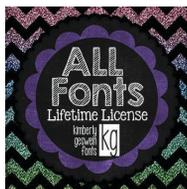




Thank You for your purchase of this 3rd grade math resource! As a 3rd grade teacher, I can never get enough practice with multiplication for my students! Whether used in whole group, small group, centers, or individual practice, I think you will love these versatile worksheets! Please see my **How to Use** page for suggestions on using these multiplication activity pages. I hope they will save you time and help your students master multiplication!

Please check out all of the math resources available in my TpT store: [Teaching in the Heart of Florida](https://www.teacherspayteachers.com/Store/Teaching-in-the-Heart-of-Florida)

Thank you to:



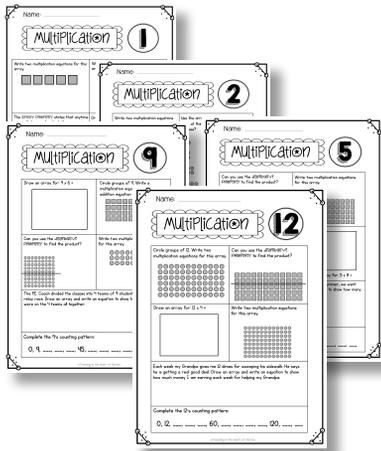
Thank you for respecting my work!

© 2018 Teaching in the Heart of Florida
All rights reserved. Purchase of this unit entitles the purchaser the right to reproduce the pages in limited quantities **for single classroom use only**. Duplication for an entire school, an entire school system or commercial purposes is strictly forbidden without written permission from the publisher.

Copying **any** part of this product and placing it on the Internet in any form (even a personal/classroom website) is strictly forbidden and is a violation of the Digital Millennium Copyright Act (DMCA). These items can be picked up in a google search and then shared worldwide for free.

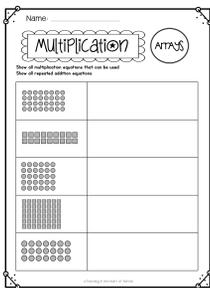
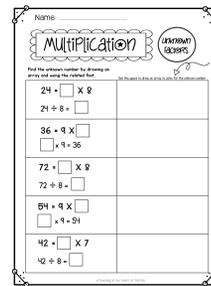


How to Use Multiplication Worksheets



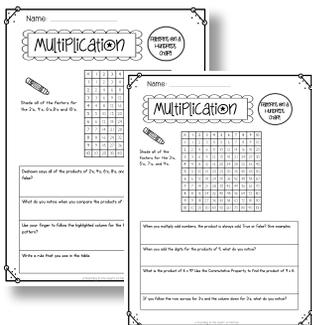
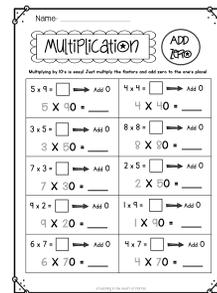
Worksheets 1 - 12: Each worksheet allows you to focus on one factor at a time. I have included arrays, word problems, Properties of Multiplication, and skip counting to give students different ways to practice.

Unknown Factors: Practice finding the unknown factor will help students understand the relationship between multiplication and division.



Arrays: Mastering arrays is essential for students to be able to visually represent multiplication. This sheet will give them focused practice.

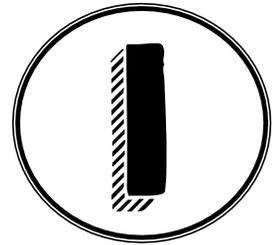
Add Zero to Multiply by 10's: This worksheet will help students understand that multiplying by 10 is as easy as adding a zero!



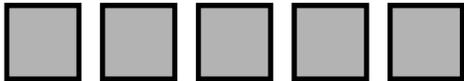
Hundreds Charts: These 2 worksheets will help your students understand patterns in the hundreds chart for multiplication.

Name: _____

MULTIPLICATION



Write two multiplication equations for this array.

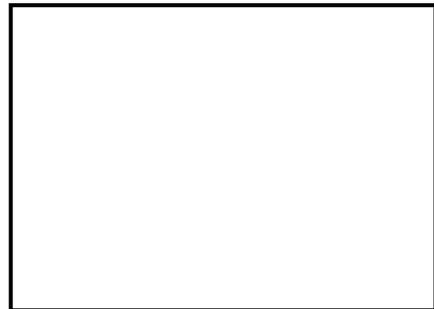


Write two multiplication equations for this array.



The **IDENTITY PROPERTY** states that anytime you multiply a number by 1, the answer is the original number. Give two examples of this property.

Draw an array for: $7 \times 1 =$

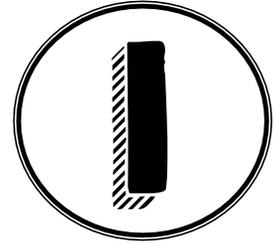


The art museum is offering a summer class for free. Each child can make 1 piece of pottery. The class will have 12 students. How many pieces of pottery will be made?

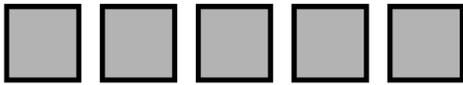
Name: _____

Answer Key

MULTIPLICATION



Write 2 multiplication equations for this array.



$$5 \times 1 = 5$$

$$1 \times 5 = 5$$

Write 2 multiplication equations for this array.



$$8 \times 1 = 8$$

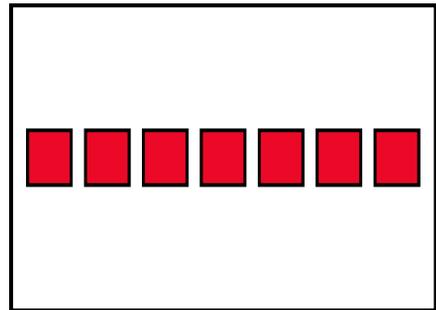
$$1 \times 8 = 8$$

The **IDENTITY PROPERTY** states that anytime you multiply a number by 1, the answer is the original number. Give two examples of this property.

$$4 \times 1 = 4$$

$$10 \times 1 = 10$$

Draw an array for: $7 \times 1 = 7$



The art museum is offering a summer class for free. Each child can make 1 piece of pottery. The class will have 12 students. How many pieces of pottery will be made? Draw an array and write an equation to solve.

$12 \text{ students} \times 1 \text{ piece of pottery} = 12 \text{ pieces of pottery}$

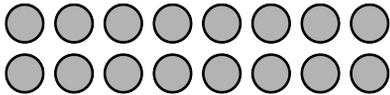


Name: _____

MULTIPLICATION



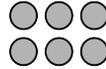
Write two multiplication equations for this array.

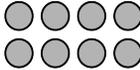


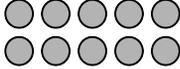
Use the arrays to solve each equation. Look at the products. What pattern do you see?

 $2 \times \square = \bigcirc$

 $2 \times \square = \bigcirc$

 $2 \times \square = \bigcirc$

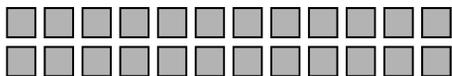
 $2 \times \square = \bigcirc$

 $2 \times \square = \bigcirc$



Draw an array for: $2 \times 9 =$

The workman laid concrete pavers in my grandmother's garden. They laid them out as shown below. Use repeated addition and multiplication to find how many total pavers they used.



Complete the 2's counting pattern:

0, 2, _____, _____, _____, _____, 12, _____, _____, _____, 20, _____, _____

Name: _____

Answer Key

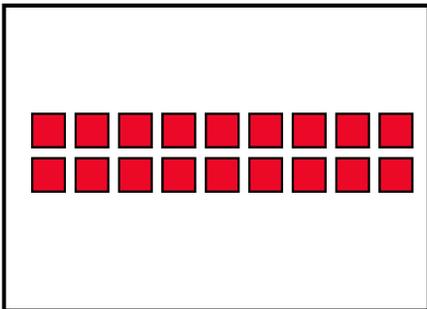
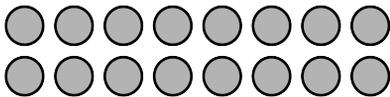
MULTIPLICATION



Write 2 multiplication equations for this array.

$$2 \times 8 = 16$$

$$8 \times 2 = 16$$

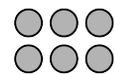


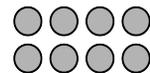
Draw an array for: $2 \times 9 = 18$

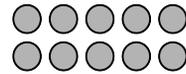
Use the arrays to solve each equation. Look at the products. What pattern do you see? **All of the products are even numbers.**

 $2 \times 1 = 2$

 $2 \times 2 = 4$

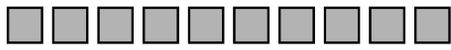
 $2 \times 3 = 6$

 $2 \times 4 = 8$

 $2 \times 5 = 10$

The workman laid concrete pavers in my grandmother's garden. They laid them out as shown below. Use repeated addition and multiplication to find how many total pavers they used.

$$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 20$$

 $2 \times 10 = 20$

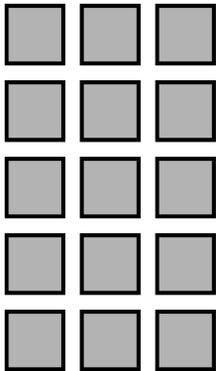
 $10 \times 2 = 20$

Complete the 2's counting pattern:

0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

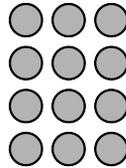
Name: _____

MULTIPLICATION

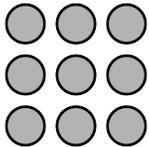


Circle groups of 3.
Write two
multiplication
equations for this
array.

The **COMMUTATIVE PROPERTY** states that two numbers can be multiplied in any order. Give two examples of this property using this array.



Why does the **COMMUTATIVE PROPERTY** NOT work with this array? Explain and show the equation.



Draw an array for: $3 \times 6 =$



My friend and I went hiking on a rocky trail. I picked up 7 rocks for my collection. My friend Jake picked up three times as many as I did. Draw an array and write an equation to show how many rocks Jake picked up.

Complete the 3's counting pattern:

0, 3, _____, _____, _____, 15, _____, _____, _____, _____, _____, _____, 36

Name: _____

Answer Key

MULTIPLICATION



Circle groups of 3.
Write two multiplication equations for this array.

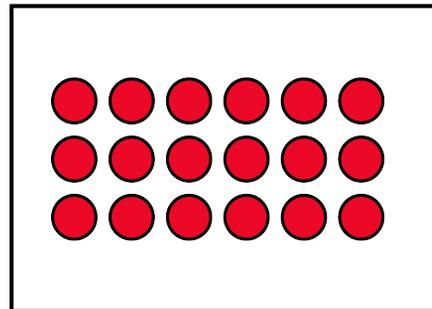
$3 \times 5 = 15$
 $5 \times 3 = 15$

The **COMMUTATIVE PROPERTY** states that two numbers can be multiplied in any order. Give two examples of this property using this array.

$3 \times 4 = 12$
 $4 \times 3 = 12$

Why does the **COMMUTATIVE PROPERTY** NOT work with this array? Explain and show the equation.

The **Commutative Property** does not work with this array because both factors are the same. $3 \times 3 = 9$



Draw an array for: $3 \times 6 = 18$

My friend and I went hiking on a rocky trail. I picked up 7 rocks for my collection. My friend Jake picked up three times as many as I did. Draw an array and write an equation to show how many rocks Jake picked up.

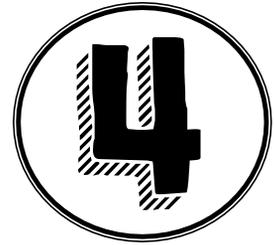
I picked up 7 rocks and Jake picked up $7 \times 3 = 21$ rocks.

Complete the 3's counting pattern:

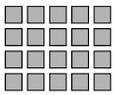
0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36

Name: _____

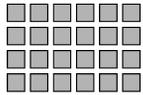
MULTIPLICATION



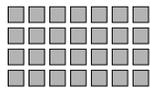
Use the arrays to solve each equation.
Look at the products. What pattern do you see?



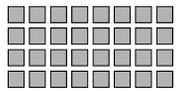
$4 \times \square = \bigcirc$



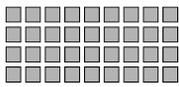
$4 \times \square = \bigcirc$



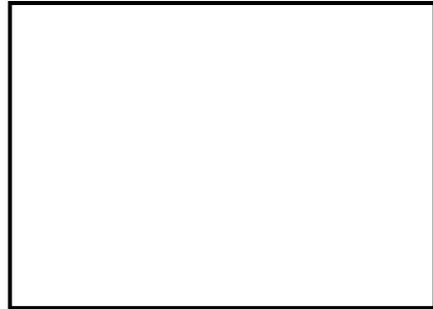
$4 \times \square = \bigcirc$



$4 \times \square = \bigcirc$

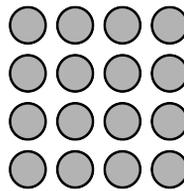


$4 \times \square = \bigcirc$



Draw an array for: $4 \times 3 =$

Circle groups of 4. Write two multiplication equations for this array.



Egg cartons contain 12 eggs each (1 dozen). For the egg hunt, we colored 4 dozen eggs. Draw an array and write an equation to show how many eggs we colored.

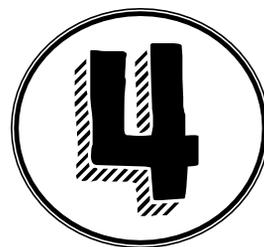
Complete the 4's counting pattern:

0, 4, _____, _____, 16, _____, _____, _____, 32, _____, _____, 44, _____

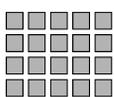
Name: _____

Answer Key

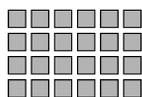
MULTIPLICATION



Use the arrays to solve each equation.
Look at the products. What pattern do you see? **All of the products are even numbers.**



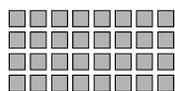
$4 \times 5 = 20$



$4 \times 6 = 24$



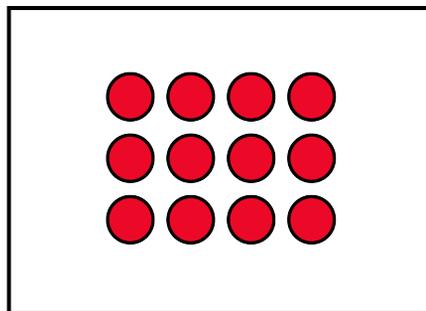
$4 \times 7 = 28$



$4 \times 8 = 32$



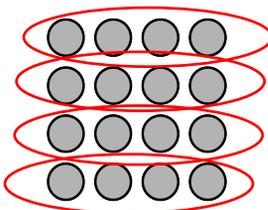
$4 \times 9 = 36$



Draw an array for: $4 \times 3 = 12$

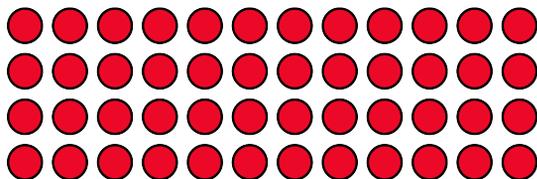
Circle groups of 4. Write a multiplication equation and repeated addition equation for this array.

$4 + 4 + 4 + 4 = 16$



$4 \times 4 = 16$

Egg cartons contain 12 eggs each (1 dozen). For the egg hunt, we colored 4 dozen eggs. Draw an array and write an equation to show how many eggs we colored.



$12 \times 4 = 48 \text{ eggs}$

Complete the 4's counting pattern:

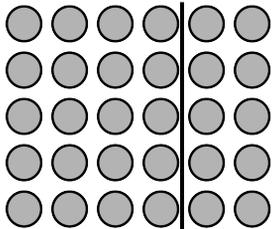
0, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48

Name: _____

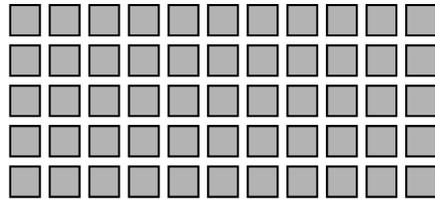
MULTIPLICATION



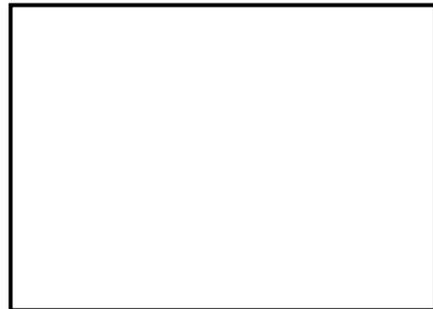
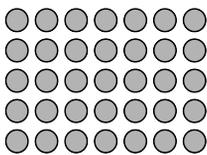
Can you use the **dISTRIBUTIVE PROPERTY** to find the product?



Write two multiplication equations for this array.



The **COMMUTATIVE PROPERTY** states that two numbers can be multiplied in any order. Give two examples of this property using this array.



Draw an array for: $5 \times 8 =$

It is 5 miles to the movie theater in our town. During the summer, we went and saw nine movies. Draw an array and write an equation to show how many miles we drove to the movie theater during the summer.

Complete the 5's counting pattern:

0, 5, _____, _____, 20, _____, _____, _____, _____, 45, _____, _____, _____

Name: _____

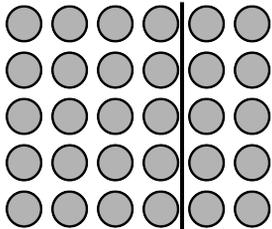
Answer Key

MULTIPLICATION



Can you use the distributive PROPERTY to find the product?

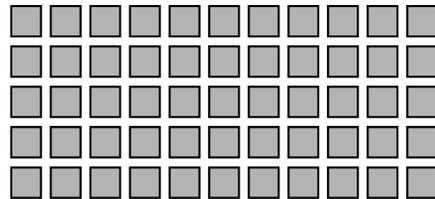
$$(5 \times 4) + (5 \times 2) = 30$$



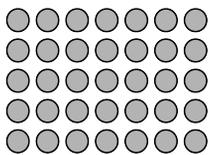
Write two multiplication equations for this array.

$$5 \times 11 = 55$$

$$11 \times 5 = 55$$

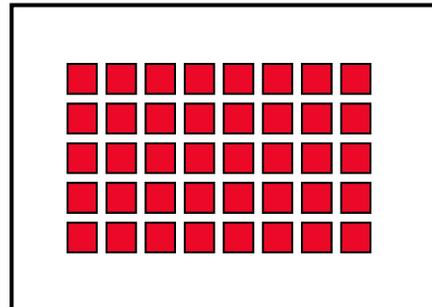


The commutative PROPERTY states that two numbers can be multiplied in any order. Give two examples of this property using this array.



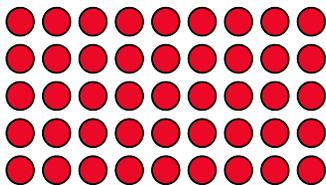
$$5 \times 7 = 35$$

$$7 \times 5 = 35$$



Draw an array for: $5 \times 8 = 40$

It is 5 miles to the movie theater in our town. During the summer, we went and saw nine movies. Draw an array and write an equation to show how many miles we drove to the movie theater during the summer.



$$5 \text{ miles} \times 9 \text{ trips} = 45 \text{ miles.}$$

Complete the 5's counting pattern:

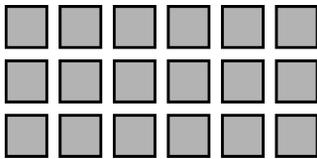
0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

Name: _____

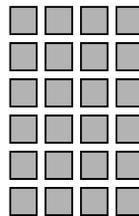
MULTIPLICATION



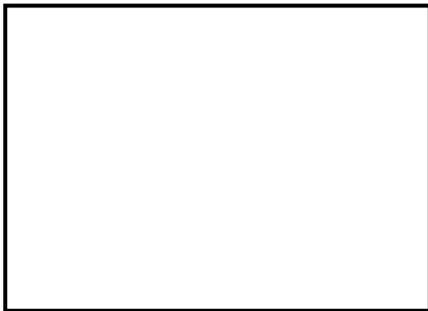
Circle groups of 6. Write a multiplication equation and repeated addition equation for this array.



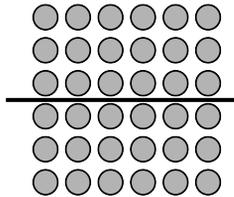
Write two multiplication equations for this array.



Draw an array for: $6 \times 5 =$



Can you use the *dISTRIBUTIVE PROPERTY* to find the product?



The gumballs at our store are 10 cents each. I want to buy enough to share with my 5 friends. Draw an array and write an equation to show how much money I will need to buy the gumballs.

Complete the 6's counting pattern:

0, 6, _____, _____, _____, _____, 36, _____, _____, _____, 60, _____, _____

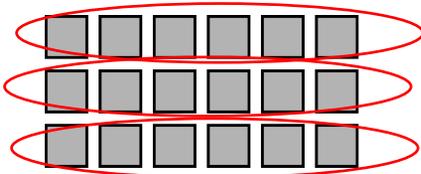
Name: _____

Answer Key

Multiplication

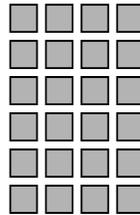


Circle groups of 6. Write a multiplication equation and repeated addition equation for this array.



$$6 \times 3 = 18 \quad 6 + 6 + 6 = 18$$

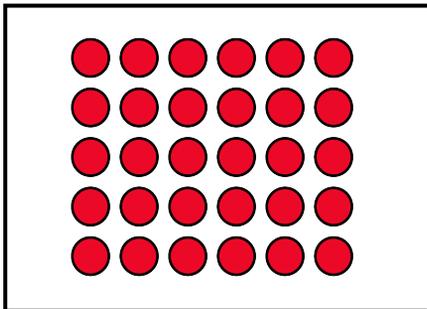
Write two multiplication equations for this array.



$$6 \times 4 = 24$$

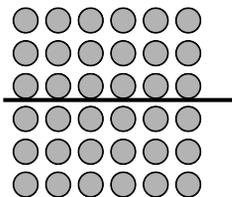
$$4 \times 6 = 24$$

Draw an array for: $6 \times 5 = 30$

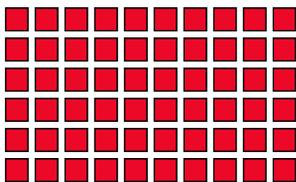


Can you use the **dISTRIBUTIVE PROPERTY** to find the product?

$$(6 \times 3) + (6 \times 3) = 36$$



The gumballs at our store are 10 cents each. I want to buy enough to share with my 5 friends. Draw an array and write an equation to show how much money I will need to buy the gumballs.



$$6 \text{ people} \times 10 \text{ cents} = 60 \text{ cents}$$

Complete the 6's counting pattern:

0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72

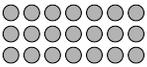
Name: _____

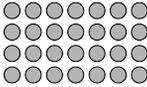
MULTIPLICATION

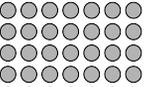


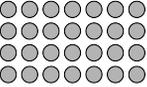
Use the arrays to solve each equation. Look at the products. What pattern do you see?

 **7** x =

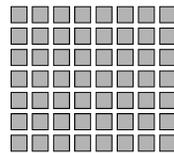
 **7** x =

 **7** x =

 **7** x =

 **7** x =

The **COMMUTATIVE PROPERTY** states that two numbers can be multiplied in any order. Give two examples of this property using this array.



Draw an array for: $7 \times 6 =$



Every day I ride my bike down to my Grandma's house. It takes me exactly 5 minutes to get there. Draw an array and write an equation to show how many minutes I spend each week riding to my Grandma's house.

Complete the 7's counting pattern:

0, 7, ____, ____, 28, ____, ____, 49, ____, ____, ____, 77, ____

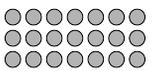
Name: _____

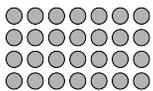
MULTIPLICATION

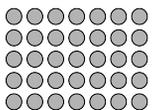


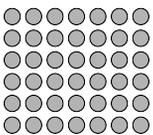
Use the arrays to solve each equation. Look at the products. What pattern do you see? **The products are even, odd, even, odd, even.**

 $7 \times 2 = 14$

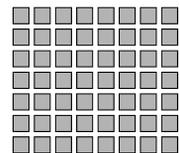
 $7 \times 3 = 21$

 $7 \times 4 = 28$

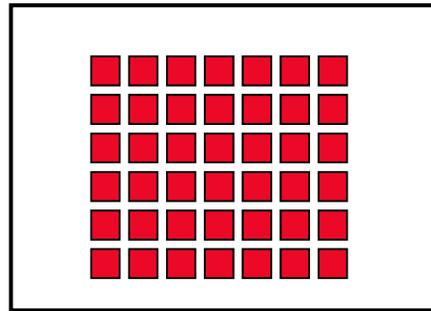
 $7 \times 5 = 35$

 $7 \times 6 = 42$

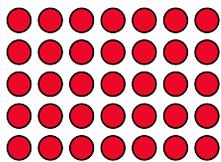
The **COMMUTATIVE PROPERTY** states that two numbers can be multiplied in any order. Give two examples of this property using this array.

 $7 \times 8 = 56$
 $8 \times 7 = 56$

Draw an array for: $7 \times 6 = 42$



Every day I ride my bike down to my Grandma's house. It takes me exactly 5 minutes to get there. Draw an array and write an equation to show how many minutes I spend each week riding to my Grandma's house.



$7 \text{ days} \times 5 \text{ minutes} = 35 \text{ minutes}$

Complete the 7's counting pattern:

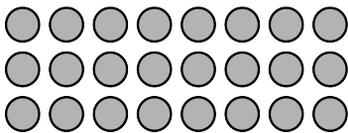
0, 7, 21, 28, 28, 35, 42, 49, 56, 63, 70, 77, 84

Name: _____

MULTIPLICATION



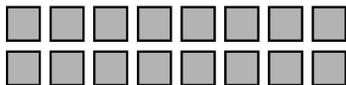
Circle groups of 8. Write a multiplication equation and repeated addition equation for this array.



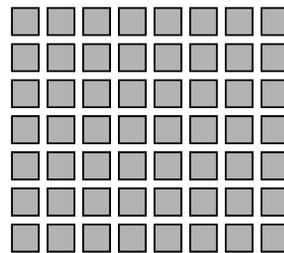
Draw an array for: $8 \times 4 =$



The **COMMUTATIVE PROPERTY** states that two numbers can be multiplied in any order. Give two examples of this property using this array.



Write two multiplication equations for this array.



Our class had a reading competition. The prize was a No Homework Pass for the rest of the year! Twelve students in our class read 8 books in one month. Draw an array and write an equation to show how many books we read all together.

Complete the 8's counting pattern:

0, 8, _____, _____, _____, _____, 48, _____, 64, _____, _____, _____, 96

Name: _____

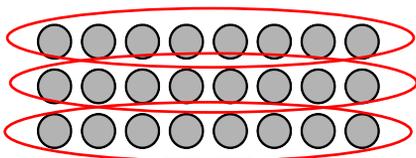
Answer Key

MULTIPLICATION

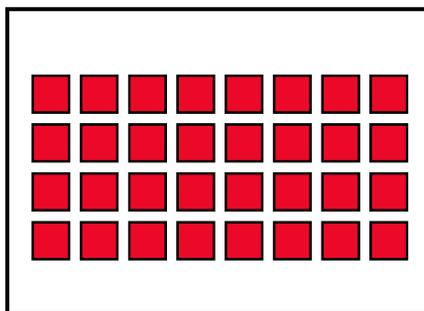


Circle groups of 8. Write a multiplication equation and repeated addition equation for this array.

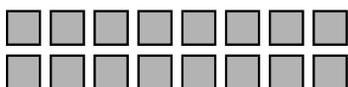
$$8 \times 3 = 24 \quad 8 + 8 + 8 = 24$$



Draw an array for: $8 \times 4 = 32$



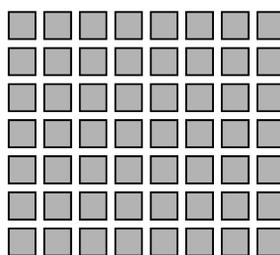
The **COMMUTATIVE PROPERTY** states that two numbers can be multiplied in any order. Give two examples of this property using this array.



$$8 \times 2 = 16$$

$$2 \times 8 = 16$$

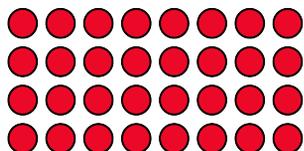
Write two multiplication equations for this array.



$$8 \times 7 = 56$$

$$7 \times 8 = 56$$

Our class had a reading competition. The prize was a No Homework Pass for the rest of the year! Four students in our class read 8 books in one month. Draw an array and write an equation to show how many books we read all together.



$$4 \text{ students} \times 8 \text{ books} = 32 \text{ books}$$

Complete the 8's counting pattern:

0, 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96

Name: _____

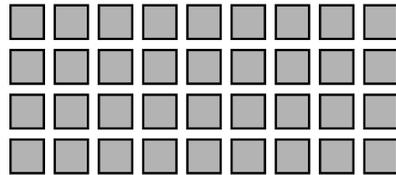
MULTIPLICATION



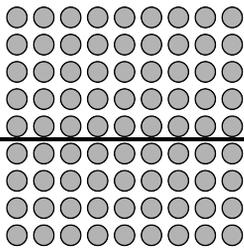
Draw an array for: $9 \times 6 =$



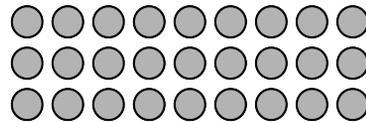
Circle groups of 9. Write a multiplication equation and repeated addition equation for this array.



Can you use the *d*ISTRIBUTIVE *P*ROPERT*Y* to find the product?



Write two multiplication equations for this array.



The P.E. Coach divided the classes into 4 teams of 9 students on each for the relay race. Draw an array and write an equation to show how many students were on the 4 teams all together.

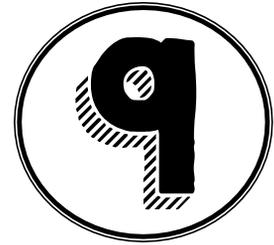
Complete the 9's counting pattern:

0, 9, _____, _____, _____, 45, _____, _____, _____, _____, _____, _____, 108

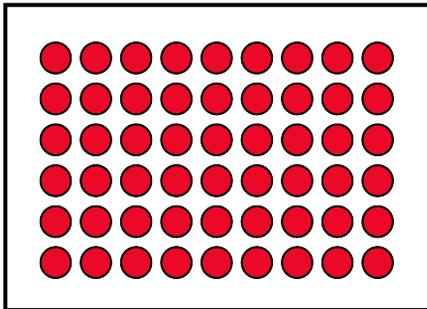
Name: _____

Answer Key

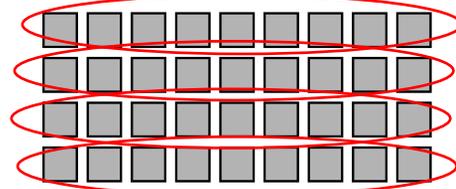
MULTIPLICATION



Draw an array for: $9 \times 6 =$



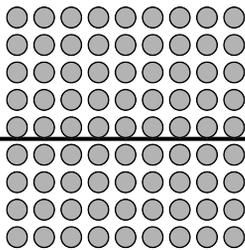
Circle groups of 9. Write a multiplication equation and repeated addition equation for this array.



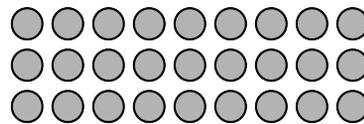
$$9 \times 4 = 36 \quad 9 + 9 + 9 + 9 = 36$$

Can you use the **dISTRIBUTIVE PROPERTY** to find the product?

$$(9 \times 5) + (9 \times 4) = 81$$



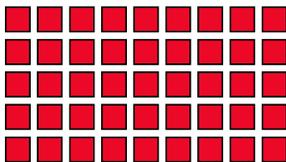
Write two multiplication equations for this array.



$$9 \times 3 = 27$$

$$3 \times 9 = 27$$

The P.E. Coach divided the classes into 5 teams of 9 students on each for the relay race. Draw an array and write an equation to show how many students were on the 4 teams all together.



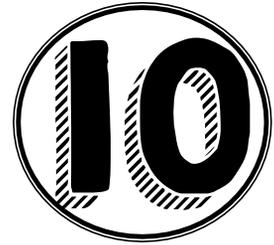
$$9 \text{ students} \times 5 \text{ teams} = 45 \text{ students}$$

Complete the 9's counting pattern:

0, 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99, 108

Name: _____

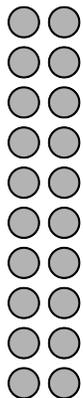
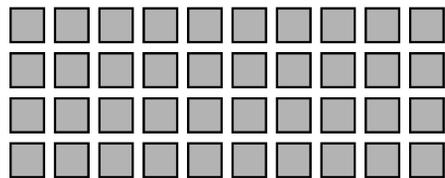
MULTIPLICATION



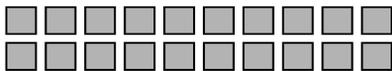
Draw an array for: $10 \times 7 =$



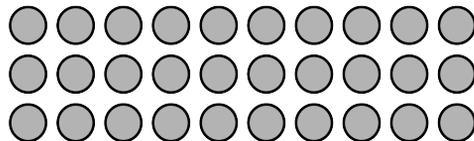
Circle groups of 10. Write a multiplication equation and repeated addition equation for this array.



Can you write the same multiplication equation for these two arrays?



Write two multiplication equations for this array.



I bought a bag of my favorite candy at the store. Mom told me I could only eat 5 pieces each day. I counted the whole bag and there are 50 pieces of candy. How many days will this bag of candy last? Use repeated addition to show your answer.

Complete the 10's counting pattern:

0, 10, _____, _____, _____, 50, _____, _____, _____, _____, _____, _____, 120

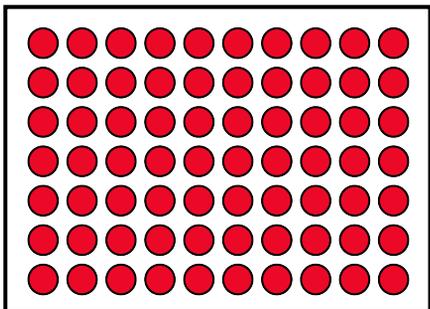
Name: _____

Answer Key

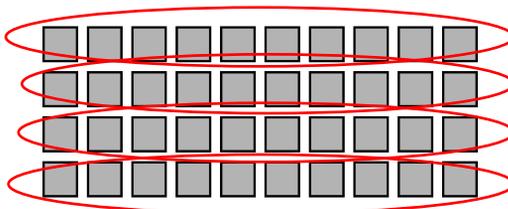
MULTIPLICATION



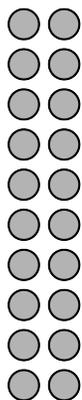
Draw an array for: $10 \times 7 =$



Circle groups of 10. Write a multiplication equation and repeated addition equation for this array.

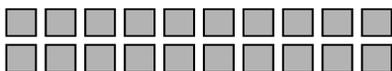


$$10 + 10 + 10 + 10 = 40$$

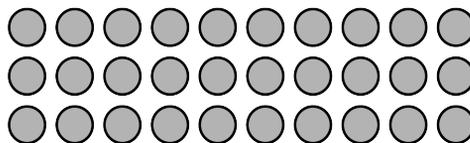


Can you write the same multiplication equation for these two arrays?

Yes, both arrays can be expressed by: $2 \times 10 = 20$
or $10 \times 2 = 20$



Write two multiplication equations for this array.



$$10 \times 3 = 30$$

$$3 \times 10 = 30$$

I bought a bag of my favorite candy at the store. Mom told me I could only eat 5 pieces each day. I counted the whole bag and there are 50 pieces of candy. How many days will this bag of candy last? Use repeated addition to show your answer.

$$5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = 50$$

Complete the 10's counting pattern:

0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120

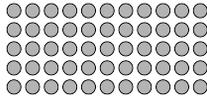
Name: _____

MULTIPLICATION

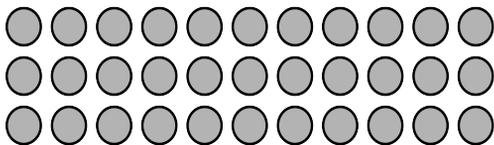


Use the arrays to solve each equation. Look at the products. What pattern do you see?

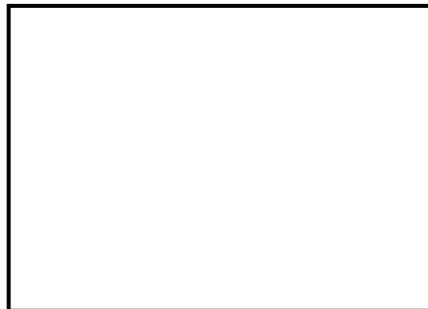
 $11 \times \square = \bigcirc$  $11 \times \square = \bigcirc$

 $11 \times \square = \bigcirc$  $11 \times \square = \bigcirc$

Write two multiplication equations for this array.



Draw an array for: $11 \times 5 =$



During the month of June, it rained 4 inches per day for 11 days in a row. Everything was so soggy! Draw an array and write an equation to show how many inches of rain fell during the 11 days.

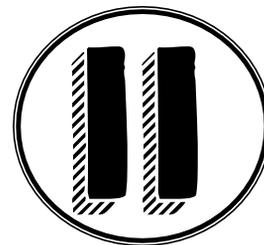
Complete the 11's counting pattern:

0, 11, _____, _____, _____, 55, _____, _____, _____, _____, _____, 121, _____

Name: _____

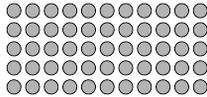
Answer Key

MULTIPLICATION

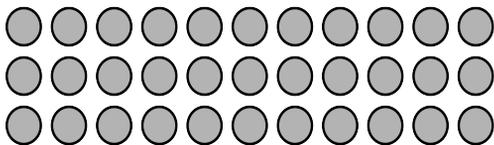


Use the arrays to solve each equation. Look at the products. What pattern do you see?

 $11 \times 2 = 22$  $11 \times 4 = 44$

 $11 \times 3 = 33$  $11 \times 5 = 55$

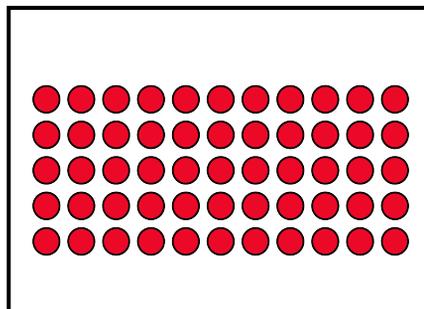
Write two multiplication equations for this array.



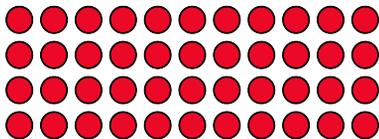
$$11 \times 3 = 33$$

$$3 \times 11 = 33$$

Draw an array for: $11 \times 5 = 55$



During the month of June, it rained 4 inches per day for 11 days in a row. Everything was so soggy! Draw an array and write an equation to show how many inches of rain fell during the 11 days.



$$11 \text{ days} \times 4 \text{ inches} = 44 \text{ inches}$$

Complete the 11's counting pattern:

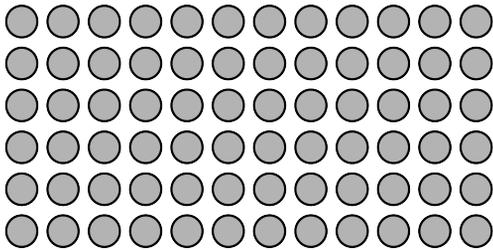
0, 11, 22, 33, 44, 55, 66, 77, 88, 99, 110, 121, 132

Name: _____

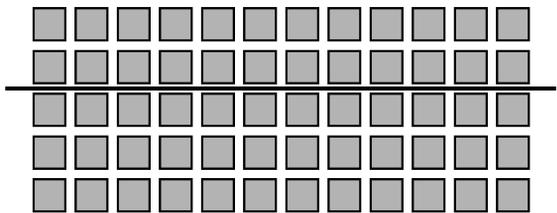
MULTIPLICATION



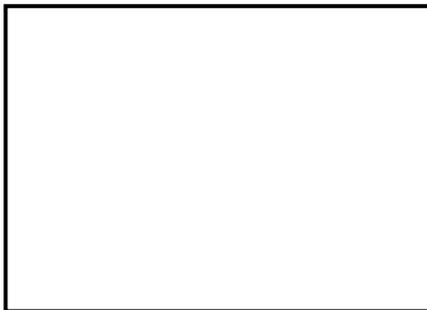
Circle groups of 12. Write two multiplication equations for this array.



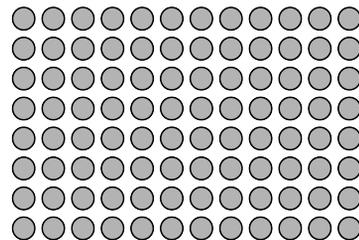
Can you use the *dISTRIBUTIVE* *PROPERTY* to find the product?



Draw an array for: $12 \times 4 =$



Write two multiplication equations for this array.



Each week my Grandpa gives me 12 dimes for sweeping his sidewalk. He says he is getting a real good deal. Draw an array and write an equation to show how much money I am earning each week for helping my Grandpa.

Complete the 12's counting pattern:

0, 12, _____, _____, _____, 60, _____, _____, _____, _____, 120, _____, _____

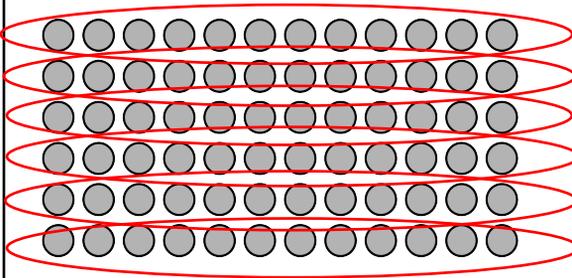
Name: _____

Answer Key

MULTIPLICATION

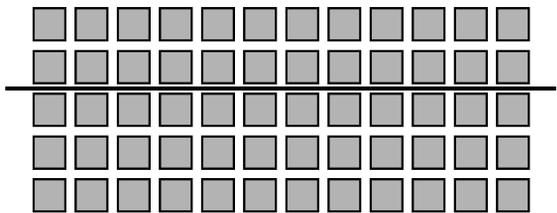


Circle groups of 12. Write two multiplication equations for this array.

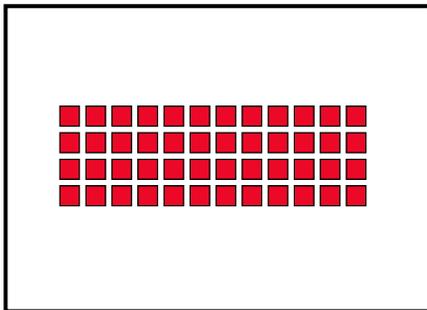


Can you use the *diStRiBUTiVe* *PRoPeRtY* to find the product?

$$(12 \times 2) + (12 \times 3) = 60$$



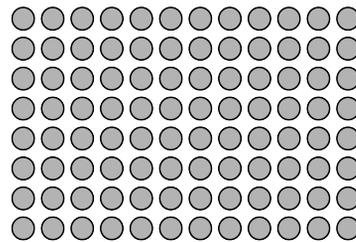
Draw an array for: $12 \times 4 =$



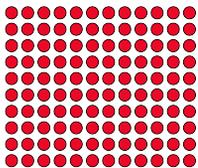
Write two multiplication equations for this array.

$$12 \times 8 = 96$$

$$8 \times 12 = 96$$



Each week my Grandpa gives me 12 dimes for sweeping his sidewalk. He says he is getting a real good deal. Draw an array and write an equation to show how much money I am earning each week for helping my Grandpa.



$$12 \times 10 \text{ (dimes)} = \$1.20 \text{ peer week}$$

Complete the 12's counting pattern:

0, 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144

Name: _____

MULTIPLICATION

UNKNOWN
FACTORS

Find the unknown number by drawing an array and using the related fact.

Use this space to draw an array to solve for the unknown number.

$$24 = \square \times 8$$

$$24 \div 8 = \square$$

$$36 = 9 \times \square$$

$$\square \times 9 = 36$$

$$72 = \square \times 8$$

$$72 \div 8 = \square$$

$$54 = 9 \times \square$$

$$\square \times 9 = 54$$

$$42 = \square \times 7$$

$$42 \div 7 = \square$$

Name: _____

Answer Key

MULTIPLICATION

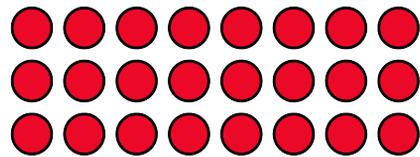
UNKNOWN
FACTORS

Find the unknown number by drawing an array and using the related fact.

Use this space to draw an array to solve for the unknown number.

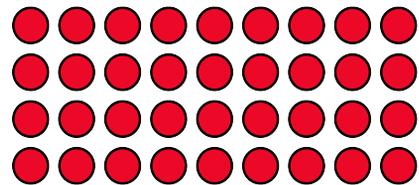
$$24 = \boxed{3} \times 8$$

$$24 \div 8 = \boxed{3}$$



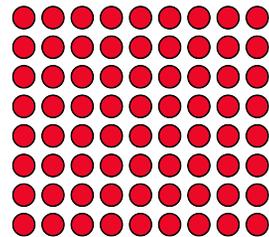
$$36 = 9 \times \boxed{4}$$

$$\boxed{4} \times 9 = 36$$



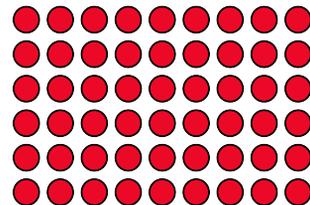
$$72 = \boxed{9} \times 8$$

$$72 \div 8 = \boxed{9}$$



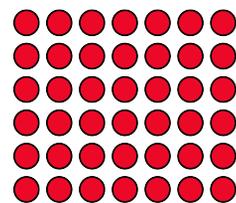
$$54 = 9 \times \boxed{6}$$

$$\boxed{6} \times 9 = 54$$



$$42 = \boxed{6} \times 7$$

$$42 \div 7 = \boxed{6}$$

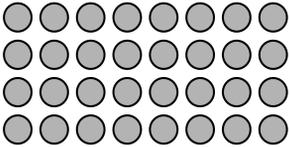
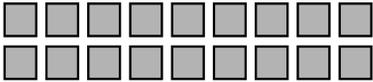
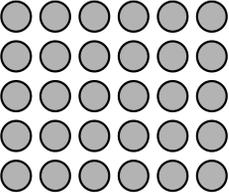
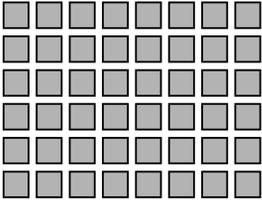
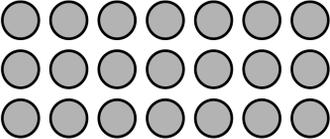


Name: _____

MULTIPLICATION

ARRAYS

Show all multiplication equations that can be used
Show all repeated addition equations

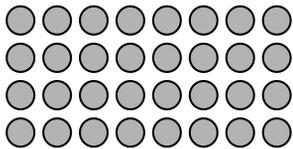
Name: _____

Answer Key

MULTIPLICATION

ARRAYS

Show all multiplication and repeated addition equations for each array.



$$4 \times 8 = 32$$

$$8 \times 4 = 32$$

$$8 + 8 + 8 + 8 = 32$$

$$4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = 32$$

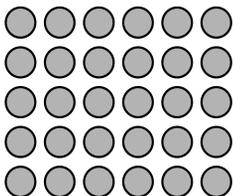


$$9 \times 2 = 18$$

$$2 \times 9 = 18$$

$$9 + 9 = 18$$

$$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 18$$

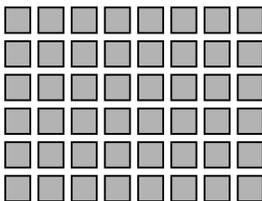


$$6 \times 5 = 30$$

$$5 \times 6 = 30$$

$$5 + 5 + 5 + 5 + 5 + 5 = 30$$

$$6 + 6 + 6 + 6 + 6 = 30$$

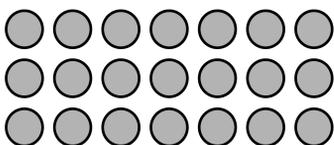


$$6 \times 8 = 48$$

$$8 \times 6 = 48$$

$$6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 = 48$$

$$8 + 8 + 8 + 8 + 8 + 8 = 48$$



$$7 \times 3 = 21$$

$$3 \times 7 = 21$$

$$7 + 7 + 7 = 21$$

$$3 + 3 + 3 + 3 + 3 + 3 + 3 = 21$$

Name: _____

MULTIPLICATION

ADD
ZERO

Multiplying by 10's is easy! Just multiply the factors and add zero to the one's place!

$5 \times 9 = \square \rightarrow \text{Add } 0$

$5 \times 90 = \underline{\quad}$

$4 \times 4 = \square \rightarrow \text{Add } 0$

$4 \times 40 = \underline{\quad}$

$3 \times 5 = \square \rightarrow \text{Add } 0$

$3 \times 50 = \underline{\quad}$

$8 \times 8 = \square \rightarrow \text{Add } 0$

$8 \times 80 = \underline{\quad}$

$7 \times 3 = \square \rightarrow \text{Add } 0$

$7 \times 30 = \underline{\quad}$

$2 \times 5 = \square \rightarrow \text{Add } 0$

$2 \times 50 = \underline{\quad}$

$9 \times 2 = \square \rightarrow \text{Add } 0$

$9 \times 20 = \underline{\quad}$

$1 \times 9 = \square \rightarrow \text{Add } 0$

$1 \times 90 = \underline{\quad}$

$6 \times 7 = \square \rightarrow \text{Add } 0$

$6 \times 70 = \underline{\quad}$

$4 \times 7 = \square \rightarrow \text{Add } 0$

$4 \times 70 = \underline{\quad}$

Name: _____

Answer Key

MULTIPLICATION

ADD
ZERO

Multiplying by 10's is easy! Just multiply the factors and add zero to the one's place!

$5 \times 9 = \boxed{45} \rightarrow \text{Add 0}$

$5 \times 90 = \underline{450}$

$4 \times 4 = \boxed{16} \rightarrow \text{Add 0}$

$4 \times 40 = \underline{160}$

$3 \times 5 = \boxed{15} \rightarrow \text{Add 0}$

$3 \times 50 = \underline{150}$

$8 \times 8 = \boxed{64} \rightarrow \text{Add 0}$

$8 \times 80 = \underline{640}$

$7 \times 3 = \boxed{21} \rightarrow \text{Add 0}$

$7 \times 30 = \underline{210}$

$2 \times 5 = \boxed{10} \rightarrow \text{Add 0}$

$2 \times 50 = \underline{100}$

$9 \times 2 = \boxed{18} \rightarrow \text{Add 0}$

$9 \times 20 = \underline{180}$

$1 \times 9 = \boxed{9} \rightarrow \text{Add 0}$

$1 \times 90 = \underline{90}$

$6 \times 7 = \boxed{42} \rightarrow \text{Add 0}$

$6 \times 70 = \underline{420}$

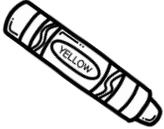
$4 \times 7 = \boxed{28} \rightarrow \text{Add 0}$

$4 \times 70 = \underline{280}$

Name: _____

Multiplication

PATTERNS ON
A HUNDREDS
CHART



Shade all of the
factors for the 3's,
5's, 7's, and 9's.

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

When you multiply odd numbers, the product is always odd. True or False? Give examples

When you add the digits for the products of 9, what do you notice?

What is the product of 6×9 ? Use the Commutative Property to find the product of 9×6 .

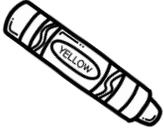
If you follow the row across for 3's and the column down for 3's, what do you notice?

Name: _____

Answer Key

Multiplication

PATTERNS ON
A HUNDREDS
CHART



Shade all of the factors for the 3's, 5's, 7's, and 9's.

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

When you multiply odd numbers, the product is always odd. True or False? Give examples

True. $3 \times 7 = 21$, $5 \times 5 = 25$, $7 \times 9 = 63$

When you add the digits for the products of 9, what do you notice?

They add up to 9 each time. $9 \times 2 = 18$, $1 + 8 = 9$; $9 \times 3 = 27$, $2 + 7 = 9$

What is the product of 6×9 ? Use the Commutative Property to find the product of 9×6 .

The product of $6 \times 9 = 54$. By using the Commutative Property, I know that 9×6 is also 54.

If you follow the row across for 3's and the column down for 3's, what do you notice?

The products are 3, 6, 9, 12, 15, 18, 21, 24, 27, 30 for both rows and columns.

Name: _____

Multiplication

PATTERNS ON
A HUNDREDS
CHART



Shade all of the factors for
the 2's, 4's, 6's, 8's and 10's.

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Deshawn says all of the products of 2's, 4's, 6's, 8's, and 10's are even. Is this true or false?

What do you notice when you compare the products of the 2's and 4's?

Use your finger to follow the highlighted column for the factor 8. What is the skip counting pattern?

Write a rule that you see in the table.

Name: _____

Multiplication

PATTERNS ON
A HUNDREDS
CHART



Shade all of the factors for
the 2's, 4's, 6's, 8's and 10's.

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Deshawn says all of the products of 2's, 4's, 6's, 8's, and 10's are even. Is this true or false?

It's true. All of the shaded numbers are even.

What do you notice when you compare the products of the 2's and 4's?

The products are all even. The products of 4's are double the products of 2's.
Example: the product of $2 \times 2 = 4$ and the product of $4 \times 2 = 8$.

Use your finger to follow the highlighted column for the factor 8. What is the skip counting pattern?

8, 16, 24, 32, 40, 48, 56, 64, 72, 80

Write a rule that you see in the table.

If you multiply 5 by an even number, the product ends in a zero.
If you multiply 5 by an odd number, the product ends in a 5.