

Math Games Teacher Guide

Math Games are engaging and enjoyable ways for children to explore math and master basic math facts. Math Games offer fun, hands on ways to practice multiplication in a setting that allows children to transfer skills they learn in class! *Multiplying by 8* will help your students practice and reinforce their 8's times tables through play.

Package Contents:

This package consists of:

- 8 different game boards
- 1 blackline of 13 playing cards
- 1 blackline for the backs of the playing cards. (Note that the face of the cards is an inverted design of the game boards for easy identification.)

We also have included:

- 5 blacklines to be used as seat work in class or sent home as homework
- Flashcards and the flashcard answers
- A 5 minute timed test and pictograph to record test scores

All the above mentioned are reproducible.

Easy Assembly:

Assembly is easy!

Simply copy the game boards onto colored index or construction paper, laminate if desired.

Make five to six copies of the game cards on colored paper or card stock. Back the cards with the card backing design provided. Cut the game cards.

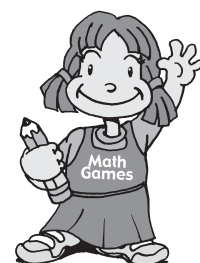
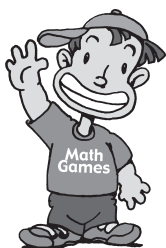
Use colored file folders to color code your Math Games according to the math concept (Multiplication-red, Measurement-blue, Geometry-yellow).

Copy the worksheets for homework and you are ready to go.

Keep the cards in a plastic baggie and store it all together in a file folder or large manila envelope for easy storage.

Watch Test Scores Soar Through Play

Math Games offer a hands on, developmentally appropriate way to increase competency, comprehension and retention of the lessons you are teaching in class. Math Games are a perfect way to supplement your math lessons. Use Math Games whole class or at a Math Game center and watch your test scores soar.



MATH GAMES

SPANISH & ENGLISH

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www.mathgamesusa.com

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Teacher Guide Games to play! Activities to do!

Multiplying by 8

Everyone is involved in this great math game! Watch how quickly your students master the ability to multiply by 8's by playing this great game.

- Game Cards
- Game Boards

Students play in groups of 2 to 8.

The objective is to be the first player to correctly cover all 15 places on your game board.

To begin each player selects their own game board. Make sure the cards are shuffled. Set the game cards face down on the table, this is the draw pile. The first player selects a card and checks to see if the product to the equation is on her game board. The other players are multiplying the equation to make sure the player is correct in her multiplication. If the player has the product of the equation on her game board she covers the product with the equation. If she can't play the card she places it face up to begin the discard pile. The second player can choose the face-up card from the discard pile if he can play it, or he may pick from the draw pile. Play continues until a player completely covers her/his game board. That player is the winner!

Concentration

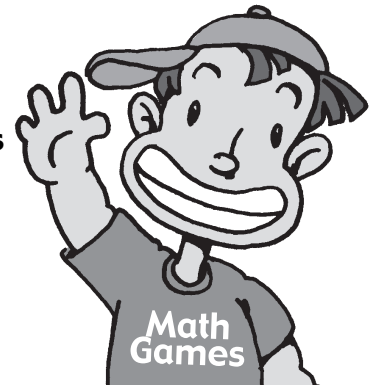
This old favorite keeps students multiplying while sharpening their memory skills.

- Game Cards
- Game Boards made into cards

Students play in groups of 2 to 4.

The objective is to be the player to collect the most cards.

Make a deck of cards using the game cards and the game board (simply copy the game boards and cut them into cards). Mix the cards up and lay out the cards face down. The first player chooses 8 cards at a time looking for the equation and the corresponding product. When a player chooses a matching set of cards she/he collects the cards and takes another turn. If a student chooses 2 cards that don't match it is the next person's turn. The winner is the player with the most cards at the end of the game.



Multiplication "Bingo"

Play this "bingo" variation whole class. Everyone is involved and practicing multiplication through play!

- Game Cards
- Game Boards
- Disks, beans or shells

Students play whole class.

The objective is to be the first player to correctly cover all 15 places on your game board.

Each student selects a game board. The teacher draws one game card at a time to read and show the class. (An alternative is to make a transparency of the game cards and cut them into cards. Put one card at a time onto the overhead so children get a visual of the equation while hearing the equation, too.) The first student to fill his board in a line that goes up and down, side to side, or diagonal is the winner. It is not uncommon to have more than one winner at a time!

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Teacher Guide Games to play! Activities to do!

Match It Up

This is a fast action game that keeps everyone part of the learning!

- Game Cards
- Game Boards

Students play in groups of 2 to 8.

The objective is to collect the most pairs of cards.

Make cards from the game board by copying the boards and cutting them into cards. Students lay the cards with the product's face up on the table. Stack the game cards in a deck face down. All players draw a card at the same time and find the matching number. The player with the most pairs of cards at the end of the game is the winner. This variation really gets kids multiplying as they search for the products!

Flashcard Mania

This is a great game to play whole class. Everyone is multiplying by 8's!

- Game Cards

Students play in groups of 2 to 8.

The objective is to get the team leader back to the front of the line.

Use the game cards as flashcards for this great game. Divide your class into 2 lines and name the first person of each line as the leader. A player from each line steps up and the teacher shows a game card. The first student to give the product wins and goes to the end of their line. The next person in line goes up against the remaining student. The team that has the leader back to the front of the line wins! Send home the flashcards and watch your students practice in order to win tomorrow's game.

Homework Blacklines

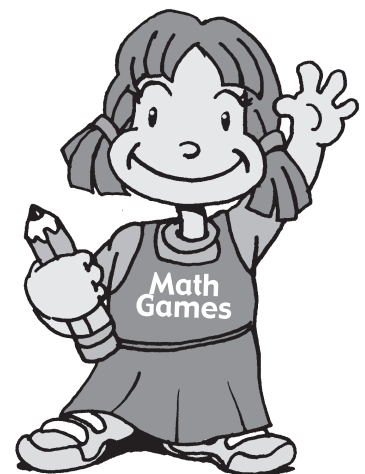
Make sure your students are practicing math at home.

Use the blackline worksheets to make sure your students are practicing these math facts at home. Send home the games and the worksheets to involve the family in what is happening at school!

Timed Tests & Score Graphs

Assessment is easy when you use the timed tests and students graph their test scores. This is a great student motivator!

Give your students a daily 5 minute timed test. Before you begin the test ask the students to write down their goal (number of correct answers) for the day. After the test have students pass their test to the right. Read the product of each equation slowly and in a steady rhythm. Ask the students to draw a star at the front of the row that has been corrected. When the page is corrected have the students count the number correct and put the score at the bottom of the page. Take this opportunity to teach students to count the completed rows by ten! When the students receive their tests back have them plot their score and date on the graph. Students watch as their scores go up each day and teachers have a hard copy assessment of students' multiplication progress.



8×0

8×1

8×2

8×3

8×4

8×5

8×6

8×7

8×8

8×9

8×10

8×11

8×12

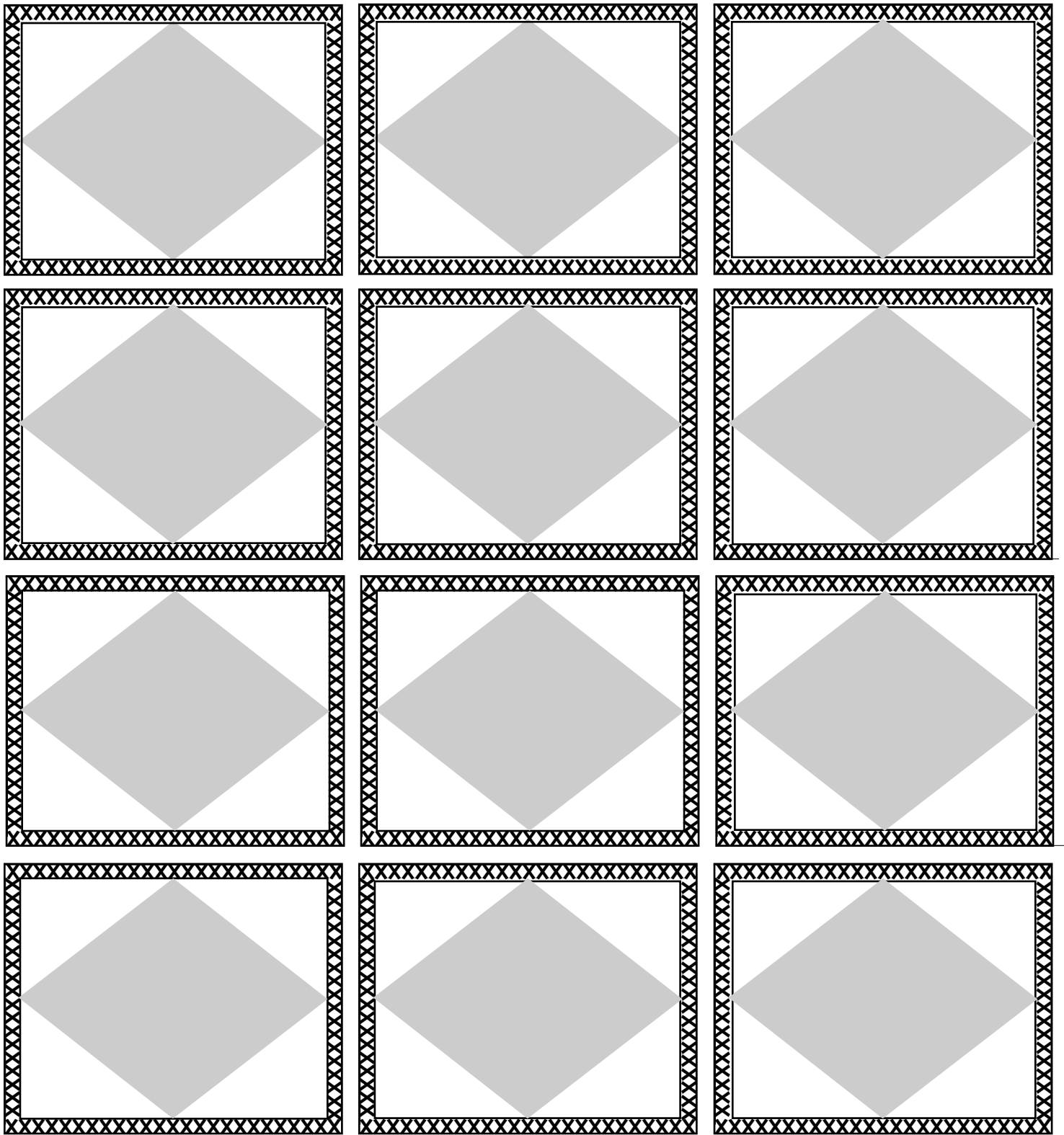


Math Games

GAME

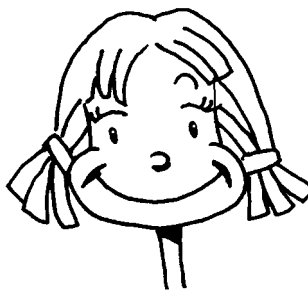
CARDS

GAME CARDS

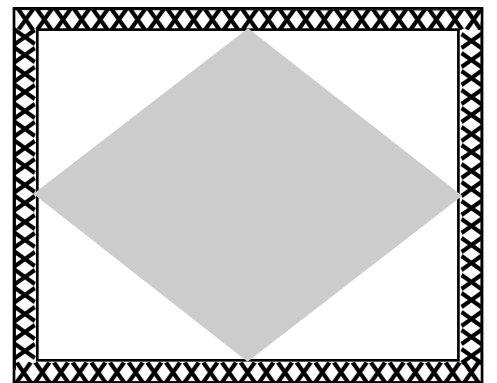


GAME CARD BACKS

GAME CARD BACKS



Math Games



40

16

0

88

24

32

72

8

8

96

32

48

56

64

80

8

24

48

32

40

16

56

8

96

48

16

80

72

88

0

0

32

16

88

80

40

24

8

0

48

88

56

32

96

24

8

16

0

24

32

80

48

8

96

40

56

64

0

80

88

16

56

24

32

80

88

32

8

40

96

56

80

0

8

16

80

8

0

16

88

24

40

8

16

80

32

48

80

64

56

80

88

56

24

16

48

40

8

24

0

16

56

88

16

80

8

16

56

24

40

16

0

8

96

96

88

40

8

32

88

Multiplying by 8

NAME _____

Multiplication is repeated addition!

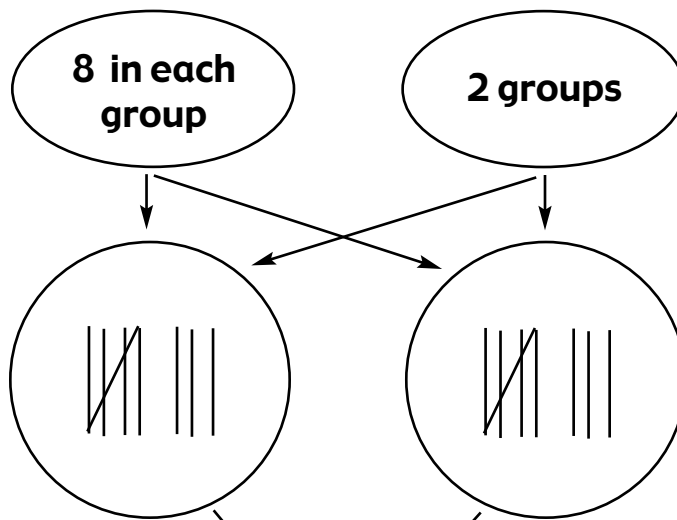


Count by 8's to fill in the blanks.

<u>8</u>	<u>8</u>	<u>8</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	<u>8</u>
<u>8</u>	_____	_____
_____	_____	_____

8, _____, _____, _____, _____,
48, _____, _____, _____, _____,
88, _____

$$8 \times 2 = 16$$




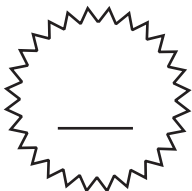
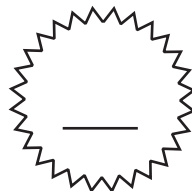
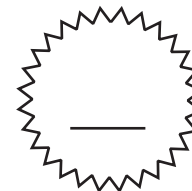
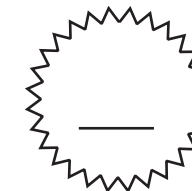
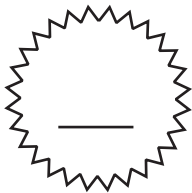
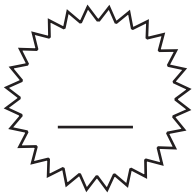
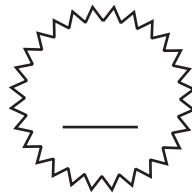
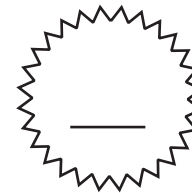
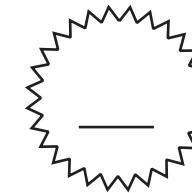
EQUALS

$$8 + 8 = 16$$

Multiplying by 8

NAME _____

Count by 8's to fill in your number bank.



Write the product.

$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$
--	--	--	--	--	--	--	--	--	--

$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$
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$\begin{array}{r} 11 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$
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$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 8 \\ \hline \end{array}$
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Multiplying by 8

Name _____



Multiplication is repeated addition!



Use the numberline to complete this set.

0, 8, 16, _____, _____, _____, _____, _____, _____, 72, 80, 88, 96

Count by eights on the numberline to find the products.

$1 \times 8 =$ _____ $2 \times 8 =$ _____ $3 \times 8 =$ _____ $4 \times 8 =$ _____

$5 \times 8 =$ _____ $6 \times 8 =$ _____ $7 \times 8 =$ _____ $8 \times 8 =$ _____

$9 \times 8 =$ _____ $10 \times 8 =$ _____ $11 \times 8 =$ _____ $12 \times 8 =$ _____

Name the products.

$$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$$

**Commutative Property of Multiplication:
The order of the factors does not matter!**

NAME _____

Factor x Factor = Product



$\begin{array}{r} 11 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$
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$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$
--	---	--	--	--	--	--	---	--

$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$
--	--	--	---	---	--	--	---	--

$8 \times \underline{\quad} = 24$

$3 \times \underline{\quad} = 24$

Name the missing factors:

$10 \times 8 = 8 \times \underline{\quad}$ $4 \times 8 = 8 \times \underline{\quad}$ $0 \times 8 = 8 \times \underline{\quad}$ $1 \times 8 = 8 \times \underline{\quad}$

$7 \times 8 = 8 \times \underline{\quad}$ $11 \times 8 = 8 \times \underline{\quad}$ $3 \times 8 = 8 \times \underline{\quad}$ $7 \times 8 = 8 \times \underline{\quad}$

$8 \times 8 = 8 \times \underline{\quad}$ $10 \times 8 = 8 \times \underline{\quad}$ $5 \times 8 = 8 \times \underline{\quad}$ $8 \times 8 = 8 \times \underline{\quad}$

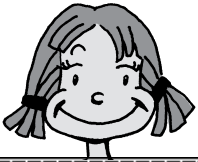
$8 \times \underline{\quad} = 32$ $8 \times \underline{\quad} = 0$ $8 \times \underline{\quad} = 80$ $8 \times \underline{\quad} = 48$

$8 \times \underline{\quad} = 8$ $8 \times \underline{\quad} = 40$ $8 \times \underline{\quad} = 88$ $8 \times \underline{\quad} = 0$

$8 \times \underline{\quad} = 88$ $8 \times \underline{\quad} = 56$ $8 \times \underline{\quad} = 64$ $8 \times \underline{\quad} = 16$

$8 \times \underline{\quad} = 48$ $8 \times \underline{\quad} = 8$ $8 \times \underline{\quad} = 56$ $8 \times \underline{\quad} = 8$

$8 \times \underline{\quad} = 72$ $8 \times \underline{\quad} = 64$



Name: _____
Fill in the stars!



$$\frac{8}{\quad} \times \frac{10}{\quad} = \frac{\quad}{\quad}$$

$$\frac{2}{\quad} \times \frac{8}{\quad} = \frac{\quad}{\quad}$$

$$\frac{8}{\quad} \times \frac{7}{\quad} = \frac{\quad}{\quad}$$

$$\frac{8}{\quad} \times \frac{9}{\quad} = \frac{\quad}{\quad}$$

$$\frac{4}{\quad} \times \frac{8}{\quad} = \frac{\quad}{\quad}$$

$$\frac{8}{\quad} \times \frac{6}{\quad} = \frac{\quad}{\quad}$$

$$\frac{1}{\quad} \times \frac{8}{\quad} = \frac{\quad}{\quad}$$

$$\frac{8}{\quad} \times \frac{5}{\quad} = \frac{\quad}{\quad}$$

$$\frac{3}{\quad} \times \frac{8}{\quad} = \frac{\quad}{\quad}$$

$$\frac{8}{\quad} \times \frac{11}{\quad} = \frac{\quad}{\quad}$$

$$\frac{1}{\quad} \times \frac{8}{\quad} = \frac{\quad}{\quad}$$

$$\frac{0}{\quad} \times \frac{8}{\quad} = \frac{\quad}{\quad}$$

$$\frac{8}{\quad} \times \frac{12}{\quad} = \frac{\quad}{\quad}$$

$$\frac{8}{\quad} \times \frac{8}{\quad} = \frac{\quad}{\quad}$$

$$\begin{array}{r} 4 \\ \times 8 \\ \hline 32 \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 1 \\ \times 8 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline 64 \end{array}$$

$$\begin{array}{r} 7 \\ \times 8 \\ \hline 56 \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 5 \\ \times 8 \\ \hline 40 \end{array}$$

$$\begin{array}{r} 12 \\ \times 8 \\ \hline 96 \end{array}$$

$$\begin{array}{r} 11 \\ \times 8 \\ \hline 88 \end{array}$$

$$\begin{array}{r} 10 \\ \times 8 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 8 \\ \hline \end{array}$$

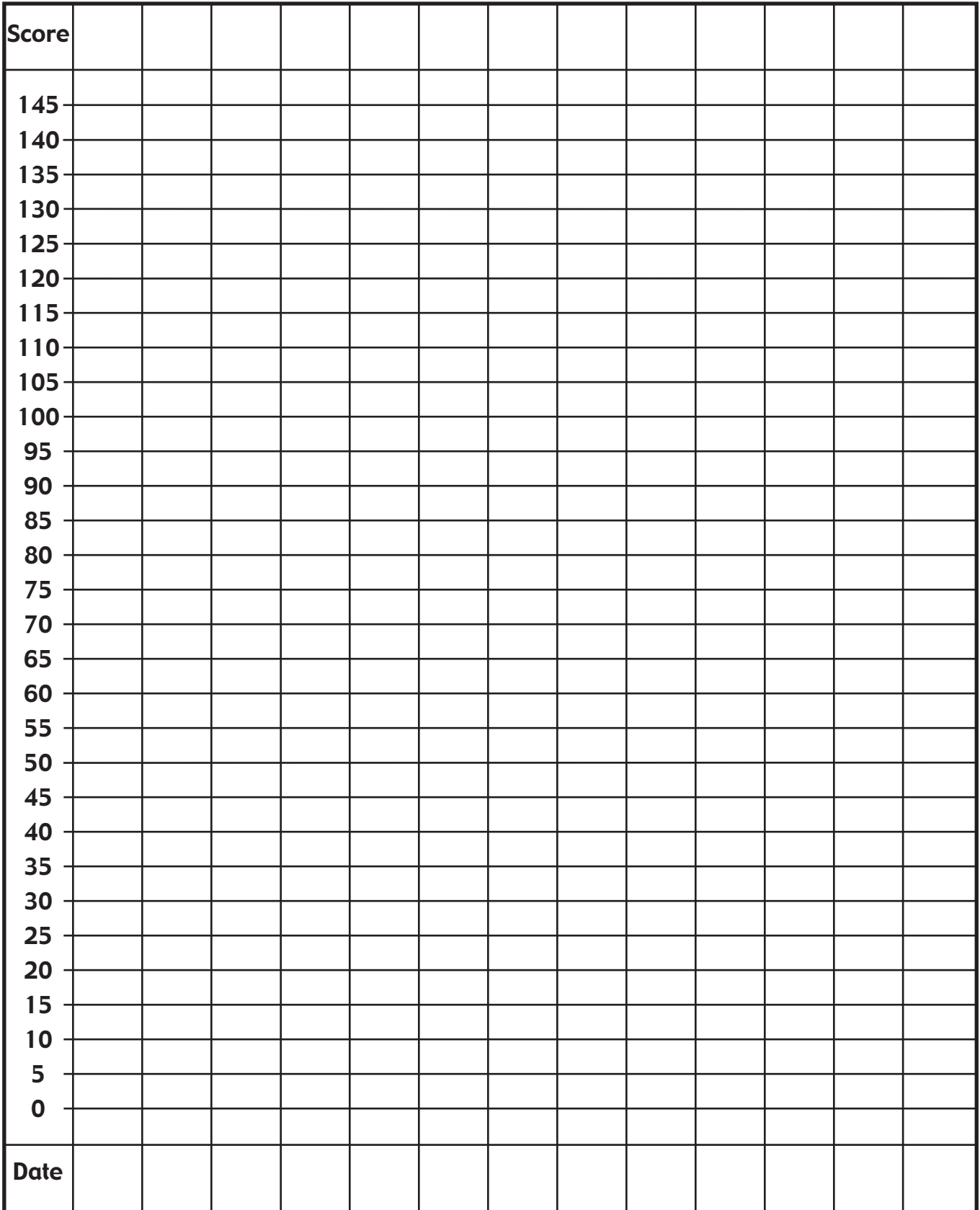
$$\begin{array}{r} 11 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 8 \\ \hline \end{array}$$

Graph

NAME _____

Number Correct in 5 Minutes



**B
A
S
I
C

M
A
T
H

F
A
C
T
S**

NAME _____

Multiplication Table

	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

