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Game	Objective	Note
NUMBER	Whole Number	
+/-24	Integer operations mixed plus order of operations	Based on the commercial game 24 but with playing cards.
Break Up	2 digit multiplication, mental math	Doesn't quite work well as a competitive game, but good for a cooperative activity. Area representation to get at partial products.
Close to Zero	Two digit integer addition, especially positive + negative	Variation of Investigations Close to Zero games. Use cards dealt to get as close to a zero pair as possible. Keep a running score.
Last One Loses	prime factorization	Not a deep game, but a really nice context to introduce prime factorization. Raises questions about which numbers are winners, do the in between choices matter, etc. <i>Bonus</i> : based on a great word game.
Make and Take	whole number computation, extendable	Strong game for whole number computation practice, scales well from mid elementary through middle school. Fun and strategy.
Mathzee	number and operations	An example for adapting Yahtzee (an all time classic) to different
Monopoly Money Madness	2 digit addition	Sometimes simple is best. Money is engaging, offers opportunities to unitize, and access to lots of worthwhile addition strategies.
Multiplying Game Possibilities	single digit multiplication	Students design their own multiplication games using a choice of mechanics.
Pick on someone your own size	3-digit number sense	Dead easy game, no materials, lots of play value. Offers opportunity to work on decomposition, addition, subtraction, calculator use. Easily adaptable to other number ranges. I also use this with decimals and fractions (quite challenging, that).
Power Up	Exponents	Fun game with story elements to introduce or practice with exponents. Integrates well with reading and especially writing lessons.
Product Game	Multiplication facts	Best math game ever. Playable just for fun, encourages fact formation in multiple ways, leads to even deeper relationships and content. The math game grail, currently in <i>Connected Math Project</i> , maybe originally for the Middle Grades Mathematics Project. Would love to know who designed it, and shake their hand. Has an online version from NCTM.
Safe or Sorry	Two Digit Addition, probability & expected value	A push your luck game that's an opportunity to keep score and practice addition, especially with an eye on landmark 5s and 10s.

NUMBER	Integers	
Consecutive Capture	Integer representation on the numberline	Comparing and ordering plus numberline use. Surprisingly fun.
Greater Than	Integer addition and multiplication	A game that gets at the effect of integer operations on inequalities, and provides practice with signed computation and a context for order of operations.
Gridfight	Integer multiplication with area representation	Seems cool - a couple twists keep it interesting for repeated play.
Honeycomb	Integer multiplication and addition	Co-developed with Nick Smith, neat multiplication mechanic for signed numbers.
Product Game: Integers	Integer multiplication practice.	Variation on the classic. Maybe now you're getting how much I like this game.
Treasure Hunt	Introduction to integers	higher/lower guessing game
Tug of War	Integer small number addition, especially positive + negative.	Addition of positive and negatives on the number line.
Zero Rummy	Integer addition with more than two summands, especially zero pairs and sums.	Rummy variation using color of cards for signed numbers.
NUMBER	Decimals	
Burger Time	decimal modeling and adding	Decimal modeling with a link to measuring in mm, this one was a surprise hit and very popular with students. More creative than competitive.
Decimal Point Pickle	decimal comparison with different number of places	One of my best games. Many opportunities to meet objective and has exciting gameplay.
Decimal Race	decimal addition	A race game where kids make their own spinners, with money connections.
Division into Decimals	Introduces decimals as quotient of whole numbers using area as a context.	A race game that supports decimals, area representation of multiplication and division and recognition of common decimal fractions.
Product Game: Decimals	Practice multiplying decimals with connection to multiplication facts.	Variation on the classic.
NUMBER	Fractions	
Find It	decimal multiplication	Precursor to area model for dividing fractions. Also has a creative story component that engages a wider range of students.
Fraction Catch	fraction comparison	Nice set of fraction cards and fun comparison game that also provides practice for equivalent fractions. One of my best games.

Product Game: Fractions	Fraction multiplication practice with simplification.	Variation on the classic.
Size the Day	Size the Day	Introduction to fraction multiplication and division. Practice and some intuition building with a scaling model.
NUMBER	Money	
Change for the Better	money values, logic	game for familiarizing young kids with coins, with a surprising amount of strategy to use as problem solving or logic material for older students. Based on a free game by James Ernest, bonus Shel Silverstein companion poem.
Make It, Take It	money values, computation, addition	Very good game for kids learning coin values and computation, easily customizable to your students.
Monopoly Money Madness	2 digit addition	Intended to work on multiple digit addition, but works as a money game also.

GEOMETRY		
Angle Acquisition	angle recognition, parallel properties	Puzzle like game that looks for angles based on parallel line and other plane geometry properties.
Area Block	area	Strategy game that's a little like Blokus and a little like Nim. Nice extension where students can make their own boards.
Coordinate Connect	graphing points	Tic Tac Toe variant that practices graphing points. Can extend to linear patterns.
Four Corners	graphing points	Simple and clear, while giving an opportunity to discover characteristics of graphing as well as practice plotting. This is a good one!
In or Out	sorting	Characteristics, venn diagrams. Also use to introduce functions with the in/out rules providing examples of functions and non-functions.
Michigan Smith	ruler measurement	Easy race game for ruler practice, with a little bit of strategy. Name is a joke about some Hoosier movie.
Polygon Capture	polygon recognition and characteristics	Adaptation of a very good game by William Carrol in <i>Math Teaching in the Middle School</i> . Highly adaptable by which shapes and characteristic cards you include. Enough reasoning to be good for people who know the content. NCTM's inferior (IMHO) version .
Prism Power Game	volume of a prism, 3-D characteristics	Encourages understanding of the volume formula by considering layers and encourages quantity understanding through gameplay.

Quadrilateral Concentration	quadrilateral types	The cards for this are also usable for rummy or Quadrilateral Euchre, the world's geekiest game. Lots of border cases to cause player deliberation and discussion.
Rope Charades	shape recognition and properties	Very kinesthetic, fun and a little silly
Spiral So-So	angle concept and addition	A good context that was an okay game. A later use of this game revolved around the students adding to the board, and that was more successful.
Triangle Detective	triangle characteristics and recognition	A simplification of polygon capture that makes it usable down to 4th grade, with enough math to be usable in high school
Triangle Rummy	triangle types and characteristics	By Sarah Cavazos. Suitable and adaptable to elementary-high school.
Unit Rummy	measurement unit type and conversions	A card game to encourage reasoning with measured quantities to find equivalence and practice unit fluency. Bonus concentration game.

ALGEBRA	& OTHER	
Greater Than	inequalities, signed numbers	Game that uses playing cards to model what happens to inequalities under various operations.
Guess My Rule	evaluating expressions, solving equations, symbolic encoding	Zero materials, classic game for algebra, adaptable for K-16 math. Loads of opportunity for discussion and symbolic development.
Linear War	lines, graphing, linear characteristics	Very promising game where students make the cards.
Modular Skirmish	modular arithmetic	Fun war variant that helps students gain facility and discover interesting modular strategies. (Bonus history on Gauss in the post.)
Trig Rummy	trigonometric functions	Designed for calculus students struggling with trigonometric familiarity, good review.
SPQR	logical calculus	Pretty good game where players evaluate composite statements for true or false to make a score.
Shopping & Errands	traveling salesman problem	The start of a game, suitable for further development by students.