# Amazing Arrays

**Directions:** Cut out the cards and place them face down in a pile. Each player will pick up a card and use chalk to draw a picture that represents the array and a repeated addition sentence. Switch cards and check if your opponent was correct. Award a point for each correct answer.

3 rows of 5	4 columns of 3
2 rows of 7	3 columns of 2
5 rows of 5	6 columns of 4

# Amazing Arrays

5 rows of 1	1 row of 12
8 rows of 3	5 columns of 6
9 rows of 4	3 columns of 3
2 rows of 10	2 columns of 5



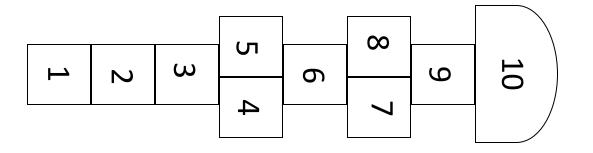
1. **Draw a hopscotch design on the ground.** Number the boxes 1-10 as shown. Add a math problem to each space. This is a great way to practice your multiplication, division, addition, or subtraction facts. Some

cards have been provided but feel free to make up your own.

- 2. Throw a flat stone or similar object (small beanbag, shell, button, plastic toy) to land on square. It has to land inside the square without touching the border or bouncing out. If you don't get it within the lines, you lose your turn and pass the stone to the next person. If you do get it, however, go on to the next step.
- 3. Hop through the squares, skipping the one you have your marker on. Each square gets one foot. Which foot you start with is up to you. You can't have more than one foot on the ground at a time, *unless* there are two number squares right next to each other. In that case, you can put down both feet simultaneously (one in each square). Always keep your feet inside the appropriate square (s); if you step on a line, hop on the wrong square, or step out of the square, you lose your turn.
- 4. **Pick up the marker on your way back.** When you get to the last number, turn around (remaining on one foot) and hop your way back in reverse order. While you're on the square right before the one with your marker, lean down (probably on one foot still!) and pick it up. Then, skip over that square and finish up.
- 5. **Pass the marker on to the next person.** If you completed the course with your marker on square one (and without losing your turn), then throw your marker onto square two on your next turn. Your goal is to complete the course with the marker on each square. The first person to do this wins the game!

Hopscotch can be played with just one person. If that's your case, make up the rules as you see fit!

Change the level of difficulty by changing the board.





Pick a card. Begin with the number on your card. Each time you hop continue adding or subtracting the numbers identified in each hopscotch box.

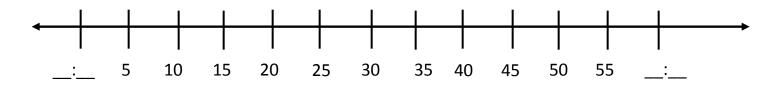
345	127	45
615	227	63
29	199	800

$\frac{1}{200} + \frac{1}{200} + \frac{1}$			
Add 30	Add 120	Subtract 50	
Subtract 19	Add 25	Add 10	
Subtract 10	Add 110	Subtract 90	



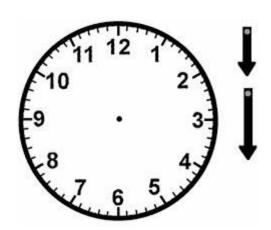
#### <u>Time</u>

Create a number line to represent a clock.



Pick a time card.

Label the starting hour and ending hour.



Hop down the number line to identify the minutes.

This can be played one player at a time or as a group.

## <u>OR</u>

Draw an analog clock.

Use chalk to draw the hour and minute hand for the selected time card.

You can also use your arms and legs to act out the time.



Time Cards

1:05	1:05 3:30 2:15	
5:45	11:50	9:20
8:10	6:00	4:55



Time Cards

12:35	2:05	6:45
9:15	3:55	8:25
11:10	4:50	8:40

# Math Card Games



# Math War

#### **Materials:**

1 deck of playing cards (without face cards) for each pair of students

# Addition War

### Directions

One player shuffles and divides the cards equally between both players, placing the cards face down between them.

Each player turns over 3 cards at the same time.

The first player to say the sum of all three cards wins and takes the cards.

Play continues until one player has most (or all) of the cards.

# Variation

- One player shuffles and divides the cards equally between both players, placing the cards face down between them.
- Each player turns over 2 cards at the same time and orders them from greatest to least.

The first player to say the difference of the cards wins and takes the cards.

Play continues until one player has most (or all) of the cards

\* Make two or three digit numbers by grabbing two or three cards at a time.







#### Materials:

Use a standard deck of cards to play this game at two levels:

I. Use the cards 1-10, Aces=1.

II. Use the cards 1-10 and all face cards with the following values:

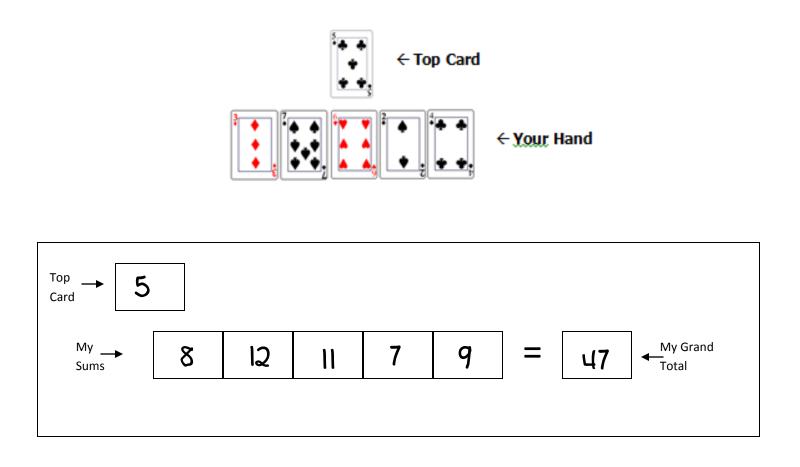
Aces = 1, Jacks = 11, Queens = 12, Kings = 13 and Jokers = 15.

#### Playing the Game:

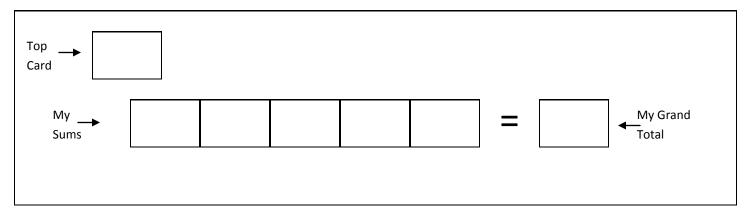
Shuffle the deck and hand 5 cards to each player.

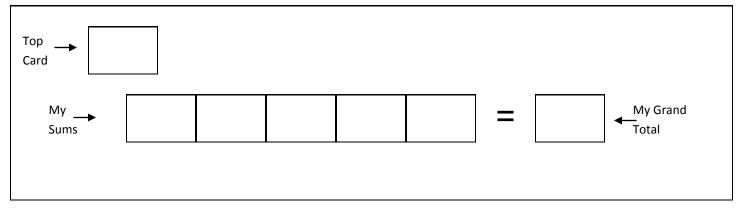
Take the next card from the deck and place it in the middle of the table. Everyone uses this card as their top card.

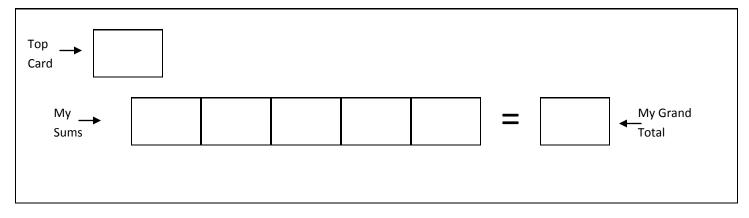
Every player adds the value of the top card to each of their 5 cards and add these sums to the score sheet. Add up all of the sums to find the grand total. The player with the greatest grand total wins the hand.

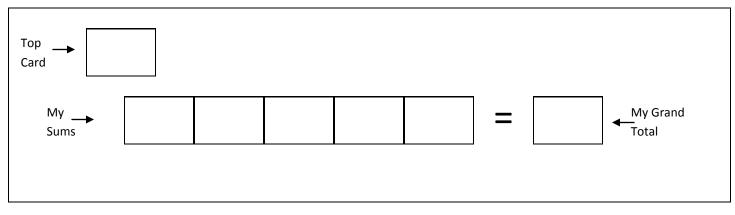












## MAKE THE MOST OF IT:

Remove kings and jacks from the deck. Ace is one and Queen is zero. Players take turns drawing one card at a time, trying to create the largest 5 digit number possible. As each card is drawn it is placed (and cannot be moved) into the ones, tens, hundreds, thousands, or tenthousands place. When the sixth card is drawn, the player can choose one of the cards on the table to discard and replace it with the sixth card. Largest 5 digit number wins.

Make this game easier or harder by varying the number of digits.



#### <u>MAKE 100:</u>

In this game Aces are one, Queens are zero, and Kings and Jacks are wild cards. Each game has 5 rounds.

To play deal six cards to each player. Players choose any four of the cards to make two doubledigit numbers that when added come as close as possible to the total of 100. Wild cards can be assigned any value. Players record their numbers and the sums on the score sheet. The player's score for each round is the difference between the sum and 100 (for example sums of 95 and 105 both score 5 points). The used cards are discarded and the two cards remaining in each hand are kept for the next round. For rounds 2 to 5, deal out four cards to each player and make two double-digit numbers, add them, and score your points. At the end of five rounds, the player with the lowest value wins.

Score Sheet:

Round 1:	_+	_ =	points
Round 2:	+	_ =	points
Round 3:	+	_ =	points
Round 4:	+	_ =	points
Round 5:	_ +	_ =	points



# SALUTE:

This game helps students practice adding (or multiplying) and finding the missing addend (or factor).



This is a game for three players. Remove the face cards from a regular deck of cards (ace represents one).

Deal out the cards evenly to two players who sit facing each other; each holds the stack of cards face down.

The third player sits where s/he can see the other two players. When the third player says "Salute," the two players with cards simultaneously take the top cards off their respective piles and hold them on their foreheads with the face of the card outwards so that they can only see the other person's card.

The third player announces the sum (or product for a more advanced version) of the two cards. Each of the two players holding a card tries to be the first to announce the number on his own card (which he cannot see).

The winner takes both cards. Rotate players so everyone gets a chance to be the one who says, "salute," and gives the sum and product.

# **Odd-Even Race**

## Players: Groups of two or more

<u>Materials</u>: Deck of cards, Ace worth 11, Jack worth 12, Queen worth 13, King worth 14, scratch paper

How to Play: Place one odd numbered card and one even numbered card in the center of the table. Players split the rest of the deck.



race to get hu of all of their cards by placing their odd

number cards on the odd stack and the even number cards on the

even stack.

The first player to correctly get rid of all of their cards wins!

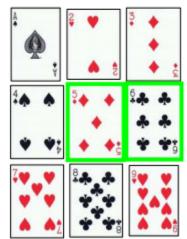
# **Addition Squares**

Players: Groups of two

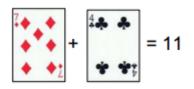
Materials: Cards Ace through 9, all face cards and tens removed

Skill: Number sense and addition

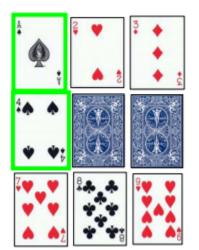
**How to Play:** Place one set of Ace through nine cards in order, face up, in a 3 X 3 grid. The other three sets of Ace through nine cards are shuffled and turned face down.

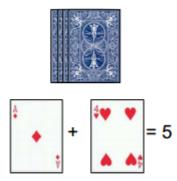




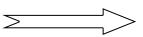


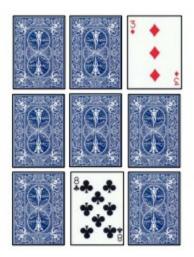
Player 1 selects the top two cards from the shuffled deck and determines the sum of the two numbers. Player 1 then turns over any number or numbers of the playing grid that have the same sum. In our example, we chose 5 and 6 for the sum of 11, but there are other combinations that could have been made.

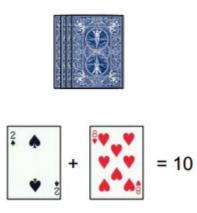




Player 1 then draws the next two cards of the shuffled deck and repeats.

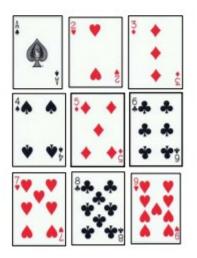






Player 1: score for the round is 11

Player 1 continues until they can no longer turn over the *exact sum* drawn from the face down deck. If there are numbers are on the playing grid still showing, Player 1 adds those numbers together and that is their score.





At this point, the grid is reset with all grid cards facing up and the drawing deck is reshuffled and it is now Player 2's turn. Lowest score wins the round with zero being a perfect score.

After playing three rounds, add up the scores from each round and the player with the *lowest total points is the game winner*.