

Box Cars and One-Eyed Jacks

**FACT FLUENCY**  
**GRADE 4-6**

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## Salute

Box Cars "All Hands On Deck" Mystery Number (adapted)

**Concepts:** Missing Addend, Factor

**Equipment:** Cards 0-12 (J=11 Q=12 K=0)

**Goal/Object:** Figure Out value of the card on your head

Usually 3 players with one player taking the role of "General". The General says "salute". The other two players take the card from the top of their deck and **WITHOUT LOOKING AT IT** place it on their forehead so everyone else can see what the card on their forehead is. The General Adds the two cards together and says "The sum of your two cards is...." The two players then use the sum and the card they can see on their opponent's forehead to try and figure out their own card.

**Variations:** (1) Multiplication (take out 0s)  
 (2) 4 Players (one General, 3 soldiers)  
 (3) Red = neg integers / Black = pos integers

# WHAT'S UNDER MY THUMB MULTIPLICATION

## PLAYER ONE

___ x ___ =	___ x ___ =
___ x ___ =	___ x ___ =
___ x ___ =	___ x ___ =
___ x ___ =	___ x ___ =
___ x ___ =	<b>TOTAL DICE IN TRAY =</b>

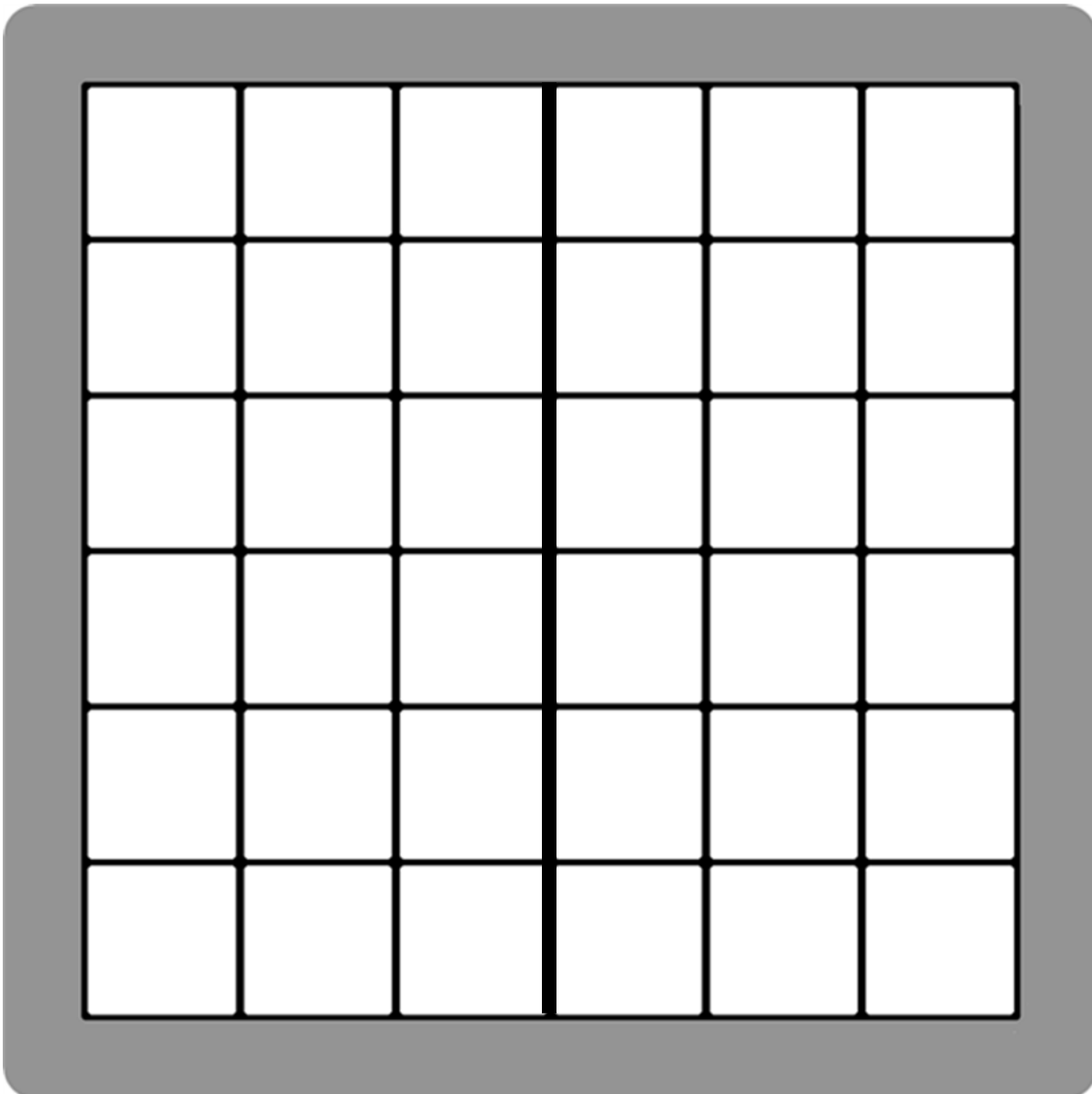
## PLAYER TWO

___ x ___ =	___ x ___ =
___ x ___ =	___ x ___ =
___ x ___ =	___ x ___ =
___ x ___ =	___ x ___ =
___ x ___ =	<b>TOTAL DICE IN TRAY =</b>

# 36 / 72 SLAM DUNK

PLAYER  
ONE

PLAYER  
TWO



- ▶ Each player takes 18 dice of own color.
- ▶ Each player rolls 2 or 3 dice, multiplies.
- ▶ Player with greatest product places them into their side of the tray, least product places in lid.
- ▶ Player with the most dice in their side of the tray at the end of the game wins.

# SUPER MUSH HORSE RACE

	<b>TARGET</b>	<input type="text"/>
1.	_____ =	_____
2.	_____ =	_____
3.	_____ =	_____
4.	_____ =	_____
5.	_____ =	_____
6.	_____ =	_____
	<b>TOTAL POINTS</b>	<input type="text"/>

	<b>TARGET</b>	<input type="text"/>
1.	_____ =	_____
2.	_____ =	_____
3.	_____ =	_____
4.	_____ =	_____
5.	_____ =	_____
6.	_____ =	_____
	<b>TOTAL POINTS</b>	<input type="text"/>

- ▶ All dice are super mushed.
- ▶ Referee calls target.
- ▶ Teams now use all their dice to make math sentences that equal the target.
- ▶ All operations can be used and 3-4 dice must be used in each sentence.
- ▶ Score 5 points per sentence.

# SQUARE DOUBLING

Skills: Patterning, addition with multiple addends, problem solving.

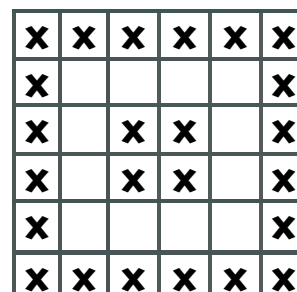
Players : 2

Equipment: 12 dice of each of two colors, two dice trays.

To Begin: Players take 12 dice of their color. Then players take turns rolling their dice one at a time and placing them into a square on their dice tray.

Once all twelve spaces in the square have been filled, players sum up the rows and columns and add the totals to their score. However, only rows and columns with doubles in them (for example, a row with two 4's or a column with two 6's) count for scoring!

If all four dice in a row or column have different numbers, they add no points to the player's score. The player with the highest score wins the game!



*Only the clear spaces on this tray are used in this game!*

If a player rolls a number they don't think will help them score, they can re-roll it as a "reject roll." Use this wisely, though! Only four reject rolls are allowed per player per game.

Example: Here's what a player's gameboard might look like at the end of a game. Let's score it!

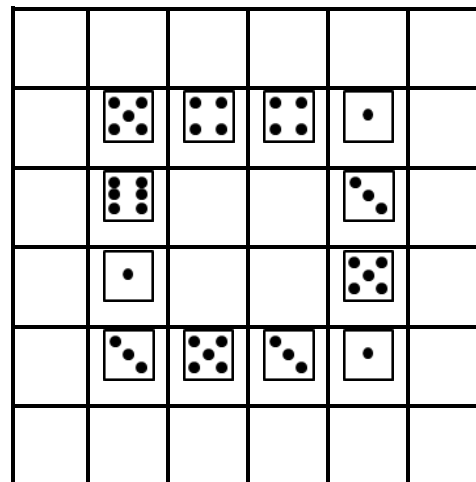
*Left Column:* No doubles! No score.

*Right Column:*  $1+3+5+1=10$  (double 1s)

*Top Row:*  $5+4+4+1=14$  (double 4s)

*Bottom Row:*  $3+5+3+1=12$  (double 3s)

Our total score:  $0+10+14+12=36$



Variation: To increase difficulty, roll 20 dice and fill in the outside edge of the dice tray. Since rows and columns in this variation have six spaces, players must place three-of-a-kind in them to score!

# SLAM DUNK WITH REGROUPING

MY ROLLS

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MY ROLLS

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# ROLL A 100

- LEVEL:** Grade 1 - 3 (Variation: Grade 2 - 5)
- SKILLS:** Adding 10's to 100, probability
- PLAYERS:** 2 - 4
- EQUIPMENT:** Four decadice, gameboard (see reproducibles), pencil
- GETTING STARTED:** The goal of the game is to find numbers that when added, equal the sum of 100.

## EXAMPLE:

### Round One

Player One rolls:



Player One selects  $80 + 20 = 100$  and earns 2 points.

Player Two rolls:



Player Two selects  $50 + 50 = 100$  and earns 2 points.

### Round Two

Players may combine more than two dice to equal 100. For example:

Player One rolls:



Player One selects  $50 + 40 + 10 = 100$  and earns 3 points.

Players may have two separate combinations to earn 4 points. For example:

Player Two rolls:



Player Two selects  $80 + 20 = 100$  and  $40 + 60 = 100$  and earns 4 points.

### Round Three

Players earn an additional 2 bonus points if all four die equal 100. For example:

Player One rolls:





# 100 Board Wipe Out

Roll 1	Roll 4
Roll 2	Roll 5
Roll 3	Roll 6

- Roll 3 to 5 dice, record numbers, create math sentence
- Mark on 100 Board at answer or on answer sheet
- Keep making math sentences with same roll until no longer possible, then re-roll
- RECORD IN WRITING ALL MATH SENTENCES.

=	1
=	2
=	3
=	4
=	5
=	6
=	7
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=	99
=	100

# TO SUM IT UP

- LEVEL:** Grade 3 and up
- SKILLS:** adding 3 digit numbers
- PLAYERS:** 2 or more, or teacher vs whole group
- EQUIPMENT:** cards (Ace=1) - 10 (10=0), one gameboard for each player (see reproducibles)

**GETTING STARTED:** The object of this game is to make the greatest sum. The deck is placed face down. A card is drawn and is placed face up. Each player selects a space on their gameboard and writes the number of this card in it. Eight more cards are drawn and players proceed to fill in their gameboards. Once all spaces are filled in, players complete the addition. The player with the greatest sum is the winner of that round and scores one point. As players have more experience with this game, they will develop strategies to maximize their chances.

Player 1	Player 2	Player 3
$\begin{array}{ c c c } \hline & 5 & \\ \hline 7 & & \\ \hline + & & \\ \hline \end{array}$	$\begin{array}{ c c c } \hline & 7 & \\ \hline 5 & & \\ \hline + & & \\ \hline \end{array}$	$\begin{array}{ c c c } \hline & & \\ \hline & & 5 \\ \hline + & 7 & \\ \hline \end{array}$

**EXAMPLE:** First card turned over is a 5. Second card turned over is a 7. Seven more numbers are drawn and completed gameboards could look like this:

Player 1	Player 2	Player 3
$\begin{array}{ c c c } \hline 3 & 5 & 4 \\ \hline 7 & 9 & 8 \\ \hline + & 0 & 6 & 2 \\ \hline 1 & 2 & 1 & 4 \\ \hline \end{array}$	$\begin{array}{ c c c } \hline 8 & 7 & 0 \\ \hline 5 & 4 & 3 \\ \hline + & 9 & 2 & 6 \\ \hline 2 & 3 & 3 & 9 \\ \hline \end{array}$	$\begin{array}{ c c c } \hline 9 & 0 & 2 \\ \hline 6 & 4 & 5 \\ \hline + & 8 & 7 & 3 \\ \hline 2 & 4 & 2 & 0 \\ \hline \end{array}$

Player 3 has the greatest sum and is the winner for this round.

# WHAT'S THE DIFFERENCE

- LEVEL:** Grade 3 and up
- SKILLS:** subtracting 3 digit numbers
- PLAYERS:** 2 or more, or teacher vs whole group
- EQUIPMENT:** cards (Ace=1) - 10 (10=0), one gameboard for each player (see reproducibles)
- GETTING STARTED:** The object of this game is to make the smallest difference. The deck is placed face down. A card is drawn and placed face up. Each player selects a space on their gameboard and writes the number of this card on it. Five more cards are drawn and players continue to fill in their gameboards. Once all spaces are filled in, players complete the subtraction. The player with the smallest difference is the winner for that round and scores one point. In the event of a tie, each player receives a point. Any negative difference causes that player to strike out for that round. As players have more experience with this game, they will develop strategies to maximize their chances.

	<b>Player 1</b>				<b>Player 2</b>		
		2				7	
-			7	-			2

**EXAMPLE:**

First card turned over is a 7. Second card turned over is a 2. Four more cards are drawn and completed gameboards could look like this:

	<b>Player 1</b>				<b>Player 2</b>		
	5	2	4		6	5	7
-	3	6	7	-	4	3	2
	1	5	7		2	2	5

Player number one has the smallest difference and is the winner for this round. The winner is the player with the most points after a set number of rounds or a set time limit.