

**box cars  
and  
one-eyed jacks®**

Presents

*What's your  
Game  
Plan?*

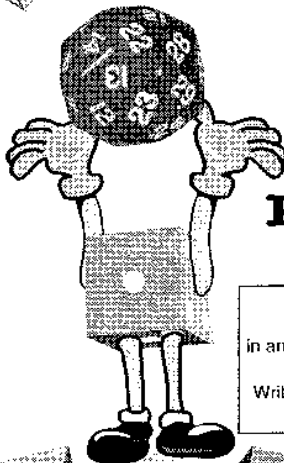
Presented by  
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## Notes:



## Games

as a

## Teaching Strategy



Make math fun & motivating;  
meaningful context for repetitive  
practice and exploration of concepts



Multi-sensory, manipulative  
experience - use all learning channels



Complement any existing  
mathematics program; reaches all  
levels in a class



Beyond rote memory - connections  
through patterns, strategy, talk



Rich in problem solving opportunities



Language and Communication;  
Writing in math journals



Opportunities to invent and create

## Make The Games Come To Life

- ◆ Every Student Participates - Not used as reward
- Games as Warm Ups
  - Short play period
  - Frequent 5-10 mins / day
- Games to Teach a Concept - Longer play period
  - Practice a concept
  - Review a concept
- Center Play
- Cross Graded Play
- Assignments
  - Students are the experts
  - Learn game & teach it
- ◆ Invent a Game
- Home Connections

**Get Rolling!**

Learn One New Game  
Every Week



## Notes:

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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.

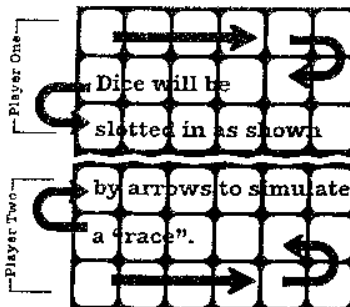
## TO BEGIN

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

## THE GOAL

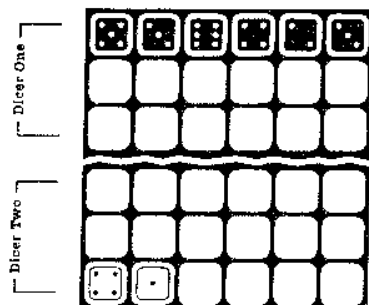
The goal of the game is to have the most dice in your side of the "horse race track" after all dice have been rolled out for the round. Dicers roll two dice at one time.

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 + = 8 → WINS and places dice in tray

Dicer Two + = 5 → Tosses dice into lid

### Toss 2

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

Dicer Two + = 3 → Tosses dice into lid

### Toss 3

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

Dicer Two + = 5

## 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".

$$\begin{matrix} \blacksquare & \blacksquare & \blacksquare \\ + & + & + \\ \hline \blacksquare & \blacksquare & \blacksquare \end{matrix} = 9$$

## LEVEL 3

Play as described in above rules, but now Dicers roll two dice and multiply  $\blacksquare \times \blacksquare = 20$  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".

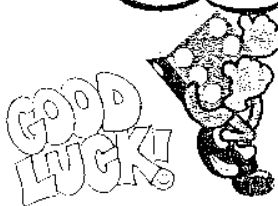


$$(5 + 3) \times 6 = 48 \rightarrow \text{Best Choice}$$

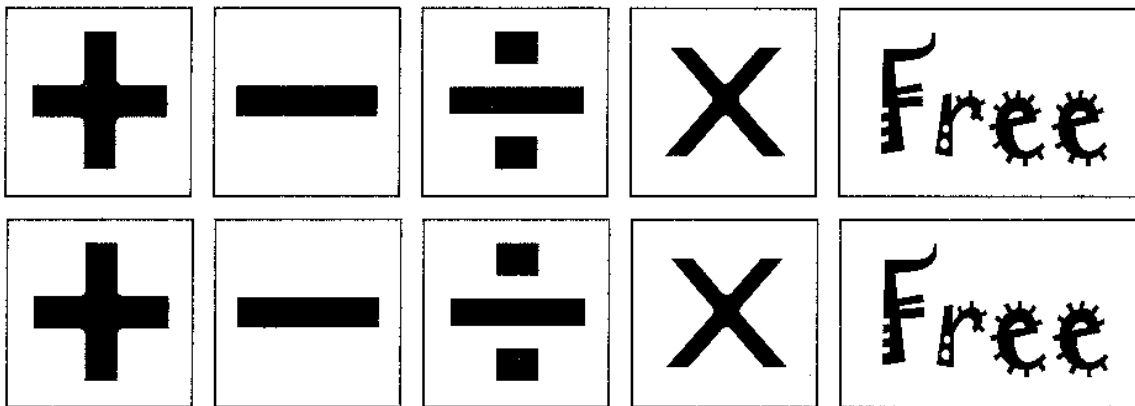
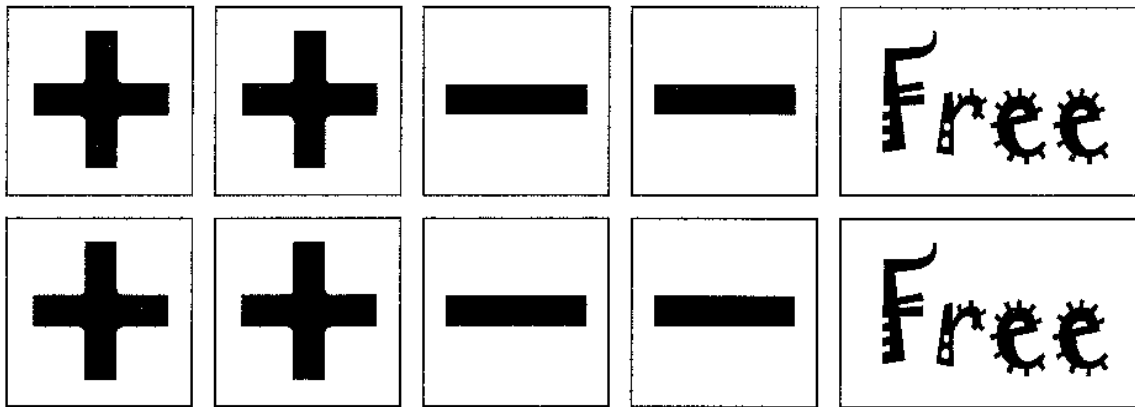
$$(6 + 3) \times 5 = 45$$

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

You will have to do some thinking here to create the best possible answer for your roll. Will there always be 3 possible answers?



# Double Dice Decisions



**GOAL:** The greatest accumulated sum wins

- 1) Roll the double dice
- 2) Decide which operation to use and record the math sentence
- 3) Bank your points and cover up that operation. That operation cannot be used again except as a free choice
- 4) Division sentences must have a remainder of zero in order to score

**EXAMPLE:**

ROLL

ACCUMULATED POINTS

- 1)  $6 - 2 = 4$
- 2)  $3 + 1 = 3$
- 3)  $4 + 3 = 7$
- 4)  $4 \times 2 = 8$
- 5)  $6 \times 3 = 18$

4  
+3 7  
+7 14  
+8 22  
+18

**40** Total Points

Chooses free →



# TICK TOCK ROLL A CLOCK

2  
Double Dicers  
to Play

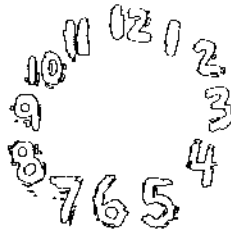


## WHAT YOU'LL NEED

Each Double Dicer needs one Three-In-A-Cube Die, paper, pencil.

## TO BEGIN

Each player needs to draw a clock as follows:

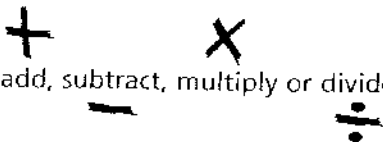


## THE GOAL

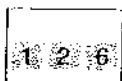
To be the first Double Dicer to circle all numbers on their clock.

## LET'S ROLL

Player One rolls the die and may now add, subtract, multiply or divide the three numbers to target any number between 1 - 12.



## EXAMPLE



Player One can circle on their clock, either:

$$6 \times 2 \times 1 = \textcircled{12} \text{ OR } 6 + 2 + 1 = \textcircled{9} \text{ OR } (6 \div 2) + 1 = \textcircled{4} \text{ etc.}$$

Players can circle only one number per roll. Players alternate rolling the die, analyzing their combinations, trying to be the first player to circle all the numbers on their clock. If a player is unable to find a combination for any of the remaining numbers, play continues to their opponent.



*Do you think there are certain numbers that will be more difficult to circle?*



*Play & Discover!*

# 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

	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

# MULTIPLICATION SCRAMBLE

0 - 9	_____	0 - 9	_____
10 - 19	_____	10 - 19	_____
20 - 29	_____	20 - 29	_____
30 - 39	_____	30 - 39	_____
40 - 49	_____	40 - 49	_____
50 - 59	_____	50 - 59	_____
60 - 69	_____	60 - 69	_____
70 - 79	_____	70 - 79	_____
80 - 89	_____	80 - 89	_____
90 - 99	_____	90 - 99	_____
100 - 109	_____	100 - 109	_____
110 - 119	_____	110 - 119	_____
120 - 129	_____	120 - 129	_____
130 - 139	_____	130 - 139	_____
140 - 149	_____	140 - 149	_____

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## THE BIG ROUND UP

10 20 30 40 50 60 70 80 90 100 110 120 130 140

10 20 30 40 50 60 70 80 90 100 110 120 130 140

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## TANGLE WITH TWENTY

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
X X X

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
X X X