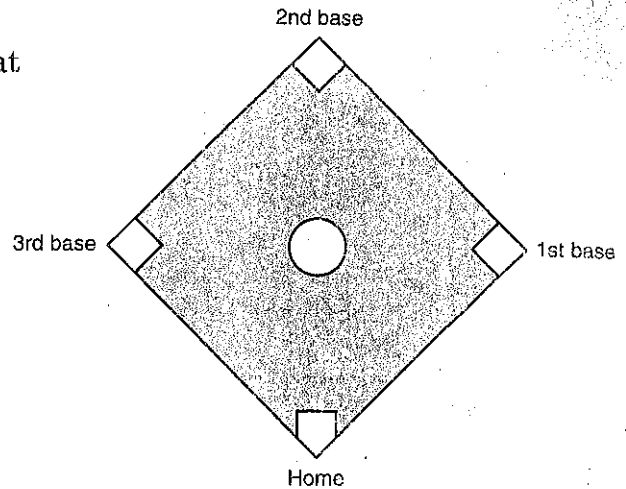


Baseball Multiplication (1 to 6 Facts)

- Materials**
- Baseball Multiplication Game Mat
(*Math Masters*, p. 31)
 - 2 six-sided dice
 - 4 pennies
 - calculator or a multiplication/division table



Players 2 or 2 teams

Object of the game To score the most runs in a 3-inning game.

Directions

Advance Preparation: Draw a diamond and label *Home plate*, *1st base*, *2nd base*, and *3rd base*. Make a Scoreboard sheet that looks like the one shown at the right.

Take turns being the *pitcher* and the *batter*. The rules are similar to the rules of baseball, but this game lasts only three innings.

Inning		1	2	3	Total
Team 1	outs				
	runs				
Team 2	outs				
	runs				

1. At the start of the inning, the batter puts a penny on home plate. The pitcher rolls the dice. The batter multiplies the numbers rolled and gives the answer. The pitcher checks the answer and may use a calculator to do so.
2. If the answer is correct, the batter looks up the product in the Hitting Table at the right. If it is a hit, the batter moves all pennies on the field the number of bases shown in the table. If a product is not a hit, it is an out.
3. An incorrect answer is a strike and another pitch (dice roll) is thrown. Three strikes make an out.
4. A run is scored each time a penny crosses home plate. The batter tallies each run scored on the Scoreboard.
5. After each hit or out, the batter puts a penny on home plate. A player remains the batter for three outs. Then the players switch roles. The inning is over when both players have made three outs.

1 to 9	Out
10 to 18	Single (1 base)
20 to 28	Double (2 bases)
30 to 35	Triple (3 bases)
36	Home Run (4 bases)

The player who has more runs at the end of three innings wins the game. If the game is tied at the end of three innings, play continues into extra innings until one player wins.



Baseball Multiplication (Advanced Versions)**1 to 10 Facts****Materials** □ number cards 1–10 (4 of each)

Follow the basic rules. The pitcher draws two cards from the deck. The batter finds their product and uses the Hitting Table at the right to find out how to move the pennies.

2 to 12 Facts**Materials** □ 4 six-sided dice

Follow the basic rules. The pitcher rolls four dice. The batter separates them into two pairs, adds the numbers in each pair, and multiplies the sums. Use the Hitting Table at the right.

How you pair the numbers can determine the kind of hit you get or whether you get an out. For example, suppose you roll a 1, 2, 3, and 5. You could add pairs in different ways and multiply as follows:

one way	a second way	a third way
$1 + 2 = 3$	$1 + 3 = 4$	$1 + 5 = 6$
$3 + 5 = 8$	$2 + 5 = 7$	$2 + 3 = 5$
$3 * 8 = 24$	$4 * 7 = 28$	$6 * 5 = 30$
Out	Single	Single

Three-Factors Game**Materials** □ 3 six-sided dice

The pitcher rolls three dice. The batter multiplies the three numbers (factors) and uses the Hitting Table at the right.

10s * 10s Game**Materials** □ 4 six-sided dice

The rules for this game are the same as for the **2 to 12 Facts** game with two exceptions:

- A sum 2 through 9 represents 20 through 90. A sum 10 through 12 represents itself. For example,
Roll 1, 2, 3, and 5. Get sums 6 and 5. Multiply $60 * 50$.
Roll 3, 4, 6, and 6. Get sums 12 and 7. Multiply $12 * 70$.
- Use the Hitting Table at the right.

Hitting Table
1 to 10 Facts

1 to 21	Out
24 to 45	Single (1 base)
48 to 70	Double (2 bases)
72 to 81	Triple (3 bases)
90 to 100	Home Run (4 bases)

Hitting Table
2 to 12 Facts

4 to 24	Out
25 to 49	Single (1 base)
50 to 64	Double (2 bases)
66 to 77	Triple (3 bases)
80 to 144	Home Run (4 bases)

Hitting Table
Three-Factors Game

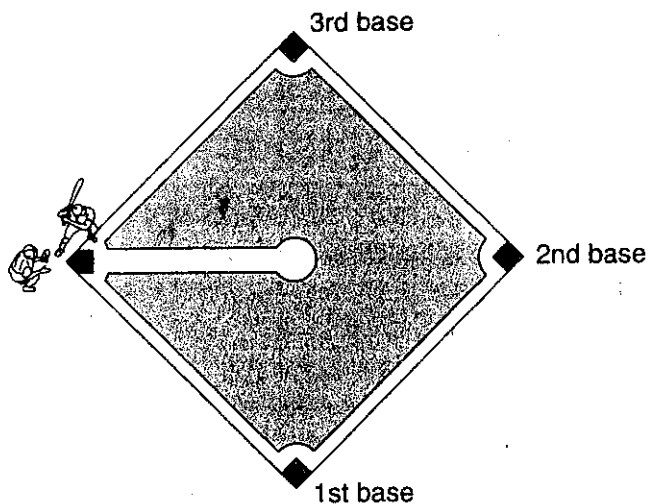
1 to 54	Out
60 to 90	Single (1 base)
96 to 120	Double (2 bases)
125 to 150	Triple (3 bases)
180 to 216	Home Run (4 bases)

Hitting Table
10s * 10s Game

100 to 2,000	Out
2,100 to 4,000	Single (1 base)
4,200 to 5,400	Double (2 bases)
5,600 to 6,400	Triple (3 bases)
7,200 to 8,100	Home Run (4 bases)



Baseball Multiplication Playing Mat



Hitting Table 1 to 10 Facts

1 to 21	Out
24 to 45	Single (1 base)
48 to 70	Double (2 bases)
72 to 81	Triple (3 bases)
90 to 100	Home Run (4 bases)

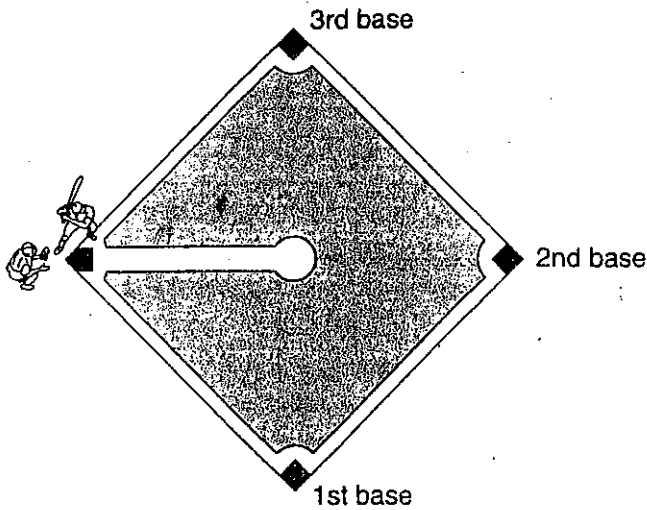
Inning		1	2	3	Total
Team 1	Outs				
	Runs				
Team 2	Outs				
	Runs				

Inning		1	2	3	Total
Team 1	Outs				
	Runs				
Team 2	Outs				
	Runs				

Inning		1	2	3	Total
Team 1	Outs				
	Runs				
Team 2	Outs				
	Runs				

Inning		1	2	3	Total
Team 1	Outs				
	Runs				
Team 2	Outs				
	Runs				

Baseball Multiplication Playing Mat



Hitting Table 2 to 12 Facts	
4 to 24	Out
25 to 49	Single (1 base)
50 to 64	Double (2 bases)
66 to 77	Triple (3 bases)
80 to 144	Home Run (4 bases)

Inning		1	2	3	Total
Team 1	Outs				
	Runs				
Team 2	Outs				
	Runs				

Inning		1	2	3	Total
Team 1	Outs				
	Runs				
Team 2	Outs				
	Runs				

Inning		1	2	3	Total
Team 1	Outs				
	Runs				
Team 2	Outs				
	Runs				

Inning		1	2	3	Total
Team 1	Outs				
	Runs				
Team 2	Outs				
	Runs				