. Each P draws a card and says total amount of money shown. Highest amount takes both cards. Game ends when draw cards run out. Most cards wins.

Concentration with Number Cards and Dominoes: *2 of each number cards 0-9, 10 dominoes with total of 0-9 dots*

P's shuffle and place cards face down in 2 rows of 5 cards and arrange dominoes face down in 2 rows of 5. P1 turns over 1 card and 1 domino, takes match or turn back over non-match. Winner has most pairs when all are gone.

Credits/Debits Game: *C.D. game board, EM deck*

Each player starts with \$10, draw card from face down deck, black is credit, blue is debit, record in change column, record answer in end column, play 10 rounds, most money wins

Credits/Debits Game (Advanced): *C.D. game board, EM deck, 1 coin*

Play as above, except P's flip coin before computing. Heads=add number, T's=subtract.

Dart Game: transparent mirror, dart game sheet

Players choose Dart A or Dart B, take turns practicing with only their dart while looking through the mirror, during game players place mirror without looking, check and record score, winner has highest score after 3 rounds

Dice Roll and Tally Game: *2 GM 43, 1 die*

P's take turns rolling die and tallying number on chart. First to 5 tally marks for any number wins.

Difference Game: *GM 44, EM deck (all 1-10), 40 pennies*

P1 shuffles and places stack face down. P's take turns turning over 1 card and getting that many pennies. P's place pennies in alignment with each other's. P with most keeps the unmatched pennies and puts all the matched ones back in the bank. Winner has most when pennies run out.

Digit Discovery: *3 sets of 0-9 number cards written in a different color for each set*

T draws place value chart on board with a color for each column. Distribute cards to entire class. T gives clue to summon numbers to the board.

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Digit Game: *K number cards 0-9 (2 of each) or Grades 1 and 2 EM deck all 0-9*

P1 shuffles and put stack face down. Each P draws 2 and makes largest possible two digit number. Largest number takes all cards. Winner has most cards when deck runs out.

Dime-Nickel-Penny Grab: *GM 45, 10 dimes, 8 nickels, 20 pennies*

P1 takes handful of coins from pile. P2 gets the remaining coins. P's total and compare. Highest amount wins.

Disappearing Train: *Disappearing Train game board, 16 counters per player, 1 die marked -1, -2, +1, +2, blank, blank*

Each player starts with a 12 counter train. P's take turns rolling and changing trains. Winner loses train first. Must have exact roll to go out.

Division Arrays: *one-inch grid, EM cards 6-18 (1 of each), die, 18 counters*

P1 draws card from facedown deck and takes that many counters, P2 rolls die, P1 puts counters in an array with that many rows, ignore left over counters, score is number of counters in a full row, play 5 rounds, high score wins

Division Dash: *D.D. game board, calculator, paper*

Clear calculator memory, choose number $>1,000$ and enter on calculator, press set key sequence (see game directions), use final digit in answer as 1-digit number, use the preceding 2 numbers as a 2-digit number, divide 2-digit by 1-digit, record result without remainder, without clearing calculator, repeat until one quotient is ≥ 100

Doggone Decimal: *EM deck 0-9, 2 counters, 4 index cards (0.1, 1, 10, 100), calculator*

P1 shuffle EM cards and deals 4 to each player, P2 shuffles index cards, places deck face down, and turns over top card which is the target number, players use 4 cards and 2 counters to make two decimal numbers, compute product on calculator, closet answer to target wins all four cards, repeat with each card in the target deck, most EM cards wins

Dollar Rummy: *20 copies of GM 46 or 47*

P1 shuffles, deals 2 cards to each player, places deck face down, and turns over top card. P's take turns making as many 2 card combinations of \$1.00 as possible using hand and discard pile. Pairs are put face up in front of P. Winner has most pairs when cards run out or no more pairs can be made.

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Domino Top-It: *Top-It game board, GM's 48 and 49*

Put all dominoes face down between P's. Each P takes one domino. Largest number gets both. Winner has most when dominoes run out.

Double-Digit Dice Game: *1 die marked 0-5 and one die marked 5-9 and 0*

P's take turns rolling and making largest possible 2-digit number. Winner has largest number.

Equivalent Fractions Game: *EM deck fraction cards*

Put deck picture side down in center, turn over top card, place next to deck, players take turns drawing top card and place it picture side up on table, player wins any matching cards, no match ends turn, P2 may take missed matches before starting turn, game ends when all cards are matched, most cards wins

Estimation Squeeze: *calculator, perfect square key*

Pick number <600 not a perfect square, take turns estimating square root of number and entering estimate on calculator, player squares that number and records answer, first to get within .1 of target number wins

Exponent Ball: *E.B. game board, die, counter, calculator*

Start on 20 yard line, get to goal line in 4 plays or less, first 3 plays must be runs, fourth play can run or kick, P1 rolls two dice separately, first dice rolled is base, second is exponent, use tables to move counter, if no score P2 takes over P1 stopped, play 4 rounds per player, high score wins

Fact Power Game: *GM 51, 1 die, 1 counter per player*

P's put counters on start and take turns rolling and moving.. P's say sum of game squares landed on. Other P's check. Correct answer gets to put initials in that space. Winner has most initials when all squares are used.

Fact Triangle Flip: *1 set \times/\div triangle cards, scratch paper*

P1 shuffles cards, places face down, P2 turns over top card and calls "start", first player to write entire fact family wins

Factor Bingo: *F.B. game board, 1 bingo mat/player, EM deck 2-9, 12 counters/player*

turn over top card from deck, players cover any number on mat which has the card as a factor, turn over next card, first to place 12 counters wins

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Factor Captor: *F.C. game board, counters, 2 calculators, scratch paper*

P1 covers a number on the grid, P2 covers all factors of that number, switch player order and repeat, high score wins

Factor Top-it: *EM deck 0-9*

P1 draws 2 cards from face down deck, makes a 2-digit number, writes all the factors, the sum of the factors is the score, most points after 5 rounds wins

First to 100: *F.T.100 cards, 2 dice, calculator, scratch paper*

P1 rolls dice and finds product of the numbers, turns over top problem card and uses dice answer for x, player may use calculator 3 times per game, P2 checks answer with calculator, first to 100 wins

500: *bat, ball, scratch paper*

P1 hits ball to others, points scored by chart (see book), first over 500 becomes new batter

Frac-tac-toe: *Ftt game board, EM deck 0-10, 20 counters in 2 colors*

Set up a denominator pile with 2 each of 2,4,5,10 and put all other cards in the numerator pile, player 1 turns over the top card on each pile to make a fraction and tries to find a match on the game board (a calculator or table of decimal equivalents for fractions may be used), winner is 1st player with 3 in a row in any direction

Fraction Action, Fraction Friction: *F.A./F.F. cards, calculator*

Put stack of cards in the center, player 1 turns over the top card and puts it face up in front of him/herself, then calls either "Action" to draw another card or "Friction" to keep the cards s/he has, each player does the same until all have called friction, winner has the sum closest to 2 without going over

Fraction Capture: *F.C. game board, dice*

Player 1 rolls dice and creates a fraction using the two numbers then claims that amount on the game square, first player to claim more than $\frac{1}{2}$ a square wins the square, winner takes the most squares

Fraction Multiplication Top-it: *Top-it game board, EM deck fraction cards, calculator*

Players each draw 2 cards, multiply the numbers and call out the answer. Highest answer claims the cards

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Fraction/Percent Concentration: *F.D.P. deck, calculator*

Separate fraction and percent cards and make 2 piles, player 1 draws a fraction card and a percent card, if they are equivalent player 1 keeps them, if not s/he puts the cards face down, winner takes the most cards

Fraction Spin: *F.S. score sheet, fraction spinner, large paper clip, pencil*

Players take turns spinning and filling in the blanks in the number sentences. 1st to make 10 true sentences wins

Fraction Top-it: *Top-it game board, EM deck fraction cards*

Player 1 deals set number of cards, players place cards fraction side up, players select one card each and puts them in the middle, largest fraction takes the cards for the round

Geometry 5 Questions: *none*

Player 1 thinks of a shape, other players ask yes/no questions, first to identify the shape becomes player 1

Getting to One: *calculator*

Player 1 chooses a number <100, player 2 guesses a number, player 1 uses calculator to divide the guessed number by the mystery number and reads aloud the answer, player 2 continues until mystery number is guessed, switch roles to complete one round, winner has the smallest number of guesses after 3 rounds

Greedy: *score sheet, die*

All students stand behind their chairs, teacher rolls die twice and adds the number for the first points in the game, after that the students may sit down at any time and keep the points they accumulate, anyone standing when a 2 is rolled loses all points for that round, winner has highest total after six rounds

Grid Search: *4 grid sheets*

Players sit so as not to see other player's game board, each places a Q (queen, 5 points) and six K's (knights, 1 point each) on game board 1, all seven pieces must be connected with no blank space between them, players take turns looking for hidden pieces by calling a letter-number coordinate pair, each records result on game board 2, after each guess the opposite player tells the guesser the point total of that square (total points in the guessed square and all squares touching it), guesser puts point total in the called square, winner takes the queen

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Guess the Rule: *1 attribute block per student*

P1 decides on 1 secret attribute and tells students whose block has that attribute to stand. First correct guess becomes new rule maker.

Hidden Treasure: *H.T. game board, 2 red and 2 blue pens*

Players sit so as not to see other player's game board, each places a red point on game board 1, players take turns looking for hidden pieces by calling a coordinate pair, each records result on game board 2, after each guess the opposite player tells the guesser the least number of square sides needed to travel from guessed point to hidden point, winner finds secret point first

High Number Toss: *H.N.T. game board, die, 2 sheets of paper*

Players alternate rolling the die and filling in one blank space on the score sheet, after all four are filled, players use the first three numbers as the first three digits in the final number, the fourth digit is the number of zeros to place after the first three, each player reads his/her number aloud, high number wins round, winner is first to win four rounds

High Number Toss (decimal version): *H.N.T. game board, EM deck 0-9, score cards*

Same as above, but use the three blank decimal score cards, use the difference between two numbers as the score for the round, winner has highest total after four rounds

High Roller: *2 dice*

P's roll both dice, keep the higher die, and re-roll low die. Winner has greatest sum after 2 rounds.

Hit the Target: *2 copies GM 92, 1 calculator*

P's choose a 2-digit multiple of 10 as target. P1 chooses a start number below target. P 2 enters start number to calculator and tries to enter a second number which will produce sum equal to target. Turn continues with +/- until target is hit. Winner takes fewest tries to hit target.

Landmark Shark: *L.S. game board, L.S. cards, EM deck*

Deal 5 cards to each player, players put cards in order least to greatest, each player decides how to score the hand using range, median, or mode and puts the corresponding L.S. card out in front, players may then trade up to three cards, score is the range number, or the median number, or the total of the mode cards, bonus points are the mean rounded to the nearest whole number, winner has highest total after five rounds

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Summarized from Everyday Mathematics Teacher's Guide to Games, Part 2Less Than You!: *EM deck 0-10*

Deal 2 cards to each player, put the rest in face down pile, each turn a player draws 1 card from pile, discards 1 of the 3 cards and mentally adds the remaining 2 cards, player may call "Less than you" after any turn, smallest total wins

Magic Bag Game: *1 bag, 20 craft sticks*

T puts sticks in bag. T selects a secret rule (e.g. +1). T takes out one stick, shows to class, and puts it back in. T says magic word and takes out 2 sticks. T repeats with 3 sticks, 4 sticks, etc. until P guesses rule. Correct guesser selects new rule.

Making Change: *2 nickels, 2 dimes, 2 quarters per layer. 1 dollar bill, 2 dice*

P's take turns rolling dice and paying the bank that amount making change as needed. Winner is first who cannot pay.

Matching Coin Game: *10 pennies, 10 nickels, 10 dimes, 10 quarters, 2 1-inch cubes, sorting tray, GM 160*

P's take turns rolling, taking a coin matching the top of die, and placing the coin in the sorting tray.

Matching Game: Analog and Digital Clocks: *GM's 95 and 96, 1 analog paper clock per student with digital time written on back.*

T distributes analog clock cards to entire class. T shows a clock face to class. P's with match call out time and give card to T. Play until all cards are collected.

Memory Addition/Subtraction: *calculator*

Players agree on target number <50, both clear calculator memory, take turns adding or subtracting 1,2,3,4, or 5 using M+ and M- keys, players keep track of total mentally, players may not use a number just used by other player, player calls "Same" when s/he thinks the display matches target number, caller wins if it matches, other wins if it doesn't

Missing Terms: *2 calculators*

Players enter same number into both calculators, P1 secretly changes the number by + or -, P2 is shown number and guesses what was done

Mixed Number Spin: *F.S. score sheet, fraction spinner, large paper clip, pencil*

Players take turns spinning and writing the fraction or mixed number in 1 of the blanks, winner completes 10 true number sentences first

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Money Exchange Game: *GM's 101, 161-165, 1 die*

P's take turns rolling, collecting dollar bills, placing bills on game mat, and trading when possible. Winner trades for \$100 first.

Monster Squeeze Game: *Monster Squeeze game board, GM 105 or 106, tape or magnets, large 1-10 number line*

T chooses secret number. P's take turns guessing. T gives clues of too large and too small while moving the monsters until answer is between them.

Multiplication Bingo: *M.B. game board, EM deck 1-6 and 10, 8 counters per player,*

Players write these numbers into the game grid in mixed order:
1,4,6,8,9,12,15,16,18,20,24,25,30,36,50,100, players take turns drawing 2 cards from top of face down deck and calling out product of the numbers, correct answer may be covered on game board, incorrect answer loses turn, winner is first with 4 in a row or any 8 numbers covered

Multiplication Bull's Eye: *EM deck 0-9, die, calculator*

Players take turns rolling die and looking up answer on Target Range of Product table, draw 4 cards, make 2 two-digit numbers, multiply on calculator, answer in range scores 1 point, winner has high score after 5 rounds

Multiplication Draw: *M.D. score sheet, EM deck 1-6 and 10, calculator*

Players fill in first number for each draw (round one x2, round two x3, etc.), players draw a card and write it in the other blank on the score sheet for each of the 5 draws, players solve all 5, winner has largest sum of five answers

Multiplication Top-it: *Top-it game board, EM deck 0-10*

Each player turns over two cards and calls out the product, highest product takes all the cards, winner has most cards when the pile runs out

Musical Name-Collection Boxes: *5 sheets chart paper, CD and player, 1 crayon or marker per player*

T plays music, P's walk in circle, music stops, P's sit down and write a new name for the number on the nearest chart paper, repeat several times

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Multiplication Wrestling: *M.W. game board, EM cards 0-9*

Each player draws 4 cards and forms two 2-digit numbers, use numbers to form wrestling teams by writing the two-digit numbers as tens + ones, each of these four numbers is multiplied by the other three, largest total of the 4 products wins 1 point for round, winner has highest total after 3 rounds

Name That Number: *N.T.N. game board, EM deck, paper*

Each player receives 5 cards, the top card on remaining deck is turned over to become the target number for that round, players try to match the target number by using their five cards and any of the 4 operations, solutions are written down, used cards are set aside and replaced from deck, winner has most cards when deck runs out

Name That Polygon: *none*

Form 2 teams, leader thinks of polygon, teams bid for fewest clues needed to identify polygon, lowest bid guesses polygon

Nickel/Penny Grab: *GM 114, 16 nickels, 40 pennies*

Mix coins into a pile. P1 grabs a handful, P2 takes remaining coins. P's count coins. Winner has most.

Number Top-it (7 digit numbers): *N.T. game board, EM deck 0-9*

Players take turns drawing a card and placing it in 1 spot on the game mat, completed numbers are read aloud, highest number wins 1 point, second highest receives 2 points, etc., winner has fewest points after 5 rounds

Number Top-it (decimals): *N.T. game board, EM deck 0-p*

Same as above, but use decimal mat

Number Grid Game: *GM 174, 1 die, 1 counter per player*

P's put counters on 0. P's take turns rolling and using chart to move counters on number grid. Winner is first to 110.

Number Line Squeeze: *class number line, 2 meter sticks with a bracket attached to 1 end*

1 P is leader, 2 P's hold meter sticks. Leader decides mystery number and calls on P's to guess. Brackets are moved to cover guesses. Leader responds to guesses with "greater than" or "less than". Correct guesser becomes leader.

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One Dollar Exchange: *GM 119, \$1 bill, 20 dimes, 20 pennies, 2 dice*

P's take turns rolling, saying total number of dots, taking that many pennies, and trading when possible. Winner trades for dollar first.

One Dollar Game: *GM 119, 4 \$1 bills, die marked 1¢ on 2 sides and 10¢ on 4 sides, 10 pennies and 10 dimes per player*

P's take turns rolling and taking coins. Trade when possible. First to trade for dollar wins.

\$1, \$10, \$100 Exchange Game: *GM 120, 48 \$1 bills, 20 \$10 bills, 4 \$100 bills, 2 dice*

P's take turns rolling, saying total number of dots, collecting that number of dollars, and trading when possible. Winner trades for \$100 first.

Ones, Tens, Hundreds Game: *1 die (marked 1,3,5,10,10,10), 200 or more craft sticks or straws, 20 rubber bands*

P's take turns rolling die, picking up that number of sticks, making bundles of ten sticks, and making large bundles of 10 small bundles. Winner has largest total when sticks run out.

Paper Money Exchange Game: *PME game board, 10 \$1 bills, 10 \$10 bills, 1 \$100 bill per player, 1 die (marked \$1 on 3 sides and \$10 on 3 sides)*

P's take turns rolling die, taking that many dollars, and trading when possible. First to trade for \$100 wins.

Penny Cup: *GM 121, 20 pennies, cup*

P1 puts cup upside-down with some pennies under it and the rest on top. P2 counts pennies on top and guesses number underneath. 1 point per correct guess. P's trade roles after each guess. First to 5 points wins.

Penny Grab: *record sheet, 40 pennies or counters*

Players take a handful of pennies from a central pile, count and record pennies in hand, record name of the player with most, line up pennies and find the difference between the two, write a number sentence to show difference.

Penny Guessing: *40 pennies, 8 nickels, 2 slates or scratch paper*

P1 takes handfuls of pennies and spreads them out on the desk. Both P's guess how many nickels will be exchanged for from pile, write guess, put pennies into piles of 5, trade for nickels, and count nickels. Closest guess is winner.

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Penny-Dice Game: *1 die, 10 pennies per player*

P's put all pennies into 1 pile. P's take turns rolling die and picking up that many pennies. Last pennies in pile must be taken on an exact roll. P's flip a coin. Heads=most pennies win. Tails=least pennies wins.

Penny-Dime Exchange: *Exchange games game board, die, 50 pennies, 50 dimes*

Put all dimes and pennies in a bank, take turns rolling die and collecting that number of pennies, player calls "Exchange" when ready to trade 10 pennies, winner has most dimes when bank runs out

Penny-Dime Exchange: *Exchange Game game board (optional), 1 die, 50 pennies, 5 dimes*

P's take turns rolling die and collecting that number of pennies. P calls out "Exchange" when a trade is possible. Winner has most dimes when pennies run out.

Penny-Drop Addition: *15 pennies, container, slate or scratch paper per player*

T drops 5 pennies one at a time into container and asks "How many pennies are in container?" "How many pennies will be in container after 3 more are dropped?" T drops 3 more pennies and P's write total. T writes change-to-more diagram for problem.

Penny-Nickel Exchange: *1 die, 20 pennies, 10 nickels*

P's take turns rolling die and collecting that number of pennies. When trade is possible, P calls "Exchange" and trades. Winner has most nickels when pennies run out.

Penny-Nickel-Dime Exchange: *1 die, 20 pennies, 20 nickels, 20 dimes*

P's take turns rolling die and collecting that number of pennies. When trade is possible, P calls "Exchange" and trades. Winner has most dimes when pennies run out.

Pick-a-coin: *P.A.C. game board, die, calculator*

Players take turns rolling the die 5 times, record the number on die after each roll, use calculator to find total and record it on Record Table, winner has largest sum after 4 rounds

Pin the Number on the Number Grid: *number grid poster, stick on notes (blindfold optional)*

T writes number on stick on note, says number, and gives to P. P tries to put note on same number on grid.

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Summarized from Everyday Mathematics Teacher's Guide to Games, Part 2

Plus or Minus Game: *GM 124, 1 die (marked +1 +2 +3 0 -1 -2), 32 counters*

P's take turns rolling die and adding or removing counters from own half of game board. Winner covers 2 row first.

Pocket Billiards Game: *billiards table game page, transparent mirror*

Players practice on P.B.G. sheet trying to get ball into a pocket using mirror, players take turns saying into which pocket a given ball will go, player places the mirror without looking through it, both player check to see if the ball is in the pocket, 1 point per ball, winner has highest total after 5 rounds

Pocket Game: *15 counters per player, 1 slate per player, 1 bag*

T shows 3 counters, counts aloud, puts in bag, puts in two more, and asks, "How many are in there now?" T repeats with P's drawing situations on slates.

Polygon Capture: *P.C. cards*

Spread polygon cards out, property cards go in 2 piles by angle or side, take turns drawing a card from each pile and taking all polygons which match both cards, next player can claim any missed polygons, winner has most cards when fewer than 3 polygon cards are left

Prize Time: *small piece of paper with a different time written on it for each student, small prize per student*

T hands out papers at beginning of day. P hands paper to T when that time is shown on the clock to win small prize.

Raft Game: *1 die, 15 beans, 20 planks (craft stick with 5 beans glued on), 4 rafts (5 planks glued onto 2 craft sticks), 4 small toys*

P's take turns rolling die, picking up that many beans, and trading when possible. P take completed rafts and float a small toy across pretend river.

Robot: *none*

P1 is Controller, P2 is Robot, Controller pick destination and gives Robot directions for amount of each turn and number of steps to reach destination, turns may be given as a fraction of a whole circle or in degrees

Rolling for 50: *GM 130, 2 counters, 1 die*

P's agree on finish number (1 to 50) put counter on start of own game board. P's take turns rolling and use table to get moves. Winner is first to finish number.

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Summarized from Everyday Mathematics Teacher's Guide to Games, Part 2Scientific Notation Toss: *2 dice*

Each player rolls dice, one number is used as a power of 10, the other is used as the multiplier, each rolls 3 times and records result in scientific notation, convert all numbers into standard notation, order least to greatest, compare, greatest number wins

Scissors, Paper, Stone: *GM 131*

P's play 20 rounds of game using tally marks to record wins and ties.

Secret Number: *2 calculators*

P's enter secret number (<100) on own calculator, show number to other, and compare using "greater than, less than, same as, equal to, etc.)

Shaker Addition Top-It: *GM 132, 2 dice, 20 counters*

P's take turns rolling dice, adding numbers shown, and saying sum aloud. Highest sum takes 1 penny for that round. Winner has most when time is called.

Shopping: *GM 133 and 134, 18 \$1 bills, 16 \$10 bills, 2 \$100 bills, 1 calculator*

P's take turns being customer and clerk. Clerk puts shopping cards in facedown pile. Customer draws 2 cards, puts them in parts boxes, mentally computes total cost, and puts money in total box. Clerk computes total on calculator. Play until all cards have been used.

Solution Search: *S.S. cards, EM deck*

S.S. cards go into a pile in center, deal 8 EM cards to each player, place the rest in facedown pile, P1 turns over top S.S. card, discards an EM card which is a solution or draws until getting one to discard, after each player has discarded, P2 turns over new S.S. card and starts round 2, winner is first to discard whole hand

Spin a Number (1-10): *GM 136, 1 large paper clip, 1 pencil, 1 counter per player*

P's put counters on start. P's take turns spinning and moving counters. First to end wins.

Spinning for Money: *GM 137 and 138, 7 pennies, 5 nickels, 5 dimes, 4 quarters, and \$1 bill per player, 1 large paper clip, 1 pencil*

P's take turns spinning and taking money making trades when possible. Winner trades for \$1 first.

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Summarized from Everyday Mathematics Teacher's Guide to Games, Part 2

Spinning to Win: *S.T.W. sheet, 120 counters, paper clip, pencil*

Each player claims one section of the spinner, take turns spinning and taking counters when his/her section is spun, use tally marks to record number of spins, winner has most counters after 12 spins

Spoon Scramble: *S.S. cards, 3 spoons*

Place spoons in center, deal 4 cards to each player, when 4 cards in hand match player grabs a spoon, otherwise pass 1 card to left, player with no spoon receives a letter from the word SPOON, winner has fewest letters when 3 players have SPOON

Spreadsheet Scramble: *game mats*

P1 uses 1,2,3,4,5, and 6, P2 uses -1,-2,-3,-4,-5, and -6, take turns writing 1 number into a cell, numbers are used once, when all cells are filled total columns and rows, 1 point for each total which matches player's sign, no points for 0, winner has most points

Stand Up If...: *one 3-dimensional shape per player*

T says, "Stand up if..." and names a characteristic. P's pass shapes after 3 commands.

Subtraction Target Practice: *EM deck 1-10, calculator, scratch paper*

Players start at 250, take turns taking 2 cards from pile to make a two-digit number which is then subtracted from player's points, work on paper, check with calculator, winner has smallest number above 0 after 5 turns each

Subtraction Top-it: *Top-it game board, EM deck 1-10*

Players draw 2 cards each and subtract the smaller from larger, largest difference wins round, winner has most cards when deck runs out

Tens-and-Ones Trading Game: *GM 144, 1 die, 10 longs and 18 cubes per player*

P's take turns rolling die, taking blocks (1 or 2 get longs, 3-6 get cubes), placing on mat, trading when possible. Winner gets 10 longs first.

3, 2, 1 Game: *2 sheets of paper*

P's write 21 on own paper and take turns subtracting 1, 2, or 3 from 21. Winner reaches 0 first.

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Summarized from Everyday Mathematics Teacher's Guide to Games, Part 23-D Shape Sort: *3-D S.S. cards*

spread out Shape cards face up, place Property cards in 1 pile and Vertex/Edge cards in another, take turns drawing a card from each pile and taking all Shape cards which have both properties, next player can claim any missed cards, winner has most Shape cards when fewer than 3 remain

Three Addends: *T.A. game board, EM deck*

P1 draws 3 cards from face down stack, both players write addition models using those 3 numbers, players total answers and compare to other's

Tic-Tac-Toe Addition: *record sheet*

Use 4 number grids at the top of record sheet, draw a straight line through any 3 numbers which make the total shown above the grid, players can make their own puzzles with the four grids at the bottom of the record sheet

Time Match: *time card deck*

P's take digital clock cards from deck, put remaining cards face down in 6x6 array. P's take turns turning over 2 cards and keeping matches. Winner has most matches when cards are gone.

Top-it (positive and negative numbers): *Top-it game board, EM deck, calculator*

Each player takes 2 cards from number side down stack and calls out the sum with blue numbers being negative and black numbers being positive, highest sum takes cards for that round, winner has most cards when stack runs out

Touch-and-Match Quadrangles: *2 quadrangles pages*

Teacher places one set of quadrangles in full view of all players, teacher takes a card from the other set and places it in a bag or box while students are not looking, 1 student reaches into the container and tries to find matching shape in the first set, player pulls shape out of container and explains how shape was chosen

Turn-Around Facts Game: *GM 155, 2 dice, 20 pennies*

P's take turns rolling dice, writing total in box on table in journal, writing sum for turn-around fact, and taking 1 penny for each box filled. Winner has most when pennies are gone.

Two-fisted Penny Addition: *T.F.P. game board, 10 pennies/player*

Each player has 10 pennies, each grabs part of the group in one hand and the rest in the other, count and record total of each hand on Parts-and-Totals diagram

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Summarized from Everyday Mathematics Teacher's Guide to Games, Part 2

"What's My Attribute Rule?": *GM 157, 158, and 159, 1 die, 1 set attribute blocks, 2 sheets of paper*

P's label one sheet "These fit the rule." and the other sheet "These do NOT fit the rule." P's take turns rolling die. Lowest roll is first rule maker. Rule maker shuffles cards, places stack face down, turns over first card without showing it to other players, and puts 3-4 blocks on each paper. Guessers take turns picking a block and putting it on a paper. Rule maker tells guessers if right or wrong. Winner becomes new rule maker.

"What's My Rule?: Fishing: *none*

T "fishes" for P's using an obvious attribute without explaining the attribute, T asks "What sort of fish am I going to catch next?" or "What's my rule?", P's guess until correct, T asks "Who are the students not in my net?"

"Who Am I Thinking Of?": *none*

P's form a circle around T. T gives negative attribute rules for P's to guess which P the T is thinking of.

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