

Math Games

played with cards and dice

IPMG  Publishing

Math Games Played with Cards and Dice (4-6)

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Accumulation

Materials

- One deck of cards for each group (point values: Aces = 1, Jacks = 11, Queens = 12, Kings = 13).
- One *Accumulation* record sheet for each player/team.
- One calculator (optional).

Rules and Play

1. This game can be used with any of the four operations (addition, subtraction, multiplication or division) for 2-4 players/teams.
2. The object of the game is to accumulate the highest score.
3. Play begins with the dealer placing a shuffled deck of cards, face down, in the center of the playing area. Players take turns drawing one card at a time. After each draw, players perform the indicated operation and record the result. For example, if a player drew a Two, their current score was 6, and the game operation was multiplication; their new score would be 12. In addition games, players/teams start with 0. In subtraction games, players/teams start with 1000. In multiplication games, players/teams start with 1. In division games, players/teams start with 1,000,000.
4. Play continues until the pack is depleted. In addition and multiplication games, the player/team with the highest final score wins. In subtraction and division games, the player/team with the lowest score wins.

Variations

- Use a smaller set of cards. Also note Face Cards can be removed or given a value of 10 and operations restricted.
- To make the standard game more challenging, change the rules so that the operation changes after each round and includes cards with special values. For example, round 1 = addition, round 2 = subtraction, etc. Special values of may be Jokers = 0, One-Eyed Jacks = 100, Queen of Spades = 50, etc.



Accumulation

Operation	Round	Card Drawn	Score
	1		
	2		
Beginning Score	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		
	11		
	12		
	13		
	14		
	15		
	16		
	17		
	18		
	19		
	20		
	21		
	22		
	23		
	24		
	25		
	26		
	27		
	28		
	29		
	30		
	Final Score		



Come Closer

Materials

- One deck of cards (point values: Aces = 1, Jokers = 0), Tens and Face Cards are removed.
- One *Come Closer* record sheet for each player/team.
- One calculator (optional).

Rules and Play

1. This is a mental arithmetic game for 2-4 players/teams.
2. The object of the game is to accumulate the highest score.
3. Play begins with the dealer providing each player/team with five cards from a well-shuffled deck. The dealer turns over two cards. The number formed by the two cards is the key number for that round. For example, if an Ace (1) and Five are turned over, the key number is 15. The remaining cards are placed face down in a pack in the center of the playing area.
4. Players then select three of the five cards they received. Players attempt to select three cards that when combined using any of the four operations (addition, subtraction, multiplication or division), will have a result closest to the key number. For example, if a player drew a 5, 8, 9, 2 and an Ace and the key number was 15, then a player might select the 5, 2 and Ace for play since $5 \times (2+1) = 15$.
5. After the selections are made, each player puts his/her cards on the playing surface in front of him/her so that all players can see the cards. Each player then has the opportunity to look at the cards that the other players have selected. Each player then announces their results and how they achieved them. The player with the result closest to the key number receives one point. In case of a tie, each player receives a point.
6. At the end of each round scores are recorded. The winner of each round receives one point for having the closest result, plus one point for each player who stayed in the game. In case of a tie, the points are shared.
7. Play continues until the pack is depleted. The player/team with the highest final score wins.

Variations

- Allow the players/teams to keep three to five of the cards dealt to them.
- For younger players, restrict the combining of cards to a single operation such as addition.
- To make the standard game more challenging, change the rules so that the number of cards in the key number is 3 or 4 and increase the number of cards that must be used by each player to 4 or 5.



Come Closer

Round	Key Number	Cards Played and Operations	Points
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
Final Score			

