MULTIPLICATION Basics

3RD Grade

2	3	4	5	6	7	8	9	
	6	8	10			16	18	20
6		12	15	18	21	24	27	
8	12	16					36	40
10	15		25	30	35	40		50
	0.		30			48		60
L	H		35			56		70
			40	48	56	64		80
						72	90	
In no time, you'll be a you'll be a multiplication star!			50	60	70	80	90	
multing	star!		55			88	99	



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Certificate of Completion

* Has an Answer Sheet

Answer Sheets

random multiples*

Fill in the missing boxes.

	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		6	8	10			16	18	20		24
3	3	6		12	15	18	21	24	27		33	36
4	4	8	12	16					36	40	44	48
5	5	10	15		25	30	35	40		50	55	60
6	6		18		30			48		60		72
7	7		21		35			56		70		84
8	8	16	24		40	48	56	64		80	88	96
9	9	18	27	36					81	90	99	108
10	10	20		40	50	60	70	80	90		110	120
11	11		33	44	55			88	99	110		132
12	12	24	36	48	60	72	84	96	108	120	132	144









multiple of self and 1 *

Fill in the missing boxes.

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

multiples of 2*

*Fill in the missing boxes.

	1	2	3	4	5	6	7	8	9	10	11	12
1	1		3		5		7		9		11	
2												
3	3		9		15		21		27		33	
4												
5	5		15		25		35		45		55	
6												
7	7		21		35		49		63		77	
8												
9	9		27		45		63		81		99	
10												
11	11		33		55		77		99		121	
12												



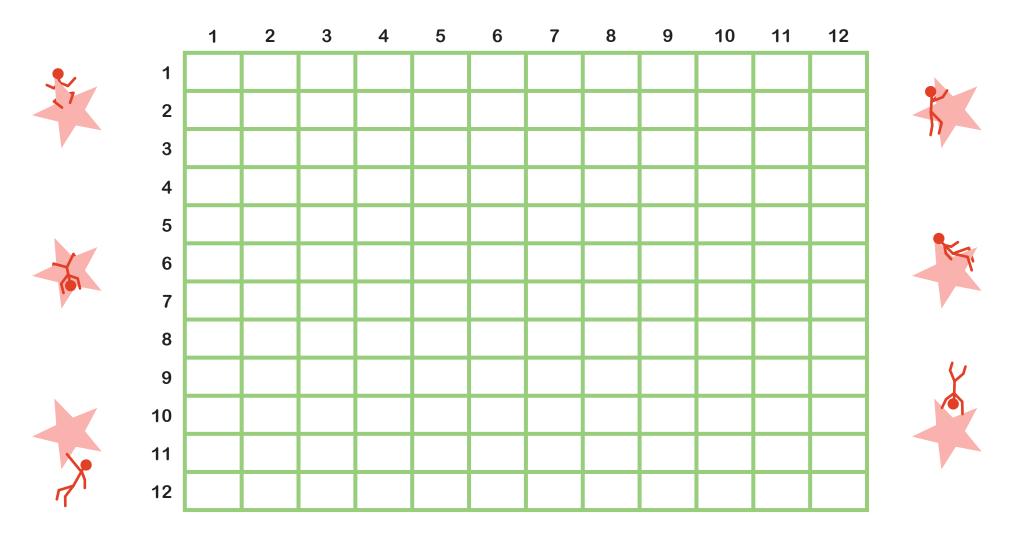
multiples of 3 *

Fill in the missing boxes.

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2		4	5		7	8		10	11	
2	2	4		8	10		14	16		20	22	
3												
4	4	8		16	20		28	32		40	44	
5	5	10		20	25		35	40		50	55	
6												
7	7	14		28	35		49	56		70	77	
8	8	16		32	40		56	64		80	88	
9												
10	10	20		40	50		70	80		100	110	
11	11	22		44	55		77	88		110	121	
12												

all the multiples*

*Fill in the missing boxes.

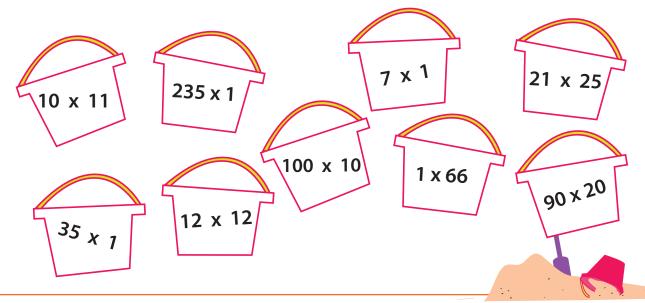


It's The Same!

One of the multiplication properties is *identity*, which means any number multiplied by 1 equals itself.

$$A \times 1 = A$$

Now color in the buckets that express the identity property.



Find the missing number. Notice the identity property.

$$0.75 x = 0.75$$

$$x 1 = \frac{8}{14}$$

Find the products of these equations. Notice the identity property.

$$(100-55) \times 1 =$$

$$(3+20+11+4) \times 1 =$$

It's Associative!

One of the multiplication properties is associative, which means you can group the factors in a multiplication equation and still get the same product.

$$A \times (B \times C) = (A \times B) \times C$$

Find the missing number according to the associative property.

$$4 \times (3 \times 2) = (4 \times 3) \times$$

$$6 \times (2 \times 5) = (6 \times 2) \times$$

$$(20 \times 5) \times 11 = 20 \times (11 \times)$$

Find the product of these numbers.

$$2 \times (7 \times 1) =$$

10 x (3 x 4) = 10 x
$$=$$

$$(10 \times 3) \times 4 =$$
 $x \times 4 =$

When you group the factors differently, do the two equations have the same product?

Commutative

One of the multiplication properties is *commutative*, which means that you can multiply numbers in any order and get the same product.

$$A \times B = B \times A$$

Find the missing number in the equations following the commutative property rule. Then answer the questions below.

$$7 \times 5 = 5 \times$$

$$10 \times 11 = 11 \times$$

Julia has four bags of candy. Each bag contains six pieces of candy. Draw the pieces in each bag. How many pieces does Julia have?











Tommy has six bags of candies. Each bag contains five pieces of candy. Draw the pieces in each bag. How many pieces does Tommy have?















Write the multiplication equations for Julia and Tommy's candy using the commutative property.

=



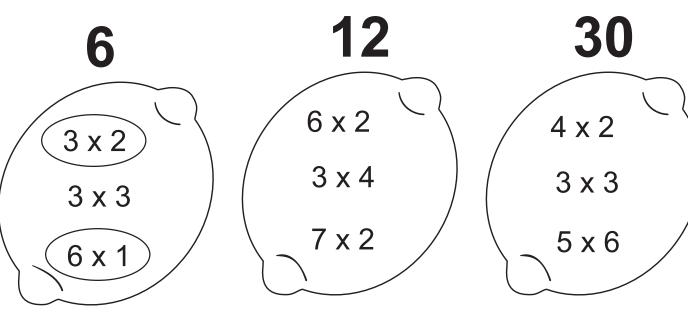
X

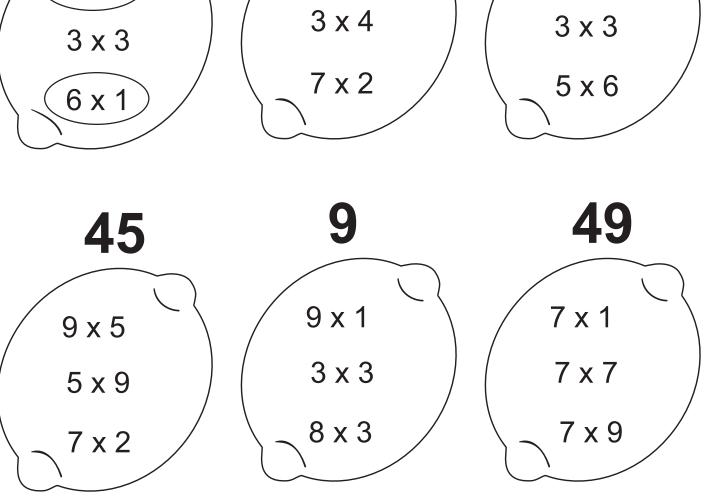
SIMPLE MULTIPLICATION



Single Digit Multiplication

Multiply the numbers inside the lemon and circle the ones that match up to the number on the top.

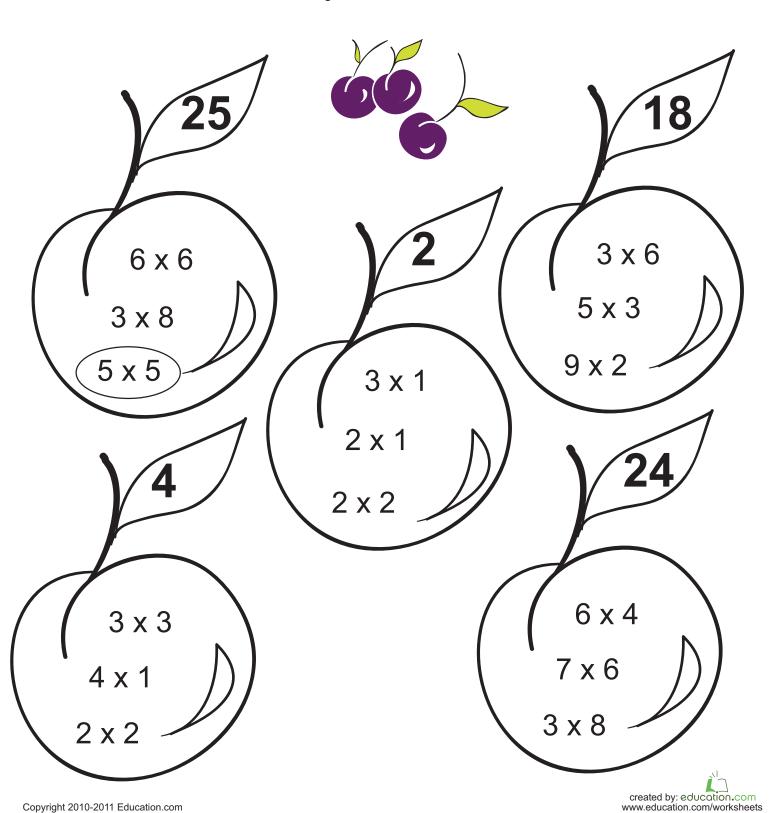




SIMPLE MULTIPLICATION

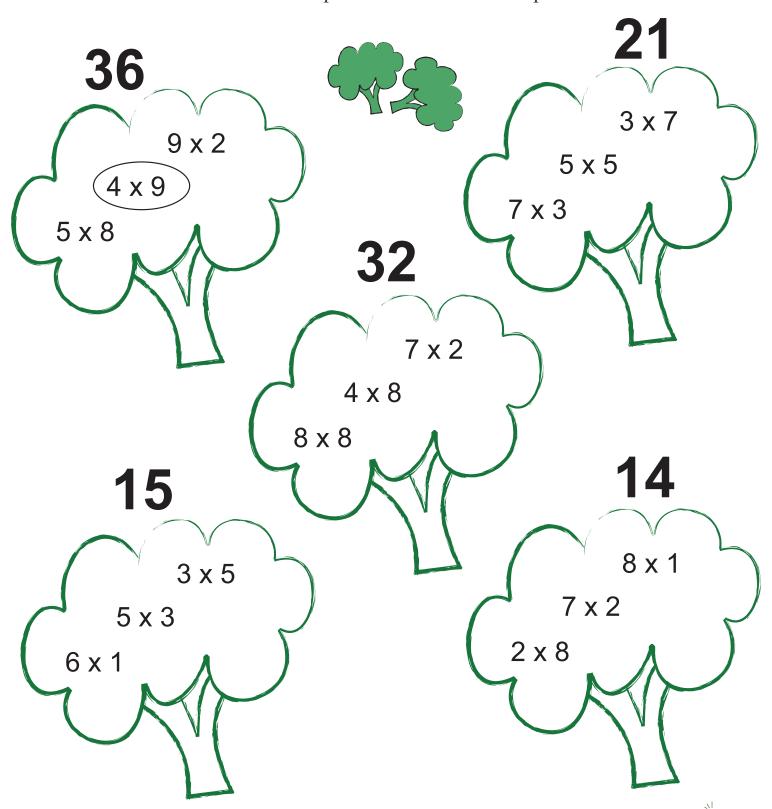
Single Digit Multiplication

Multiply the numbers inside the plum and circle the ones that match up to the number on the leaf.





Multiply the numbers inside the broccoli and circle the ones that match up to the number on the top.



Multiply It!

Solve each multiplication word problem. Show your work!

An octopus has 8 legs.

Kyle counted 5 octopi in the tank.

How many legs are there in the tank?



Eric owns 12 pairs of sunglasses. Alan owns 3 times more than Eric owns. How many pairs of sunglasses does Alan own?



Peter Planter has 7 rows of pineapple plants with 8 plants in each row. How many pineapple plants does he have?

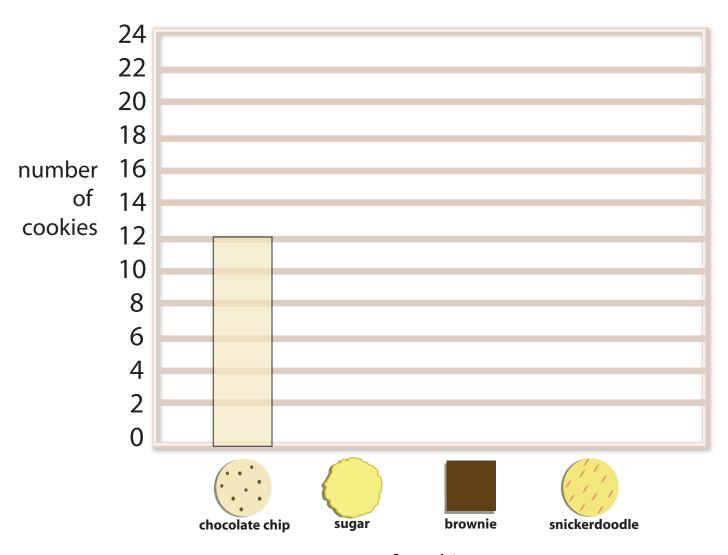
Uri and his family eat 2 loaves of bread a day. Each loaf has 6 slices. How many slices of bread do Uri and his family eat in 4 days?

Yolanda makes 3 sweaters a day. She sews 6 buttons onto each sweater she makes. How many buttons will she sew in 3 days?



At the Bake Sale...

Debbie and Elizabeth counted the cookies they sold at the bake sale. They sold 12 chocolate chip cookies, 22 sugar cookies, 10 brownies and 18 snickerdoodles. Fill out the graph below to see the amounts of each type.



type of cookie

If they sold each type of cookies for .50¢, how much money did they make?



Eggplant Recipe: Reading a Pictograph

You can cook a variety of dishes using eggplant. See how many of them the chef is planning for his restaurant. Answer the questions below. Note: each eggplant in the pictograph stands for 3 eggplants.

Recipe	Number of Eggplants
Eggplant Parmesan	
Eggplant Lasagna	
Stuffed Eggplant	

= 3 eggplants

Questions:

1. How many eggplants did the chef use for Eggplant Parmesan?
Answer:
2. Which recipe used the least amount of eggplant?
Answer:
3. Which recipe used the most amount of eggplant? How many?
Answer:
4. What recipe used 15 eggplants?
Answer:
5. What is the difference between the number of eggplants in Eggplant Parmesan and in Eggplant Lasagna?
Answer:

Numbers Party!

All of the numbers are off partying! It's up to you to complete each equation by writing the missing digit or digits in the box.











$$\times$$
 6 = 48

$$6 \times = 18$$

$$\times 4 = 8$$

$$6 \times = 0$$













Multiplication Basics

Multiplication Tables
It's the Same!
It's Associative!
Commutative
Simple Multiplication #1
Simple Multiplication #2
Simple Multiplication #3
Multiply It!
At the Bake Sale...
Eggplant Recipe: Reading a Pictograph
Numbers Party!

multiplication tables

answersheet

*Completed Grid.



	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
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12	12	24	36	48	60	72	84	96	108	120	132	144











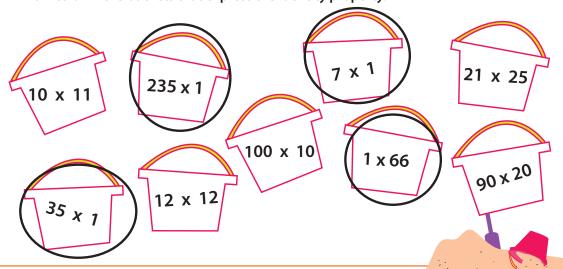


It's The Same!

One of the multiplication properties is identity, which means any number multiplied by 1 equals itself.

$$A \times 1 = A$$

Now color in the buckets that express the identity property.



Find the missing number. Notice the identity property.

$$4 x 1 = 4$$

$$0.75 \times 1 = 0.75$$

$$\frac{8}{14} \quad x \quad 1 \quad = \quad \frac{8}{14}$$

Find the products of these equations. Notice the identity property.

$$(68 + 15) \times 1 =$$
 83 $(100 - 55) \times 1 =$ **45**

$$(3+20+11+4) \times 1 =$$



It's Associative!

One of the multiplication properties is *associative*, which means you can group the factors in a multiplication equation and still get the same product.

$$A \times (B \times C) = (A \times B) \times C$$

Find the missing number according to the associative property.

$$4 \times (3 \times 2) = (4 \times 3) \times 2$$

$$6 \times (2 \times 5) = (6 \times 2) \times \boxed{5}$$

$$(20 \times 5) \times 11 = 20 \times (11 \times 5)$$

Find the product of these numbers.

$$7 \times (2 \times 1) = 14$$
 $2 \times (7 \times 1) = 14$

10 x (3 x 4) = 10 x
$$12$$
 = 120

$$(10 \times 3) \times 4 = \begin{pmatrix} 30 \\ \end{pmatrix} \times 4 = \begin{pmatrix} 120 \\ \end{pmatrix}$$

When you group the factors differently, do the two equations have the same product?





Commutative

One of the multiplication properties is *commutative*, which means that you can multiply numbers in any order and get the same product.

$$A \times B = B \times A$$

Find the missing number in the equations following the commutative property rule. Then answer the questions below.

$$7 \times 5 = 5 \times \boxed{7}$$

$$10 \times 11 = 11 \times 10$$

Julia has four bags of candy. Each bag contains six pieces of candy. Draw the pieces in each bag. How many pieces does Julia have?











Julia has 24 pieces of candy.

Tommy has six bags of candies. Each bag contains five pieces of candy. Draw the pieces in each bag. How many pieces does Tommy have?













Tommy has 30 pieces of candy.

Write the multiplication equations for Julia and Tommy's candy using the commutative property.

X



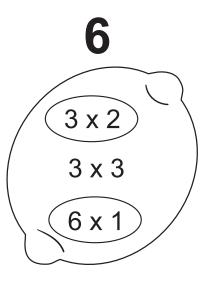
SIMPLE MULTIPLICATION

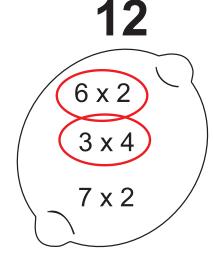


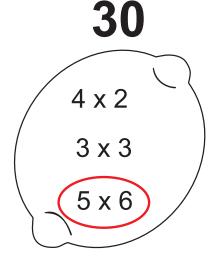
Single Digit Multiplication

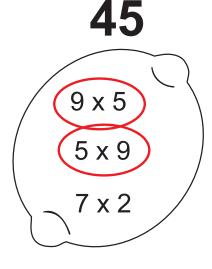


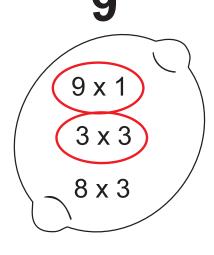
Multiply the numbers inside the lemon and circle the ones that match up to the number on the top.

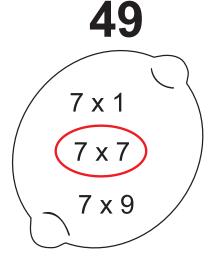








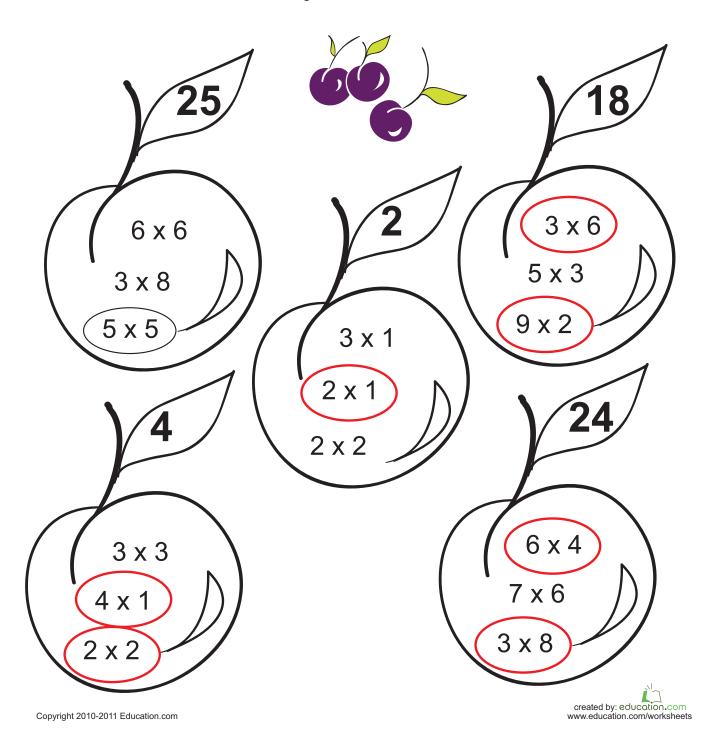




SIMPLE MULTIPLICATION

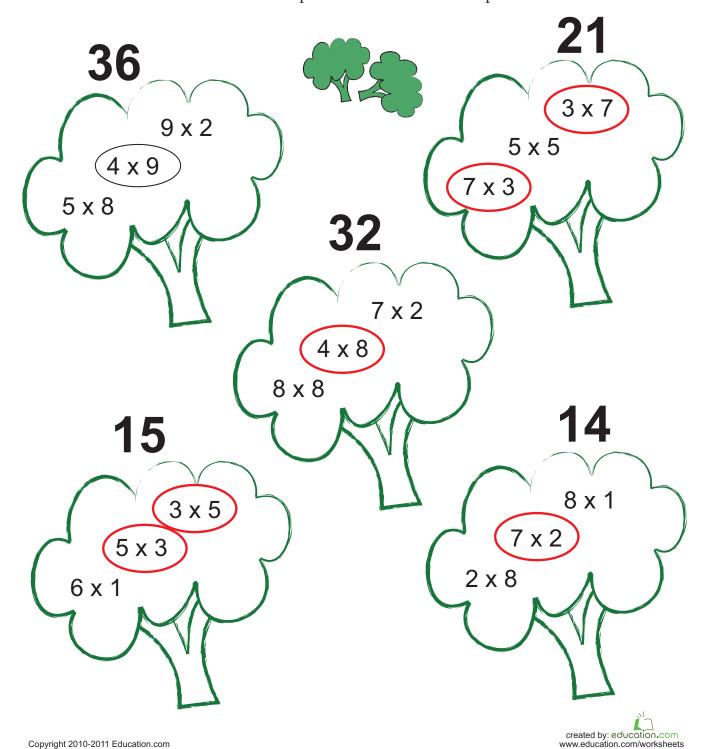
Single Digit Multiplication

Multiply the numbers inside the plum and circle the ones that match up to the number on the leaf.





Multiply the numbers inside the broccoli and circle the ones that match up to the number on the top.



Multiply It!

Solve each multiplication word problem. Show your work!

An octopus has 8 legs.

Kyle counted 5 octopi in the tank.

How many legs are there in the tank?

8x5=40

There are 40 legs in the tank.

Vera owns 17 pairs of socks. How many socks does she have in all?

17x2=34

Vera owns 34 socks.

Eric owns 12 pairs of sunglasses. Alan owns 3 times more than Eric owns. How many pairs of sunglasses does Alan own?

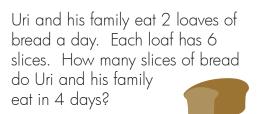
12x3=36

Alan owns 36 pairs of sundlasses.

Peter Planter has 7 rows of pineapple plants with 8 plants in each row. How many pineapple plants does he have?

7x8=56

Peter Planter has 56 pineapple plants.



2x6x4=48

Uri and his family eat 48 slices of bread in 4 days.

Yolanda makes 3 sweaters a day. She sews 6 buttons onto each sweater she makes. How many buttons will she sew in 3 days?

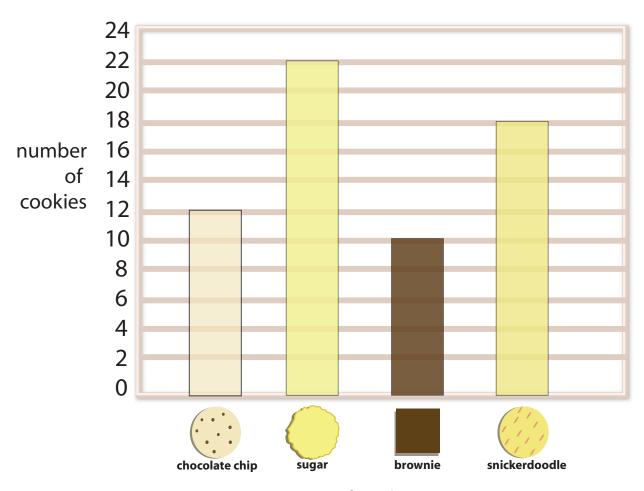
3x6x3=54

Yolanda sews 54 buttons in 3 days.



At the Bake Sale...

Debbie and Elizabeth counted the cookies they sold at the bake sale. They sold 12 chocolate chip cookies, 22 sugar cookies, 10 brownies and 18 snickerdoodles. Fill out the graph below to see the amounts of each type.



type of cookie

If they sold each type of cookies for .50¢, how much money did they make?

$$12 + 22 + 10 + 18 = 62$$
 cookies 62 cookies $\times \$0.50 = \31.00



Eggplant Recipe: Reading a Pictograph

You can cook a variety of dishes using eggplant. See how many of them the chef is planning for his restaurant. Answer the questions below. Note: each eggplant in the pictograph stands for 3 eggplants.

Recipe	Number of Eggplants
Eggplant Parmesan	
Eggplant Lasagna	
Stuffed Eggplant	



Questions:

Answer: 6 x 3 = 18 Eggplants

2. Which recipe used the least amount of eggplant?

Answer: Eggplant Lasagna

3. Which recipe used the most amount of eggplant? How many?

Answer: **Eggplant Parmesan: 18 Eggplants**

4. What recipe used 15 eggplants?

Answer: Stuffed Eggplant

5. What is the difference between the number of eggplants in Eggplant Parmesan and in Eggplant Lasagna?

Answer: 18 - 12 = 6 Eggplants

Numbers Party!

All of the numbers are off partying! It's up to you to complete each equation by writing the missing digit or digits in the box.











$$8 \times 6 = 48$$

$$6 \times 3 = 18$$

$$2 \times 4 = 8$$

$$4 \times 8 = 32$$

$$10 \times 1 = 10$$

$$4 \times 5 = 20$$

$$5 \times 6 = 30$$

$$7 \times 2 = 14$$

$$6 \times 0 = 0$$

$$9 \times 3 = 27$$

$$7 \times 8 = 56$$

$$5 \times 5 = 25$$

$$6 \times 7 = 42$$

$$8 \times 8 = 64$$

$$6\times9=54$$

$$7 \times 4 = 28$$

$$9 \times 5 = 45$$









