

**box cars
and
one-eyed jacks[®]**

Presents

**What's your
Game
Plan?**

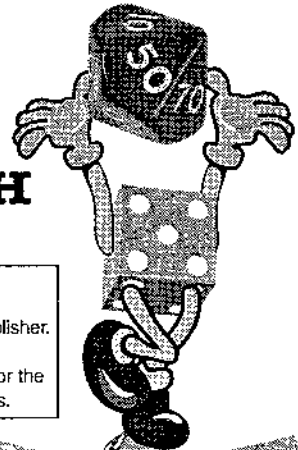
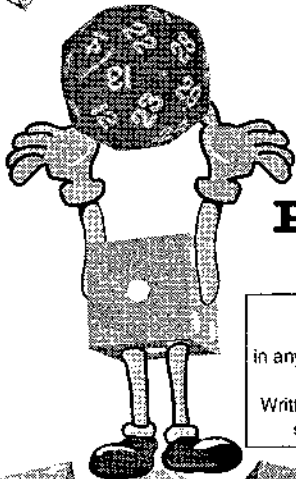
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HORSE RACE

4 LEVELS
OF
PLAY

2 DICERS
2 PLAY



This is a game for two Dicers to play at one time. Players use one tray divided so that each player uses only their half.

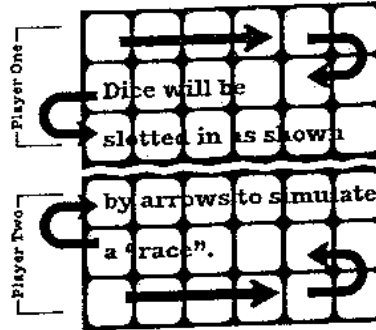
TO BEGIN

Each Dicer chooses eighteen dice of their own colour and these are removed from the tray.

THE GOAL

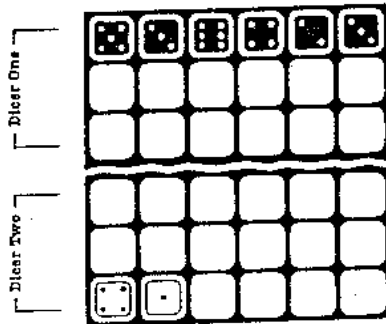
The goal of the game is to have the most dice in your side of the "horse race track" after all dice have been rolled out for the round. Dicers roll two dice at one time.

Dicers add their two dice and compare their sums. The Dicer with the greatest sum places them into their side of the "horse race track". Their opponent places their two dice into the lid (losing side). Dicers pick up two new dice, roll, add and compare their sums. The Dicer with the greatest sum places them into their side of the "horse race track" and their opponent places them into the lid. In the event of a tie sum, both Dicers place their dice into their own side of the "horse race track". Dicers roll out all remaining dice. The Dicer with the most dice on their side of the "horse race track" after nine tosses, is the winner.



The tray is divided between the two players as shown.

EXAMPLE



Play After 3 of 9 Rounds.

Toss 1

Dicer One + = 6 → WINS and places dice in tray

Dicer Two + = 2 → Tosses dice into lid

Toss 2

Dicer One + = 10 → WINS and places dice in tray

Dicer Two + = 2 → Tosses dice into lid

Toss 3

Dicer One + = 5 → TIE both players place dice in tray

Dicer Two + = 2

LEVEL 1

Play is outlined above, Dicers roll two dice and add.

LEVEL 2

Play as described in above rules, but now Dicers roll three dice and add for the greatest sum. The Dicer with the greatest sum (answer) places them into their side of the "horse race track".

$$\text{die with 3, 2, 1} + \text{die with 2, 1, 1} + \text{die with 1, 1, 1} = 9$$

LEVEL 3

Play as described in above rules, but now Dicers roll two dice and multiply $\text{die with 4} \times \text{die with 5} = 20$ for the greatest product. The Dicer with the greatest product (answer) places them into their side of the "horse race track".

LEVEL 4

Play as described in above rules, but now Dicers roll three dice, add two, and multiply by the third for the greatest product. See example.

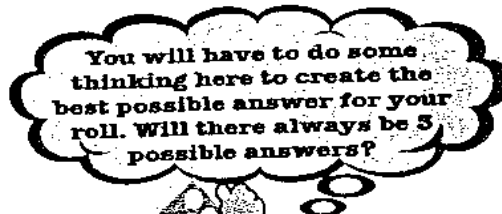
The Dicer with the greatest product places them into their side of the "horse race track".



$$(5 + 3) \times 6 = 48 \star \text{ Best Choice}$$



$$(6 + 3) \times 5 = 45$$

$$(6 + 5) \times 3 = 33$$



GOOD
LUCK!





Dear Parents,

This year, your child's math program includes a games component. Key concepts will be repeated and practised through games in class and at home with the Math Games Backpacks.

Math backpacks will come home with your child for the night, approximately twice each week. All materials should be returned when specified so that other children in the class can have their turn.


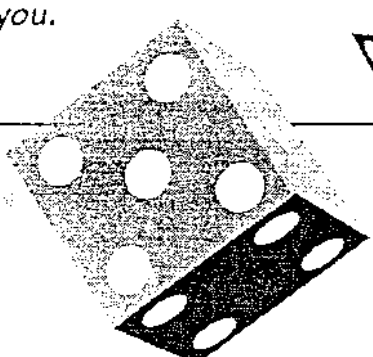
Included in the backpack are the rules for the math game, equipment, and a games book. The games book is for the students and parents to write about their experiences with the game—what they learned, liked about the game, tips to pass on to other classmates, etc. The children may need help and support to complete their writing.

Practice times do not need to be long; 10 to 15 minutes a day will "add up" over the course of the year and will benefit your child's mathematical development greatly.

Math games can be played with brothers or sisters as well. New games will be put into the backpacks every two weeks or so. If you have any special requests (e.g., games for adding, etc.), let me know.

Have fun! Shake, Rattle and Roll your way into our math program.

Thank you.



HUNDRED BOARD TIC TAC TOE

LEVEL:	Grade 1 and up
SKILLS:	Identification of place value 1 - 100
PLAYERS:	2
EQUIPMENT:	Hundred Board, two 10-sided dice or cards (Ace=1)-9, bingo chips (1 colour per player)

GETTING STARTED: Players select a colour of marker. The goal of the game is for players to get three bingo chips of their own colour in a row, either horizontally, vertically or diagonally. Player one rolls the dice and makes a two-digit number (ie., roll 4 and 7 and verbalizes "4 tens, 7 ones, : forty-seven", OR "7 tens, 4 ones, : seventy-four"). Player then covers the two corresponding spaces on the Hundred Board. Player two then takes their turn, rolling the dice and covering both of their numbers, remembering to verbalize the tens and ones place value to their opponent. Players continue to alternate turns trying to get TIC TAC TOE - THREE IN A ROW. When this happens the player removes their markers and counts 2 points for each marker (6 points for three in a row).

CAPTURING AN OPPONENT'S SPACE: If a player rolls a two-digit number that is occupied by their opponent then that player removes their opponent's marker and replaces it with one of their own. Each captured marker is worth 5 points.

ROLLING YOUR OWN SPACE: If a player rolls a one or two-digit number that they already occupy, they may roll again to get a new number.

Players continue to alternate turns for a set period of time. At the end of play, the player with the most points is the winner.

Hundred Board TIC TAC TOE

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
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

ADDITION TIC TAC TOE

- LEVEL:** Grade 2 and up.
- SKILLS:** Addition facts to 18
- PLAYERS:** 2
- EQUIPMENT:** Two 10-sided dice or cards (Ace=1)-9, bingo chips (1 colour per player), addition table to 18
- GETTING STARTED:** Players select a colour of markers. The goal of the game is for players to get three bingo chips of their own colour in a row, either horizontally, vertically or diagonally. Player one rolls the dice and adds them together, verbalizing the sum to their opponent (ie., player rolls 6 + 8; verbalizes "6 + 8 = 14 and 8 + 6 = 14") and covers the two corresponding spaces on the gameboard. Player two now rolls and covers their corresponding spaces on the gameboard. Players continue to alternate turns trying to get TIC TAC TOE - THREE IN A ROW. When this happens, the player removes their markers and counts 2 points for each marker (6 points for three in a row).

CAPTURING AN OPPONENT'S SPACE: If a player rolls a sum that is occupied by their opponent then that player removes their opponent's marker and replaces it with one of their own. Each captured marker is worth 5 points.

ROLLING YOUR OWN SPACE: If a player rolls a sum that they already occupy, they may roll again to get a new sum.

Players continue to alternate turns for a set period of time. At the end of play, the player with the most points is the winner.

Addition TIC TAC TOE

	0	1	2	3	4	5	6	7	8	9
0	0	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9	10
2	2	3	4	5	6	7	8	9	10	11
3	3	4	5	6	7	8	9	10	11	12
4	4	5	6	7	8	9	10	11	12	13
5	5	6	7	8	9	10	11	12	13	14
6	6	7	8	9	10	11	12	13	14	15
7	7	8	9	10	11	12	13	14	15	16
8	8	9	10	11	12	13	14	15	16	17
9	9	10	11	12	13	14	15	16	17	18

or Adding Fact Family TIC TAC TOE

MULTIPLICATION TIC TAC TOE

- LEVEL:** Grade 4 - 6
- SKILLS:** multiplication facts to 81, using a multiplication table
- PLAYERS:** 2
- EQUIPMENT:** cards (Ace=1) - 12 (Jack=11) (Queen=12) or two 12-sided dice, paper, pens, markers of two different colours, multiplication table to 144 (see reproducibles)

GETTING STARTED: Players select a colour of marker. The goal of the game is for players to get three or more of their markers in a row, either vertically, horizontally or diagonally. Player number one begins by drawing two cards and multiplying them together; verbalizing this fact to their opponent. A player would then cover all possible locations (ie: 2×8 , 8×2 , 4×4 if their product was sixteen) with their markers. Player number two then takes a turn. Players alternate turns until a player gets three or more of their markers in a row. When this happens, the player removes their markers and counts two points for each (ie. six points for three in a row or eight points for four in a row).

Players can steal an opponent's space in two different ways. First, when a player makes a product already occupied by an opponent, they replace their opponent's markers with their own. Each marker replaced is worth five points. Second, after a player verbalizes that their turn is over, the opponent gets an opportunity to cover any combinations that the opponent missed (ie. if the product is 6 and player number one covers 2×3 and 3×2 and says that they are finished, player number two can cover 1×6 and 6×1). No points are awarded for this type of steal. If a player draws two cards that they already have, they may draw two new cards.

Players continue to alternate turns for a set period of time. At the end of play the player with the most points wins.

MULTIPLICATION TIC TAC TOE

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

0 1 2 3 4 5 6 7 8 9

0
1
2
3
4
5
6
7
8
9

Box Cars and One-Eyed Jacks