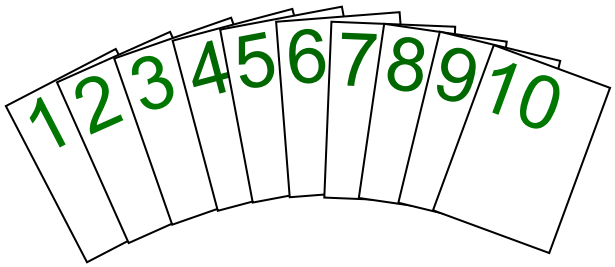
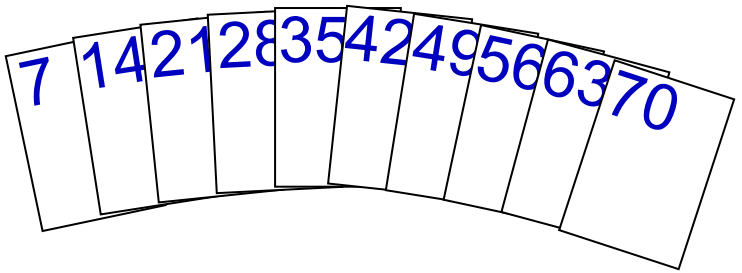
Let's Play Math Games!





Games

$$\frac{\text{Games}}{\text{Math}} = \frac{\text{Books}}{\text{Reading}}$$

Games provide instant feedback.

Games provide interesting repetition needed for automatic responses in a social setting.

More importantly, games provide an application for the new information!

Go to the Dump

Objective: To learn and master the facts of 10.

Number of Players: 2 to 4.

Cards: Basic number cards from 1 to 9.

Goal: To collect the most pairs.

Go to the Dump with Elevens

Objective: To learn and master the facts of 11.

1 + 10
2 + 9
3 + 8
4 + 7
5 + 6

Play: Same as Go to the Dump.

Addition Bingo

Objective: To practice all the sums.

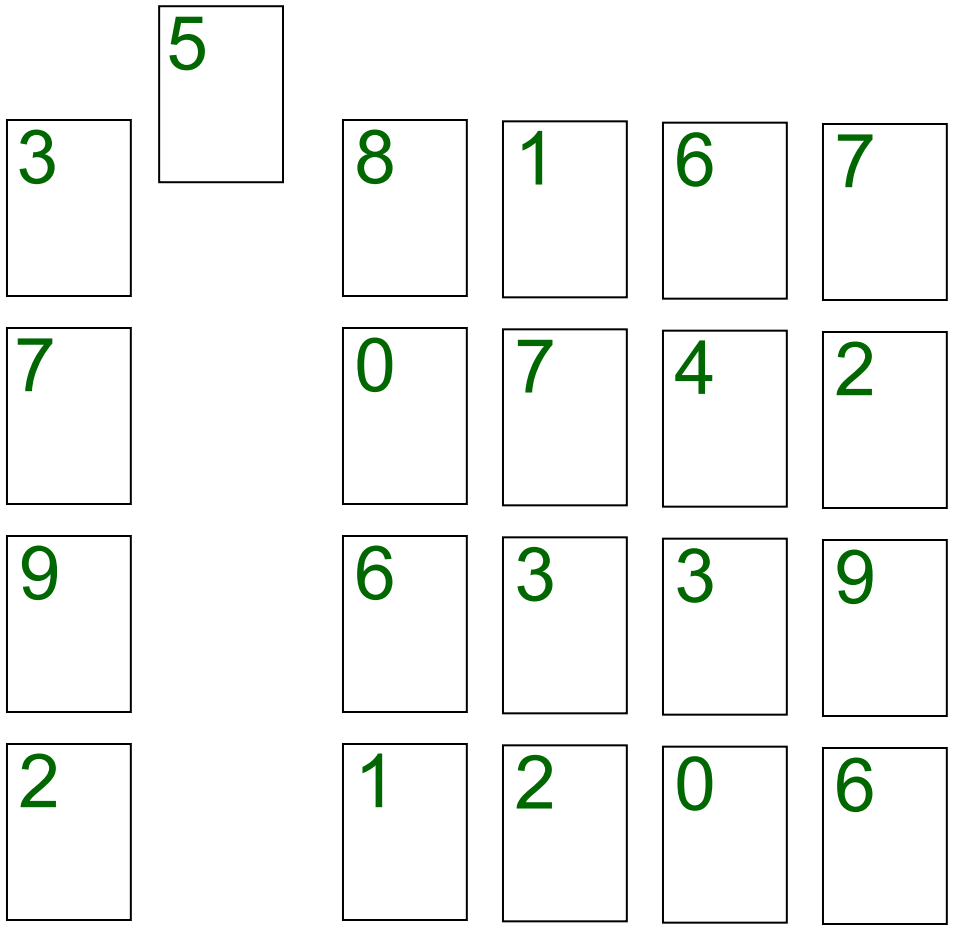
Number of Players: 2 to 4.

Cards: Basic number cards from 0 to 9.

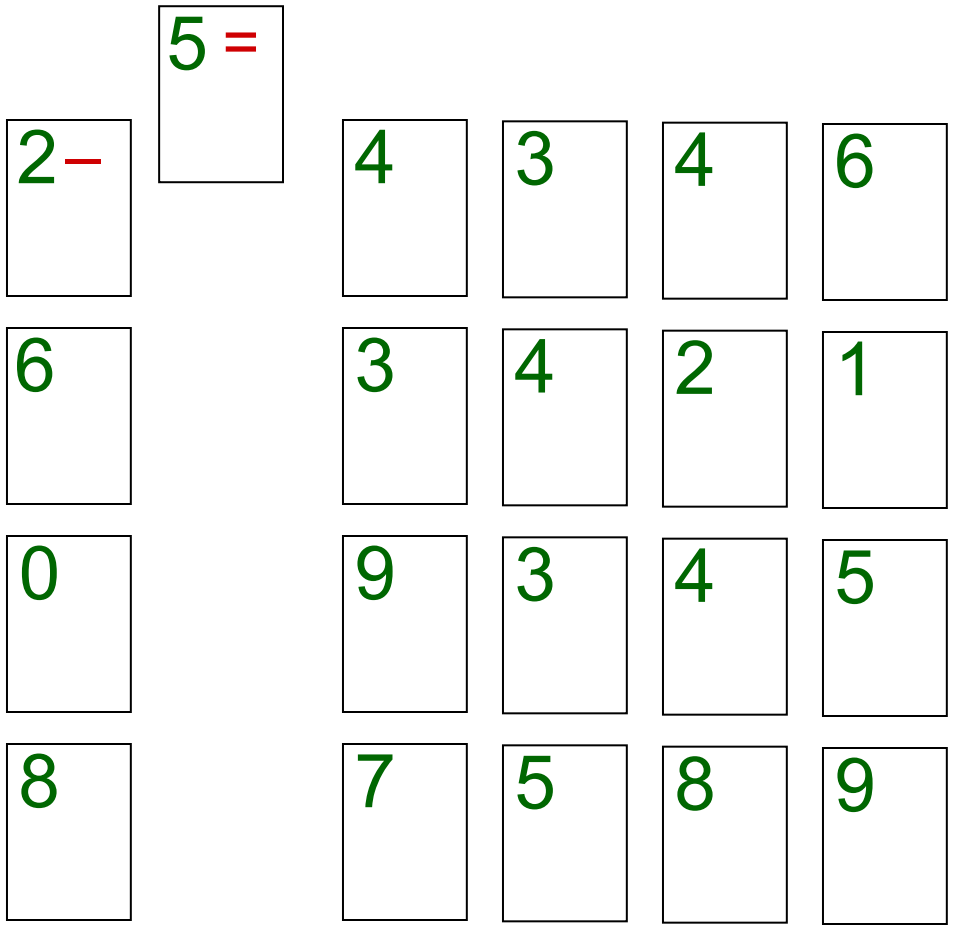
Layout: Each player lays 20 cards face up.

Goal: To be the first to cover a row, column, diagonal, or the four corners.

Addition Bingo



Subtraction Bingo



Short Chain Solitaire

A chain is composed of links.

Each link (after the first two) is formed by adding the previous two numbers, while disregarding any 1s in the tens place.

1	3	9	7
8	4	2	6
9	7	1	3
7	1	3	9
6	8	4	2
3	9	7	1
9	7	1	3
2	6	8	4
1	3	9	7

Short Chain Solitaire

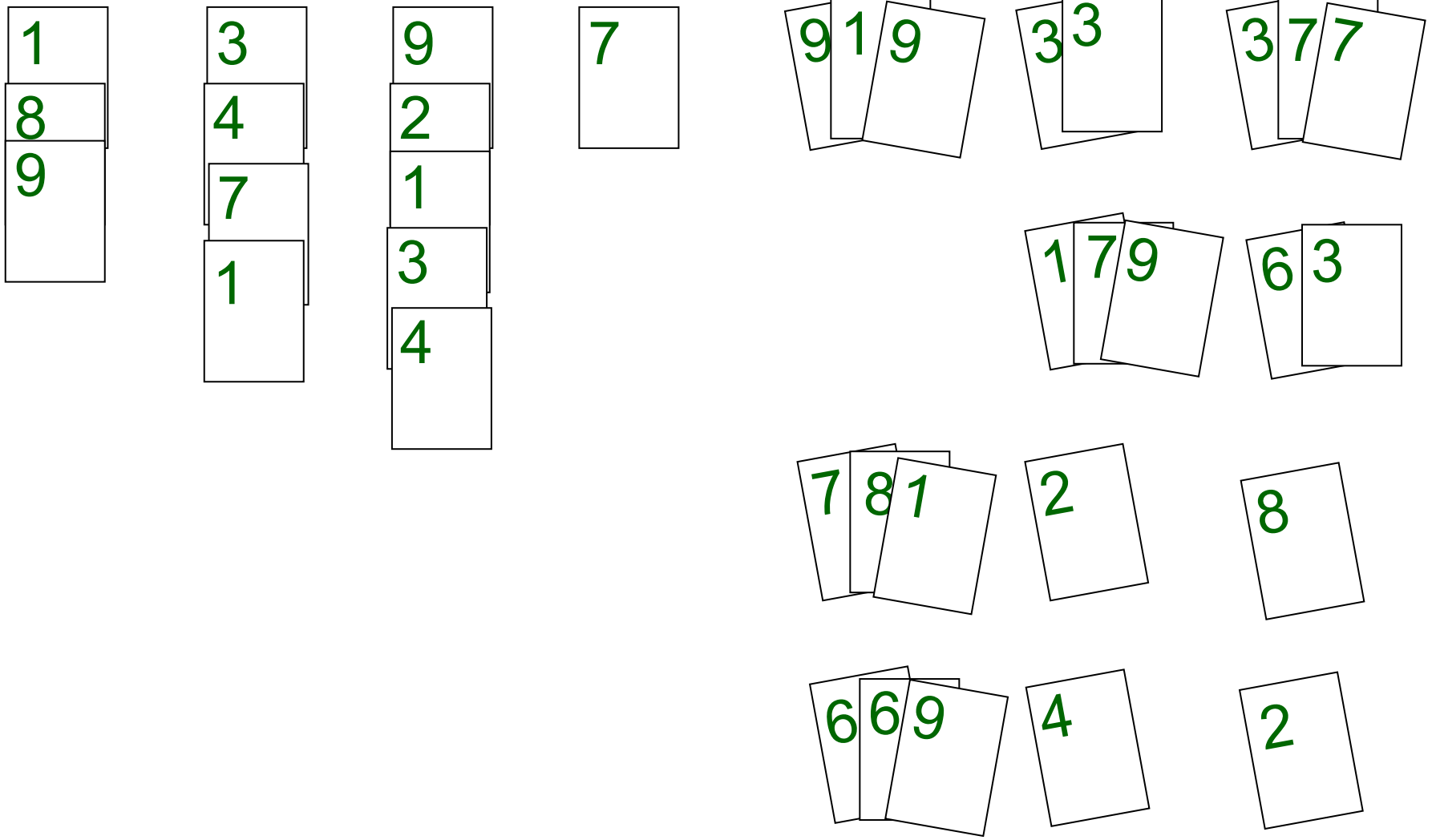
Objective: To provide reinforcement of addition facts.

Goal: To build the four chains.

Cards: 36 cards specific cards.

Layout: Lay cards in fans of three.

Short Chain Solitaire



Short Chain Solitaire

- 97 of the 100 addition facts are used. Only 0 + 0, 5 + 0, and 5 + 5 are omitted.
- Cannot be won if an error is made.
- Using some strategy, a player can win about three-fourths of the time. Several players can work together to win.
- Best of all, these Chain Solitaire games provide hours of fun!
- Nine variations available.

Short Chain Subtraction

Each link (after the first two) is formed by subtracting the previous two numbers, while assuming the 1 in the tens place is present when needed.

1	3	9	7
2	6	8	4
9	7	1	3
3	9	7	1
6	8	4	2
7	1	3	9
9	7	1	3
8	4	2	6
1	3	9	7

Mental Addition

10
25
30
40
55
65
80

$$65 + 15 =$$

$$65 + 10 + 5 =$$

Corners™

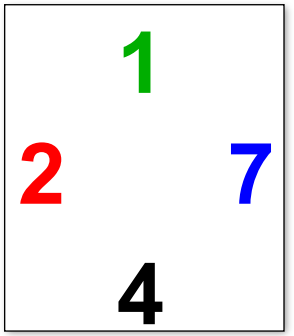
Objective: To practice the facts that total 5, 10, 15, and 20.

To practice mental math.

Goal: To have the highest score.

Number of Players: From 2 to 6, however 3 or 4 work best.

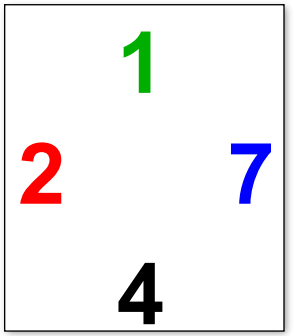
Cards: Corner™ cards.



Corners™

Rules:

- Match the colors.
- To score, sum must equal 5, 10, 15 or 20.
- May have scoreless matching, such as 2&2.
- Play on the last card played, or play to any corner.



Top and Bottom Corners™

Objective: To practice scoring for positive and negative numbers.

Rules:

- Sums must equal 5, 10, 15 or 20.
- Tops and bottoms are positive numbers; sides are negative numbers.
- Corners will create both positive and negative numbers. Final result will vary depending on values.

Multiples Solitaire

Objective: To provide practice in recognizing multiples.

Number of Players: One.

Cards: Any four sets of multiplication cards.

Deal: Lay the cards face up in fans of three.

Goal: To collect the four sets in order.

Multiples Solitaire

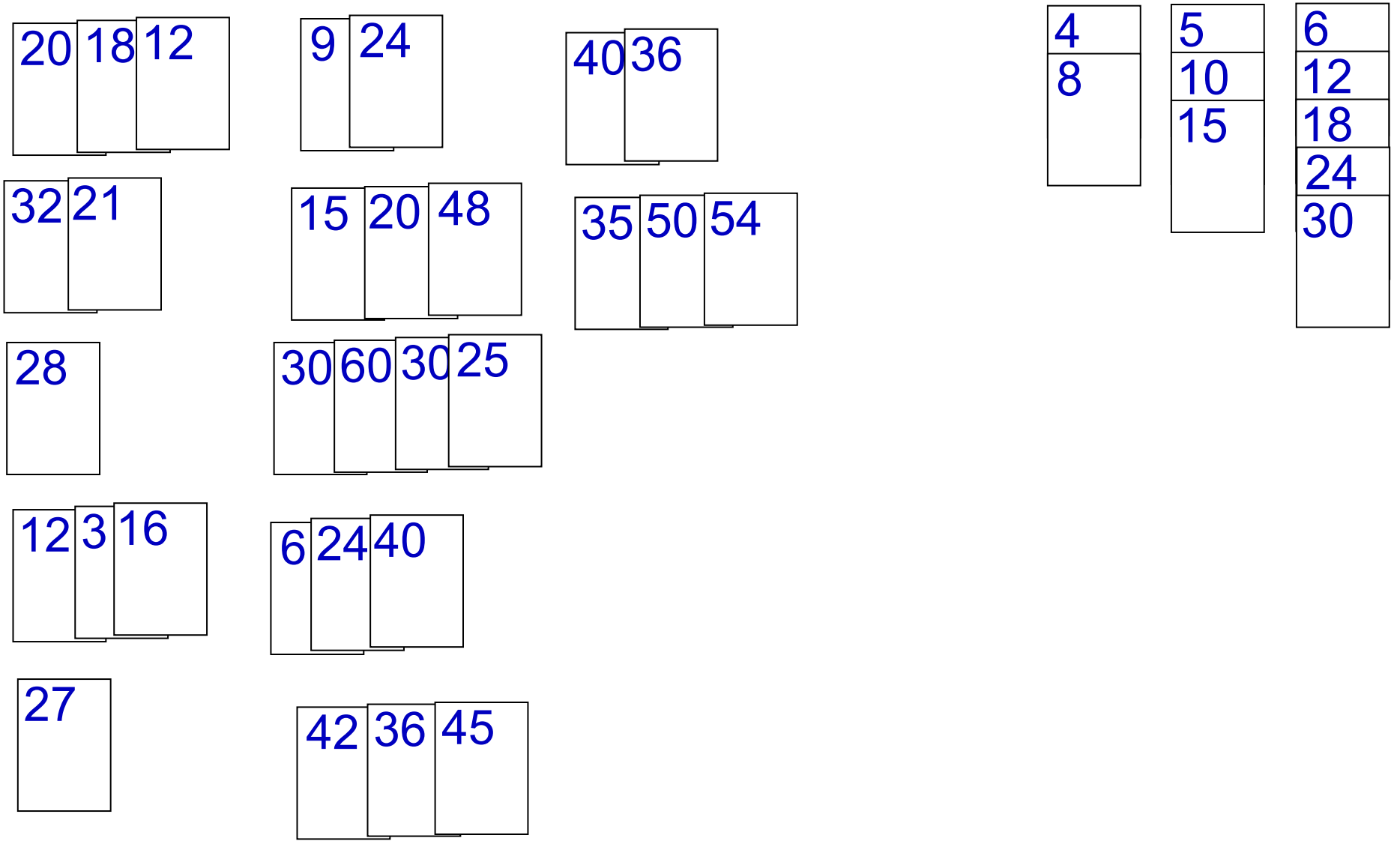
Rules:

1. Only the top card of any fan may be played.

2. Columns are started with the lowest number of a set, as they become available.

3. The top card of a fan may be moved to another fan if the top number of the new fan immediately follows (in one of the sets being used) the card being moved.

Multiples Solitaire



Short Multiplication Chart

1									
2	4								
3	6	9							
4	8	12	16						
5	10	15	20	25					
6	12	18	24	30	36				
7	14	21	28	35	42	49			
8	16	24	32	40	48	56	64		
9	18	27	36	45	54	63	72	81	
10	20	30	40	50	60	70	80	90	100

Ring Around the Products

Objective: To review the multiplication facts.

Number of Players: Two to four.

Cards: Multiplication cards and a deck of basic number cards without the 0s.

Goal: To collect the most multiplication cards.

Ring Around the Products

2	6	3	5	1
8	54	12	42	7
5	50	15	9	8
9	1	6	8	3

1									
2	4								
3	6	9							
4	8	12	16						
5	10	15	20	25					
6	12	18	24	30	36				
7	14	21	28	35	42	49			
8	16	24	32	40	48	56	64		
9	18	27	36	45	54	63	72	81	
10	20	30	40	50	60	70	80	90	100

Equal Quotients

Objective: To form division equations and use the basic division facts.

Number of Players: Two to four.

Cards: The multiplication cards and the basic number cards without the 0s and 1s.

Goal: To collect the most cards.

Equal Quotients

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

24	6
45	5

14	16	35	60
8	4	7	3

24	18	30	56
2	9	6	4

Division War

Objective: To practice finding quotients quickly.

Number of Players: Two.

Cards: About 40 multiplication cards and an equal number of basic cards without the 0s.

Goal: To collect the most cards.

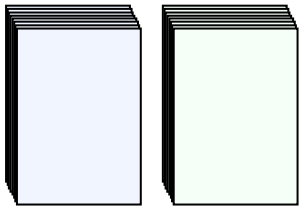
Division War

Note: Division is **more** than the inverse of multiplication. The quick recognition of division facts is not sufficient.

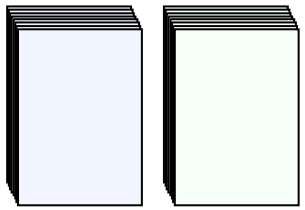
When dividing by 6, you need to recognize that 48, as well as 49, 50, 51, 52, and 53 will give 8 as the quotient, however, all but 48 have a remainder.

Division War

1									
2	4								
3	6	9							
4	8	12	16						
5	10	15	20	25					
6	12	18	24	30	36				
7	14	21	28	35	42	49			
8	16	24	32	40	48	56	64		
9	18	27	36	45	54	63	72	81	
10	20	30	40	50	60	70	80	90	100



40 6



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Division War Variation

Rather than the person with the greater **quotient** taking all the cards,

have the person with the greater **remainder** take all the cards.

In Conclusion …

- Games provide instant feedback.
- Games provide interesting repetition needed for automatic responses in a social setting.
- More importantly, games provide an application for the new information!

In Conclusion …

Math needs to be taught so
95 percent is understood and
only 5 percent memorized.

Richard Skemp
– major pioneer in
mathematics education

In Conclusion …

Our goal as a teacher of mathematics
is to help our children transform,
expand, and refine these beginning ideas
into deeper mathematical thinking.

– Dr. Joan A. Cotter