

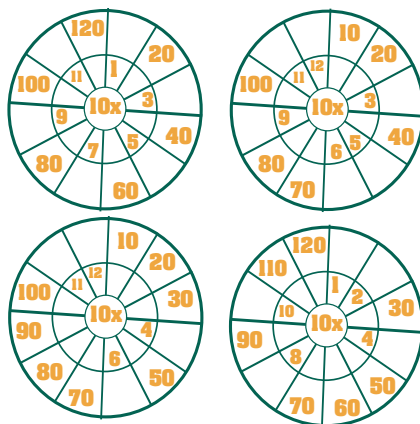
MULTIPLYING by 10

WORKBOOKLET

MULTIPLES OF 10

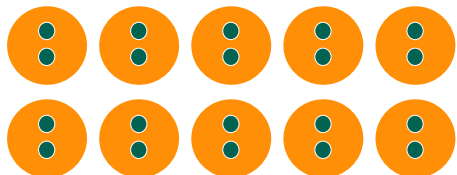


MULTIPLICATION WHEELS



$$10 \times 2 =$$

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



Hint: Think Place Value. The value of the digit becomes 10 times bigger.

MULTIPLES OF TEN

10 🖐️ 🖐️ 20 🖐️ 🖐️ 30 🖐️ 🖐️

40 🖐️ 🖐️ 50 🖐️ 🖐️ 60 🖐️ 🖐️

70 🖐️ 🖐️ 80 🖐️ 🖐️ 90 🖐️ 🖐️

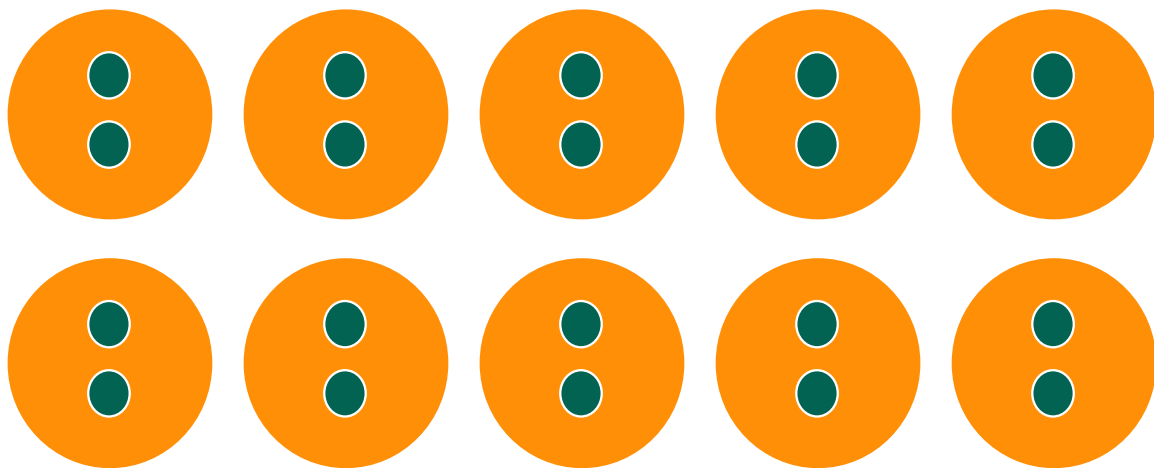
100 🖐️ 🖐️ 🖐️ 110 🖐️ 🖐️ 🖐️ 120 🖐️ 🖐️ 🖐️

STRATEGY POSTER

When multiplying by **10**
**Think Place Value. The value of the
digit becomes 10 times bigger.**

$$10 \times 2 = 20$$

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



**Hint: Think Place Value. The value of
the digit becomes 10 times bigger.**

MULTIPLICATION

$$10 \times 9 = 90$$



FACTOR



FACTOR



PRODUCT

MULTIPLES OF TEN

10



20



30



40



50



60



70



80



90



100



110



120



MULTIPLES OF TEN

10   20   30  

40   50   60  

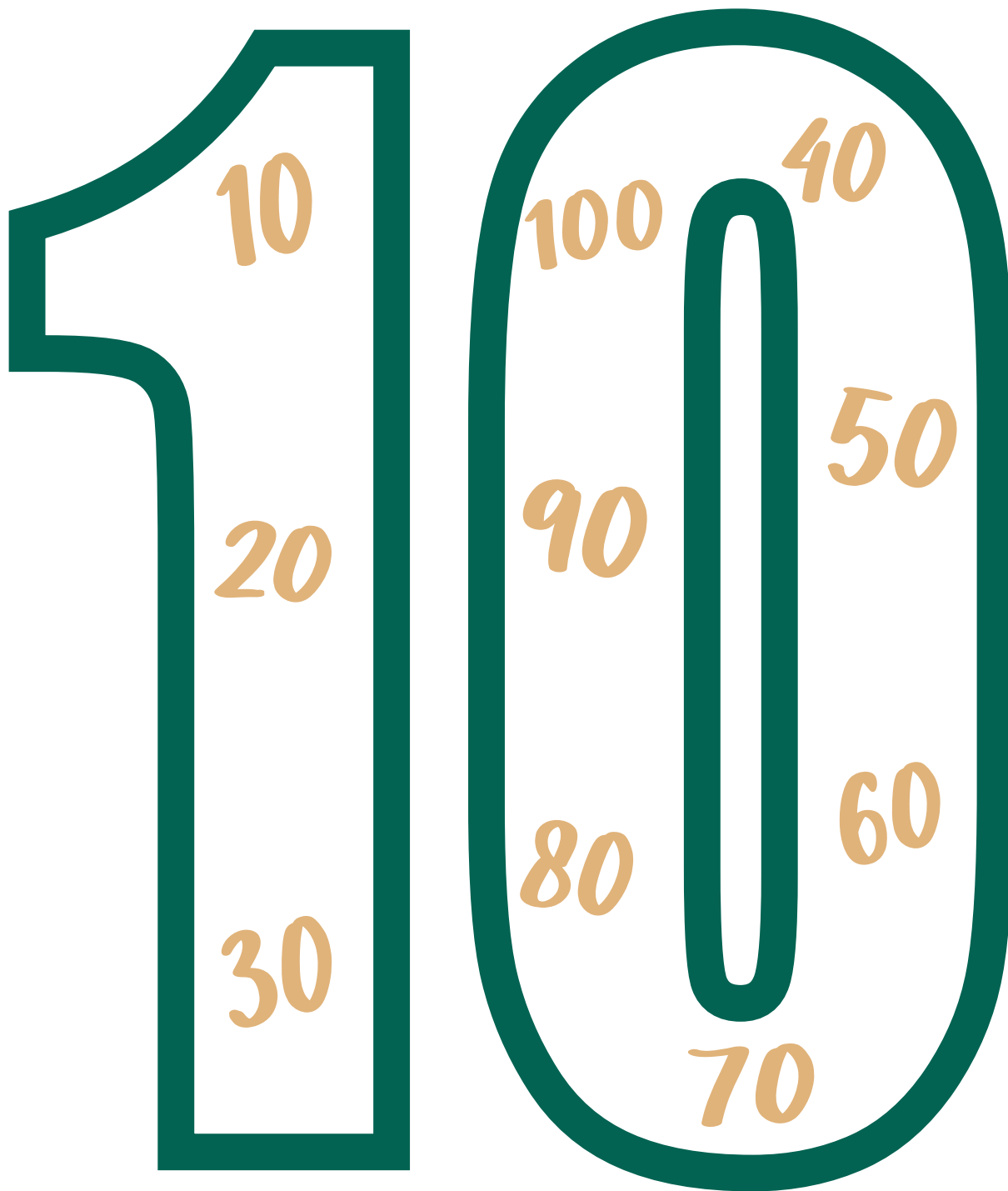
70   80   90  

100   110   120  

PICTURING THE MATH

GROUP THERE ARE 10 FINGERS IN A PAIR OF HANDS	COUNT BY SEQUENCE	MULTIPLICATION EQUATION
If you have 2 pairs of hands, how many fingers would you have? 	10, 20	$10 \times 2 = 20$
If you have 6 pairs of hands, how many fingers would you have? 	10, 20, 30, 40, 50, 60	$10 \times 6 = 60$
If you have 8 pairs of hands, how many fingers would you have? 		
If you have 4 pairs of hands, how many fingers would you have? 		
If you have 10 pairs of hands, how many fingers would you have? 		

MULTIPLES OF 10

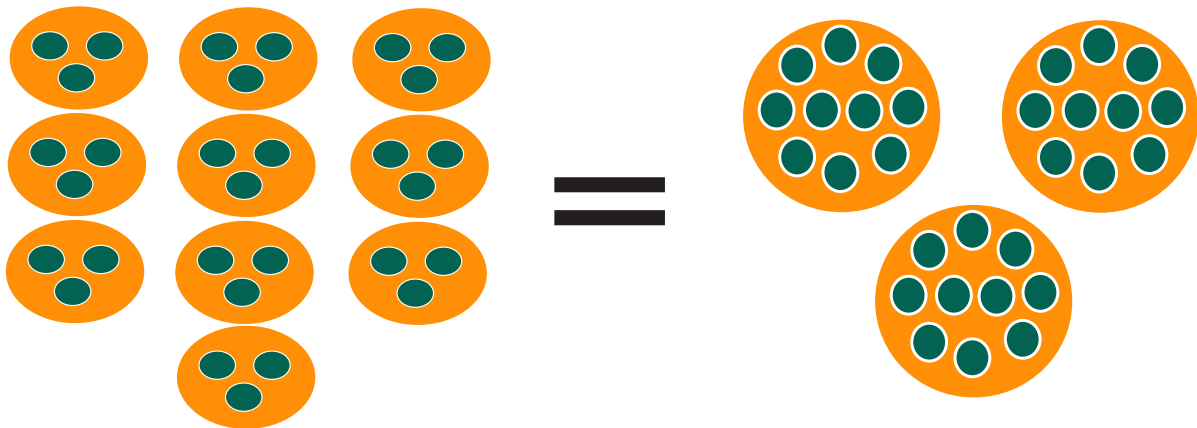


The word "VOCABULARY" is centered in a bold, black, sans-serif font. Behind the text is a decorative graphic consisting of several overlapping orange diamond shapes, some of which have thin green outlines.

VOCABULARY

COMMUTATIVE PROPERTY

$$10 \times 3 = 3 \times 10$$

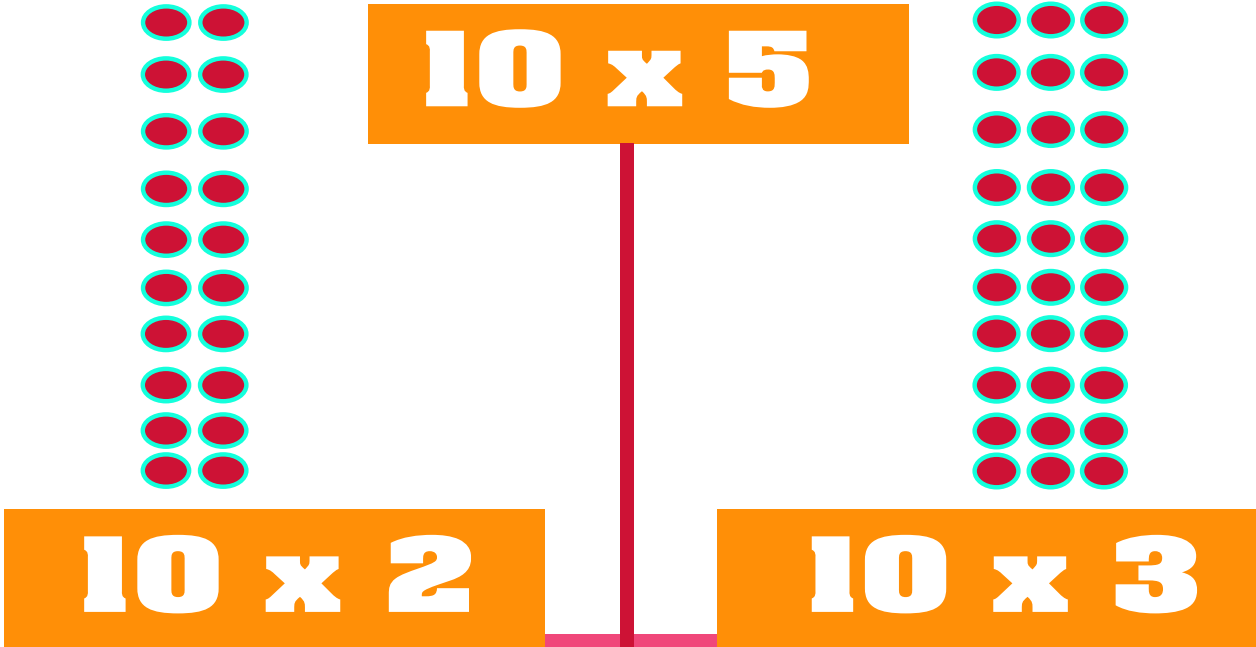


MODEL THE FACTS

$$10 \times 6 = 6 \times 10$$

$$10 \times 1 = 1 \times 10$$

DISTRIBUTIVE PROPERTY



MODEL THE FACTS

10 x 7 = (_x_) + (_x_)



There are other to ways to model this as well.

ASSOCIATIVE PROPERTY

$$10 \times 2 \times 2$$

$$10 \times 4 \text{ or } 2 \times 20$$

MODEL THE FACTS

$$10 \times 1 \times 10 = \underline{\quad} \times \underline{\quad}$$

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

$$10 \times 2 \times 10 = \underline{\quad} \times \underline{\quad}$$

These are examples. There are other answers.

FREE CHOICE

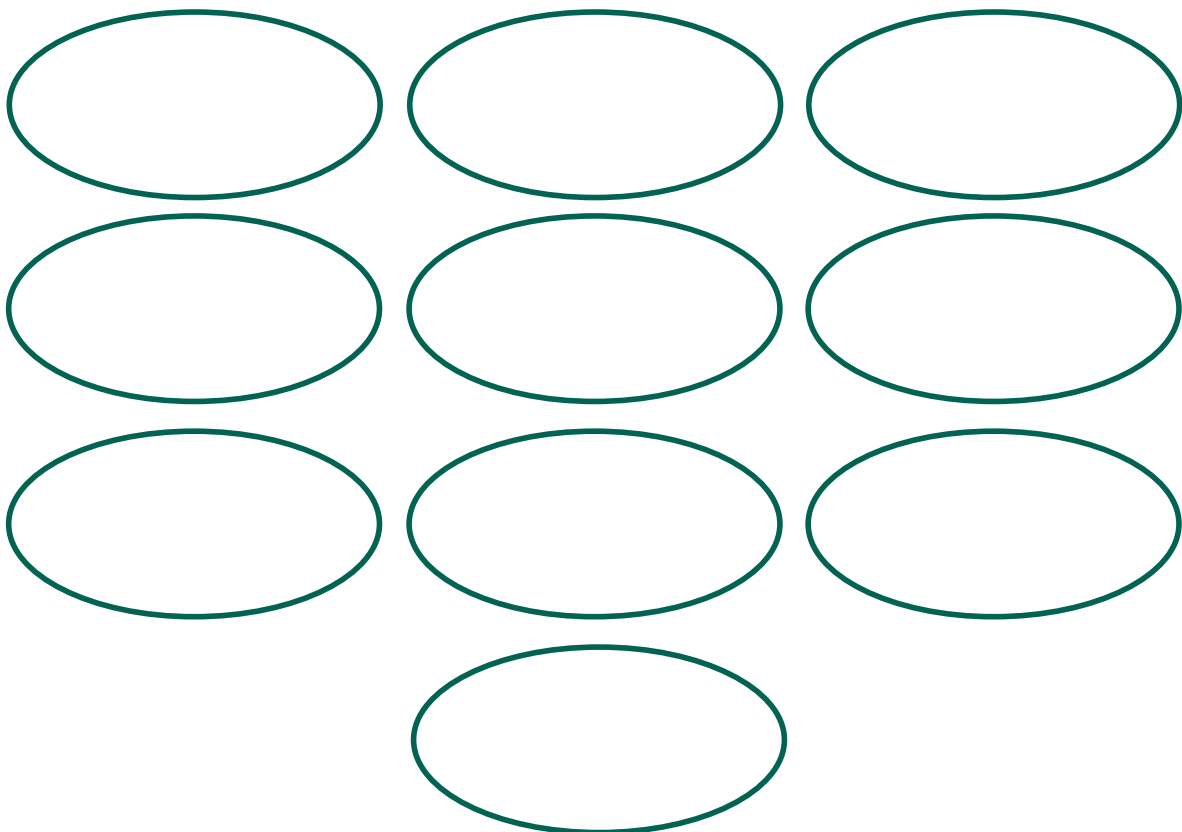
$$\underline{\quad} \times \underline{\quad} \times \underline{\quad} = \underline{\quad} \times \underline{\quad}$$

ZERO PROPERTY

When you multiply
by zero you get zero...

Zero groups of anything is zero

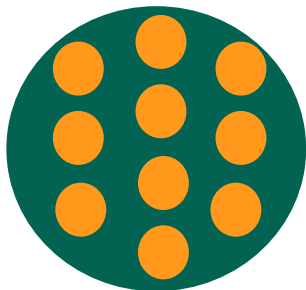
10 groups of **0** is **0**



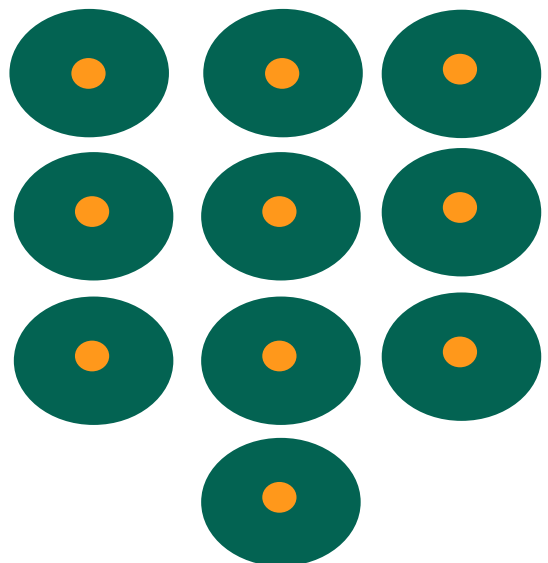
IDENTITY PROPERTY

**When you multiply by 1...
you get that number**

**1 group of
10 is 10**

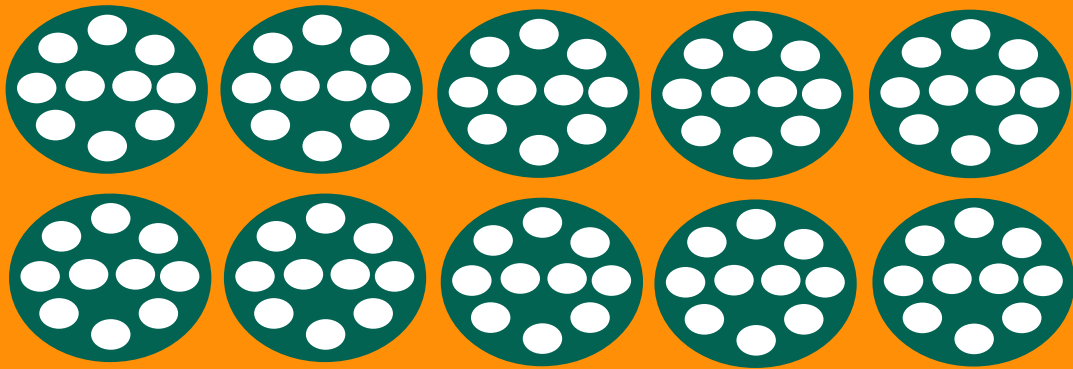


**10 groups
of 1 is 10**



Modeling Multiplication

DRAW EQUAL GROUPS



10 X 10

10 X 1

10 X 2

10 X 3

10 X 4

Modeling Multiplication

DRAW EQUAL GROUPS

10 X 5

10 X 6

10 X 7

10 X 8

10 X 9

10 X 10

FREE CHOICE

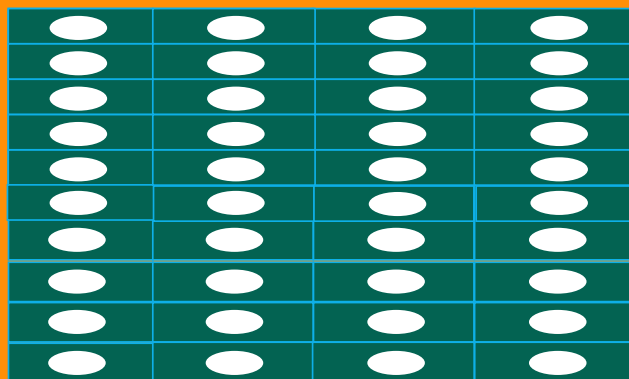
FREE CHOICE

Modeling Multiplication

DRAW AN ARRAY

10 groups of 4

$$10 \times 4 = ?$$



DRAW AN ARRAY

$$10 \times 1$$

$$10 \times 2$$

$$10 \times 3$$

$$10 \times 4$$

Modeling Multiplication

DRAW AN ARRAY

10 x 5

10 x 6

10 x 7

10 x 8

10 x 9

10 x 10

FREE CHOICE

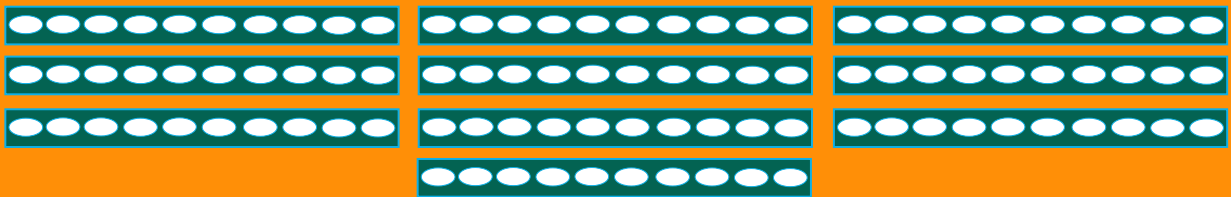
FREE CHOICE

Multiplication strategies:

REPEATED ADDITION

10 groups of 10

$$10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = 100$$



$$10 \times 10 = 100$$

MODEL THE REPEATED ADDITION
SENTENCE

$$10 \times 1 =$$

$$1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1$$

--

$$10 \times 2 =$$

$$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$$

--

$$10 \times 3 =$$

$$3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3$$

--

$$10 \times 4 =$$

$$4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4$$

--

Multiplication strategies:

REPEATED ADDITION

$$10 \times 5 =$$

$$5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5$$

$$10 \times 6 =$$

$$6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6$$

$$10 \times 7 =$$

$$7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7$$

$$10 \times 8 =$$

$$8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8$$

$$10 \times 9 =$$

$$9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9$$

$$10 \times 10 =$$

$$10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10$$

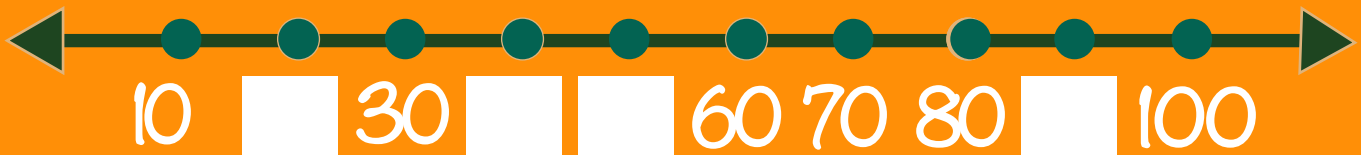
FREE CHOICE

FREE CHOICE

Modeling Multiplication

SKIP COUNTING

DRAW ON A NUMBER LINE



FILL IN THE MISSING NUMBERS



Modeling Multiplication

SKIP COUNTING

FILL IN THE MISSING NUMBERS

10		30		50		70			100
----	--	----	--	----	--	----	--	--	-----

FILL IN THE MISSING NUMBERS

	20		40	50		70		90	
--	----	--	----	----	--	----	--	----	--

FILL IN THE MISSING NUMBERS

	20		40		60		80		100
--	----	--	----	--	----	--	----	--	-----

FILL IN THE MISSING NUMBERS

10		30		50		70		90	
----	--	----	--	----	--	----	--	----	--

Modeling Multiplication

SKIP COUNTING

FILL IN THE MISSING NUMBERS. MODEL 10×1 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 10×2 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 10×3 ON THE NUMBER LINE.



Modeling Multiplication

FILL IN THE MISSING NUMBERS. MODEL 10×4 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 10×5 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 10×6 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 10×7 ON THE NUMBER LINE.



Modeling Multiplication

SKIP COUNTING

FILL IN THE MISSING NUMBERS. MODEL 10×8 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 10×9 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 10×10 ON THE NUMBER LINE.



Multiplication Strategies:

SKIP COUNTING ON THE NUMBER LINE



$$10 \times 2$$

SOLVE THE PROBLEM ON THE NUMBER LINE

$$10 \times 2$$



$$10 \times 3$$



$$10 \times 4$$



$$10 \times 5$$



SOLVE THE PROBLEM ON THE NUMBER LINE

10 x 6



10 x 7



10 x 8



10 x 9



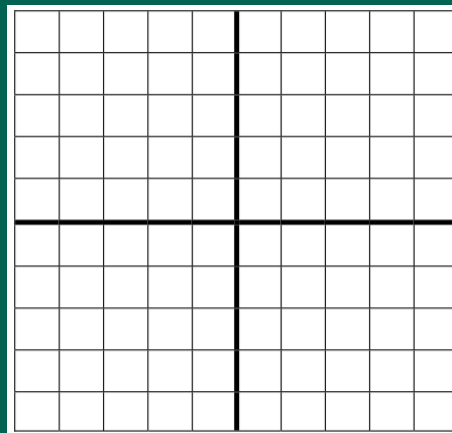
10 x 10



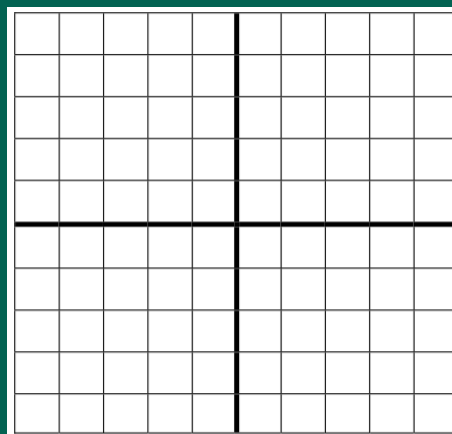
Array Flashcards

MODEL THE PROBLEMS ON THE GRIDS.

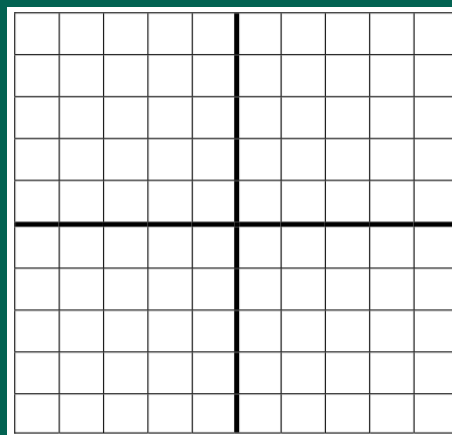
$$10 \times 1 = \underline{\quad}$$



$$10 \times 2 = \underline{\quad}$$



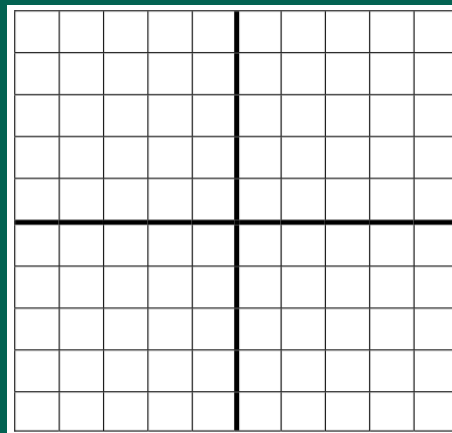
$$10 \times 3 = \underline{\quad}$$



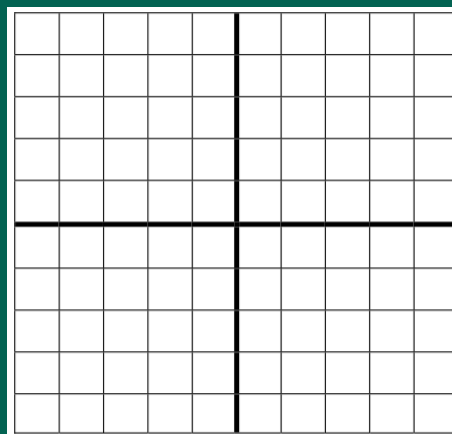
Array Flashcards

MODEL THE PROBLEMS ON THE GRIDS.

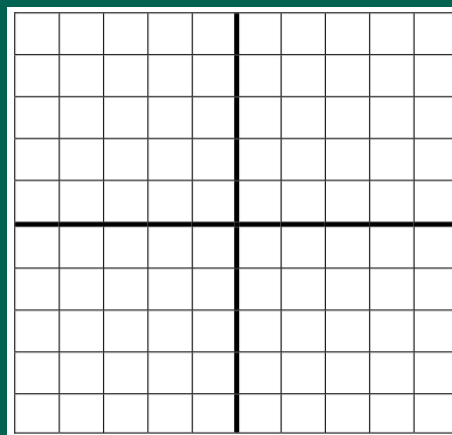
$$10 \times 4 = \underline{\quad}$$



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



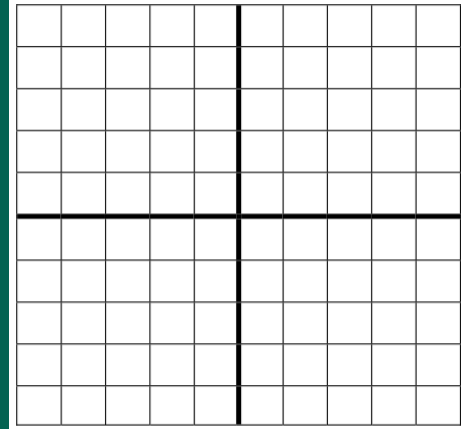
$$10 \times 6 = \underline{\quad}$$



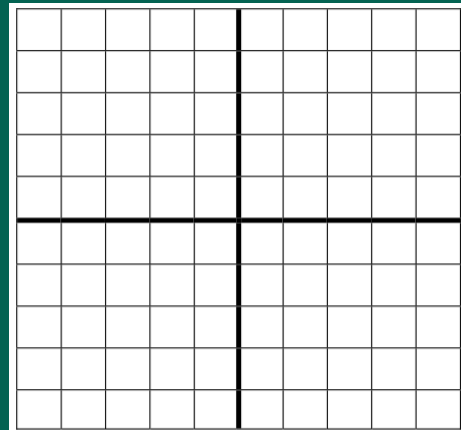
Array Flashcards

MODEL THE PROBLEMS ON THE GRIDS.

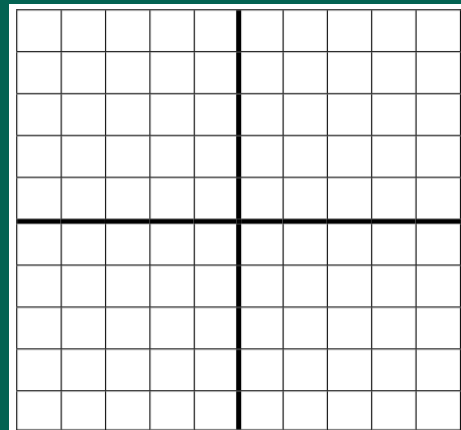
$$10 \times 7 = \underline{\quad}$$



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



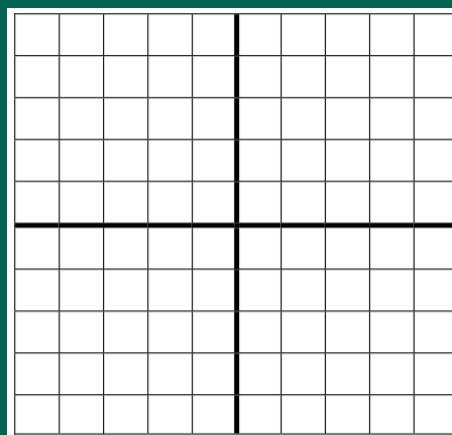
$$10 \times 9 = \underline{\quad}$$



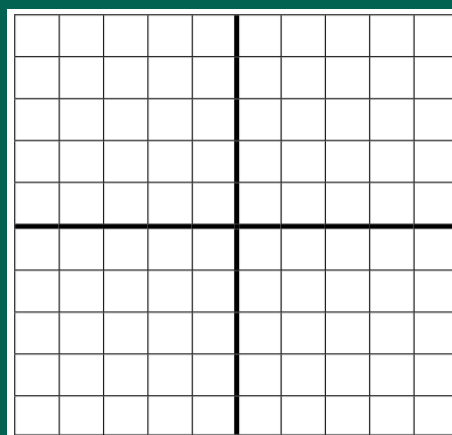
Array Flashcards

MODEL THE PROBLEMS ON THE GRIDS.

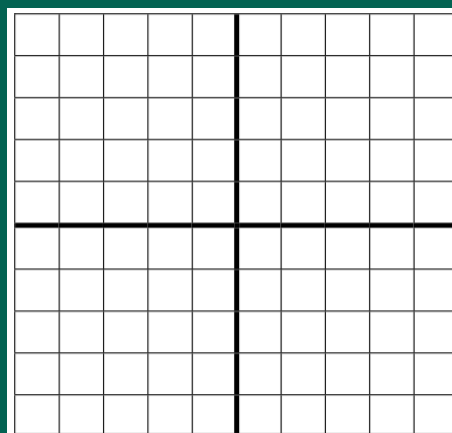
$$10 \times 10 = \underline{\quad}$$



FREE CHOICE



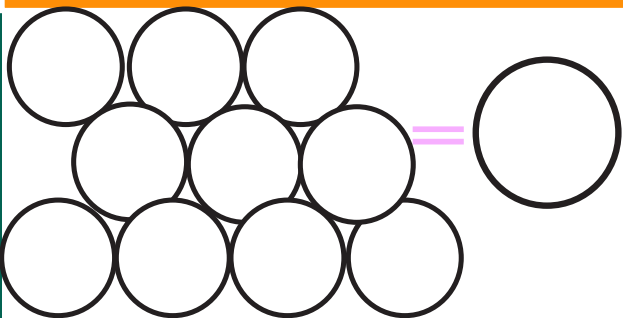
FREE CHOICE



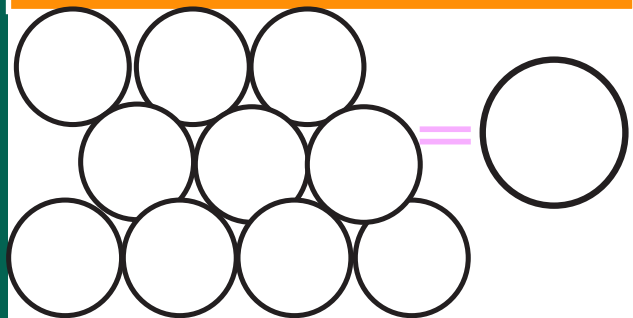
Equal Group Flashcards

MAKE YOUR OWN EQUAL GROUP FLASHCARDS. DRAW EQUAL GROUPS TO MODEL THE PROBLEM.

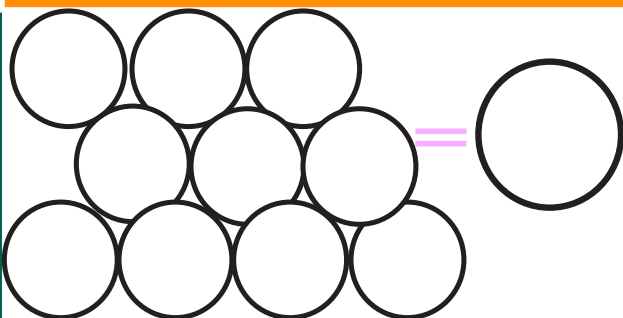
$$10 \times 0 = 0$$



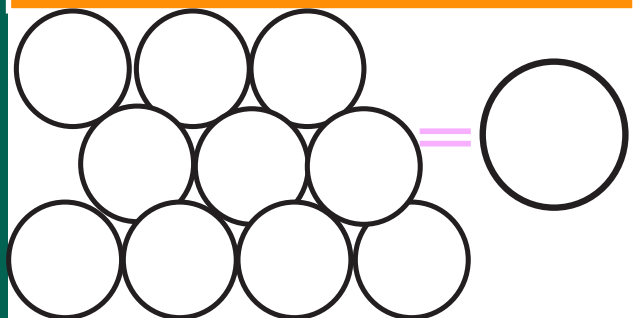
$$10 \times 1 = 10$$



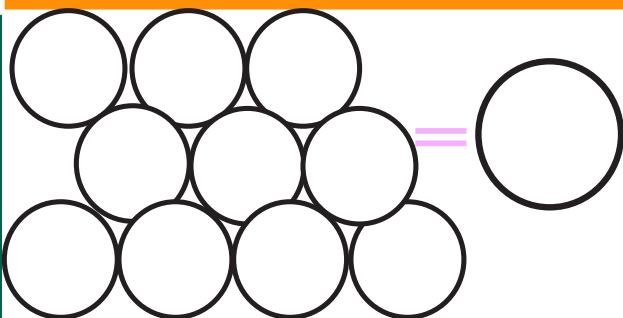
$$10 \times 2 = 20$$



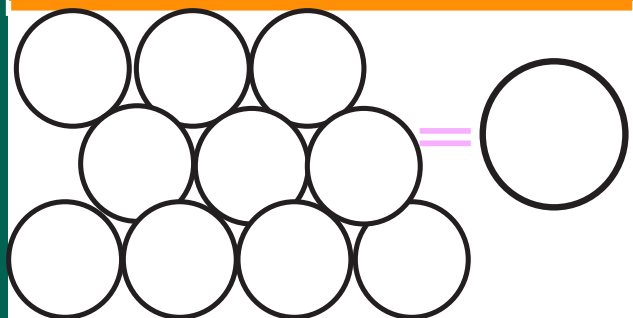
$$10 \times 3 = 30$$



$$10 \times 4 = 40$$



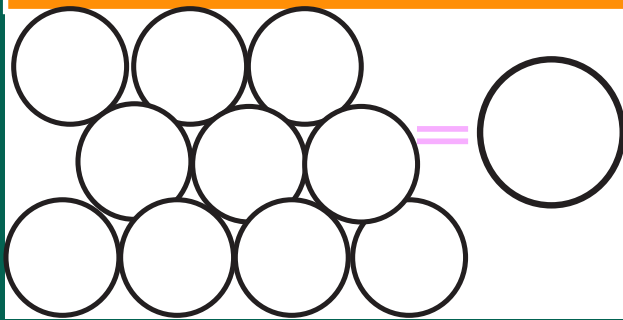
$$10 \times 5 = 50$$



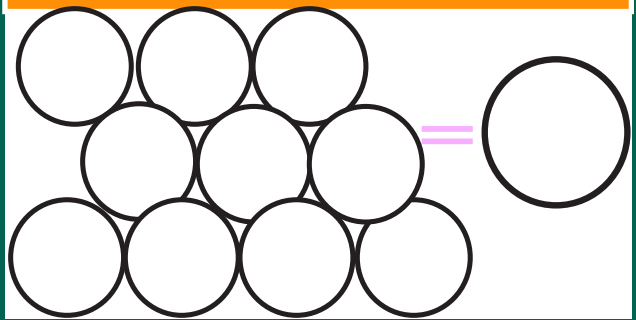
Equal Group Flashcards

MAKE YOUR OWN EQUAL GROUP FLASHCARDS. DRAW EQUAL GROUPS TO MODEL THE PROBLEM.

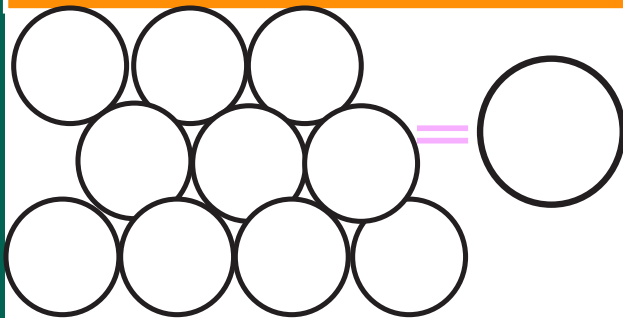
$$10 \times 6 = 60$$



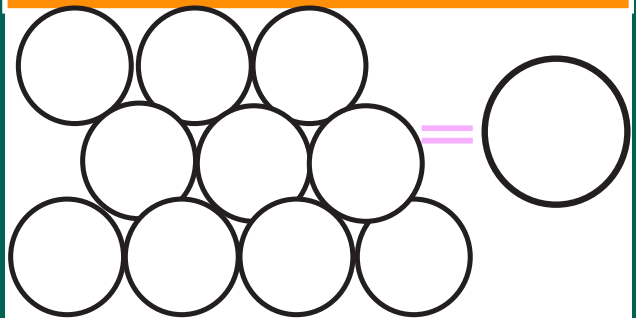
$$10 \times 7 = 70$$



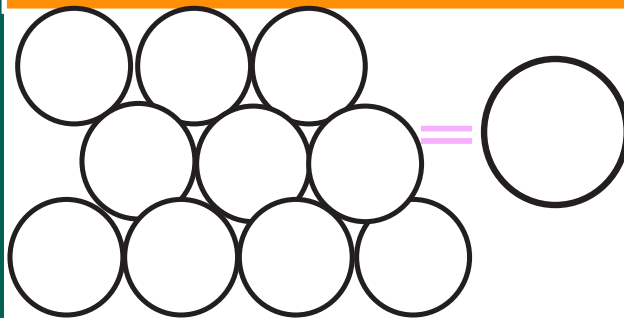
$$10 \times 8 = 80$$



$$10 \times 9 = 90$$



$$10 \times 10 = 100$$



Regular Flashcards

$$10 \times 0$$

$$10 \times 1$$

$$10 \times 2$$

$$10 \times 3$$

$$10 \times 4$$

$$10 \times 5$$

Regular Flashcards

$$10 \times 6$$

$$10 \times 7$$

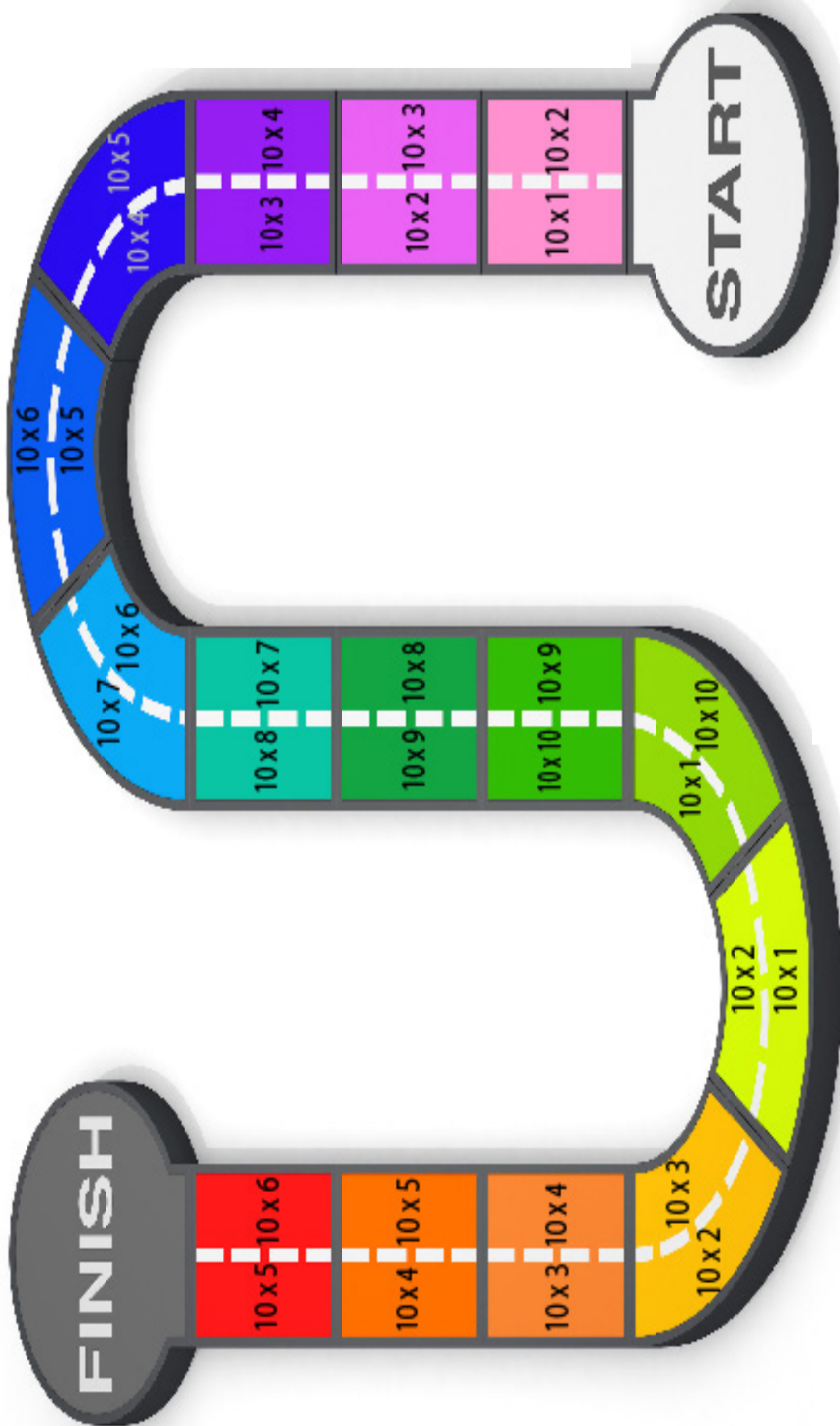
$$10 \times 8$$

$$10 \times 9$$

$$10 \times 10$$

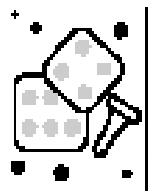
MULTIPLICATION RACE

Directions: Play with a partner. Each player chooses a marker and a side. Decide who starts. Roll the die. Take turns moving. Player 1 says the product. Player 2 checks the answer using the bookmark. If it is correct, stay on the spot. If it is incorrect, move back one. Whoever reaches first wins.

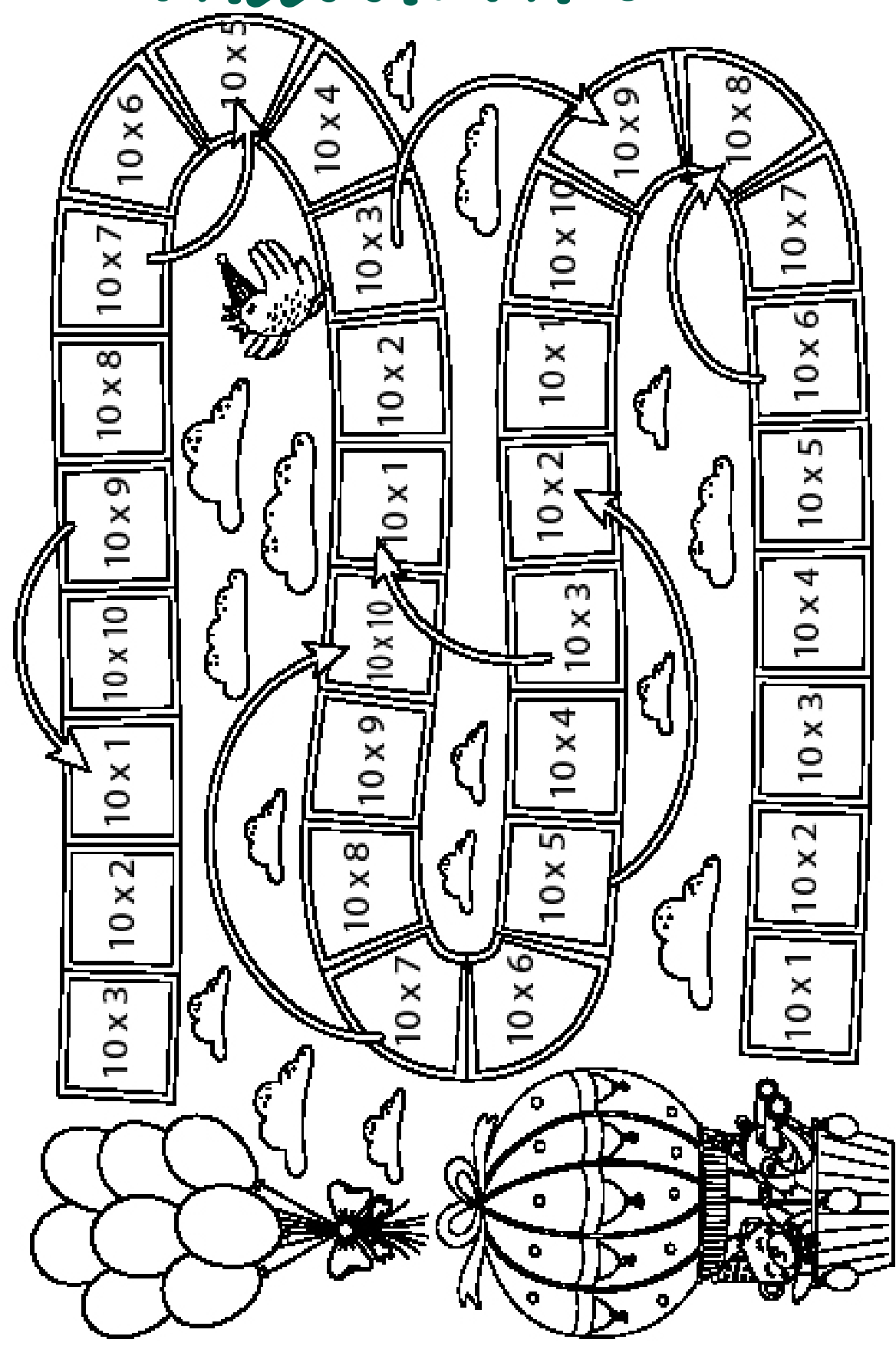




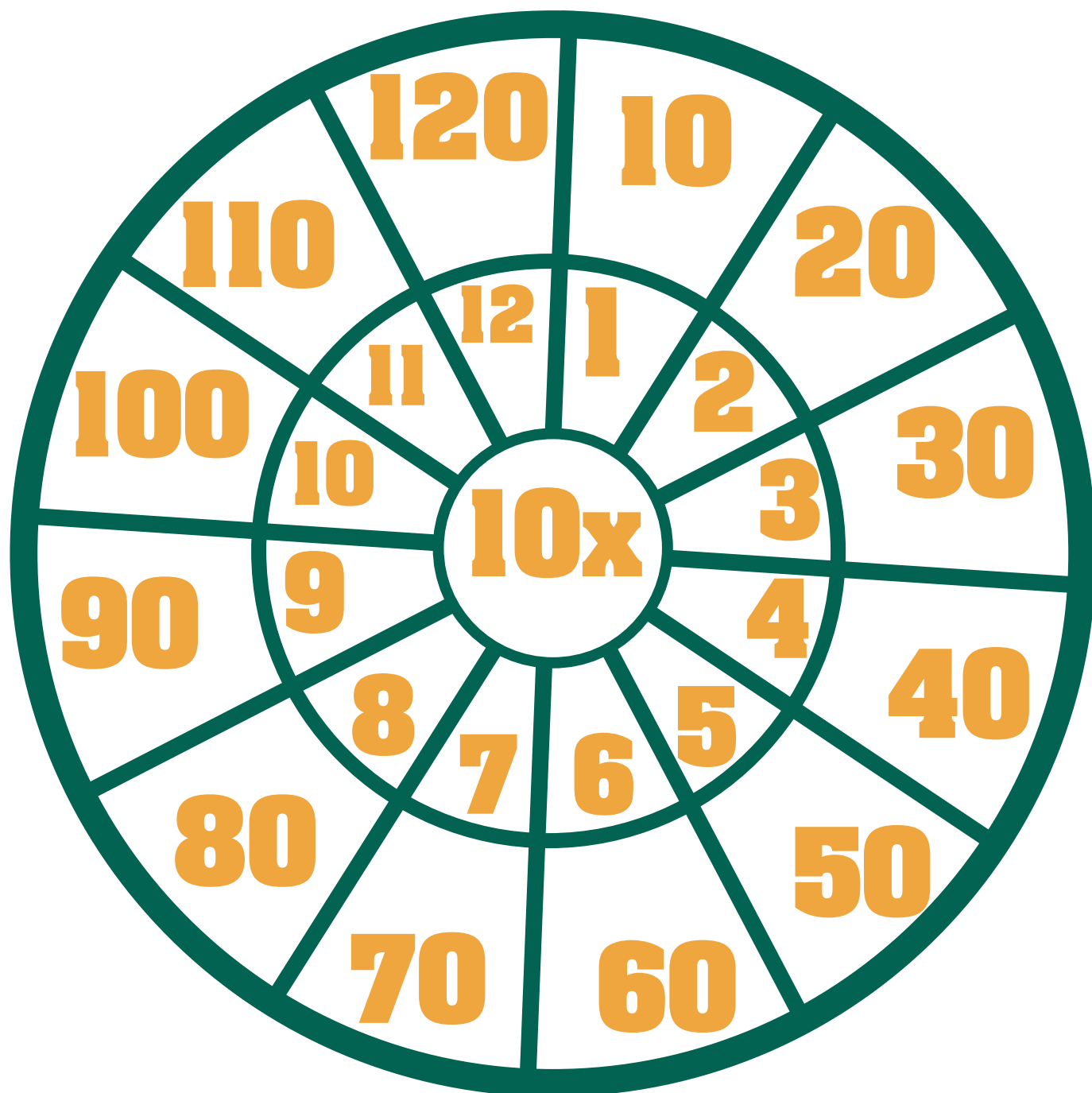
Help the animals get to the bunch of balloons



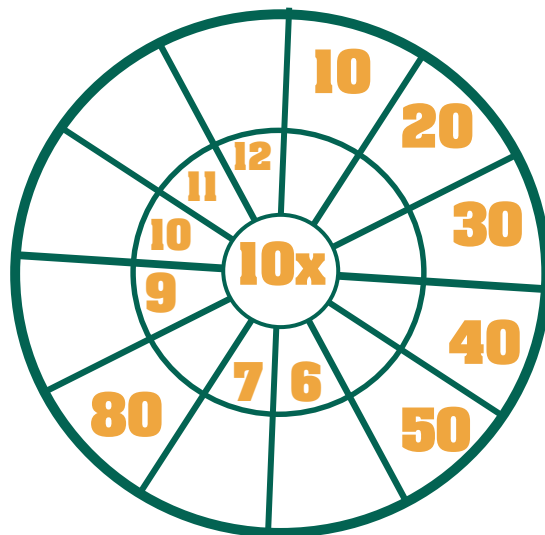
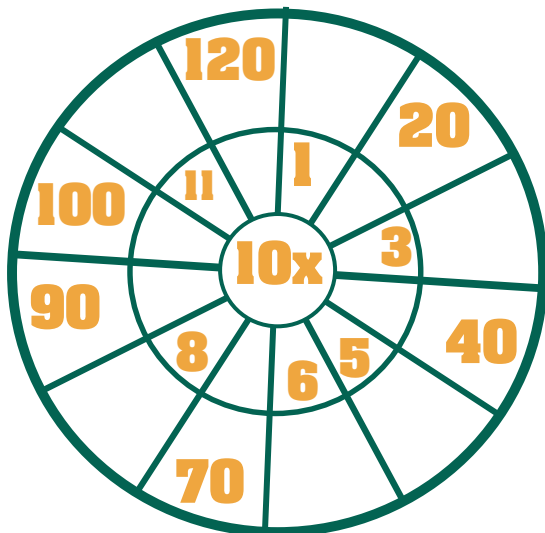
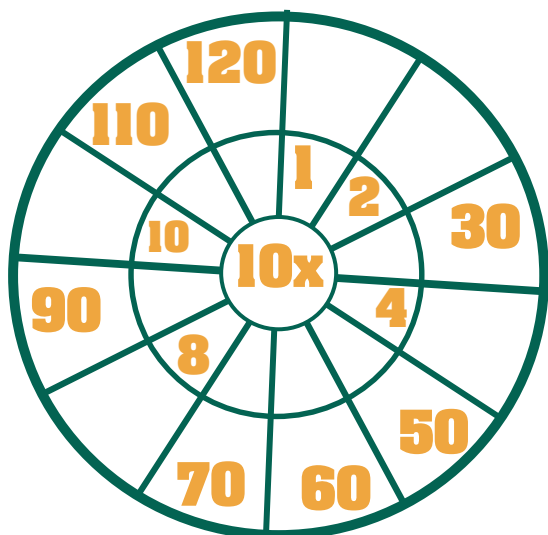
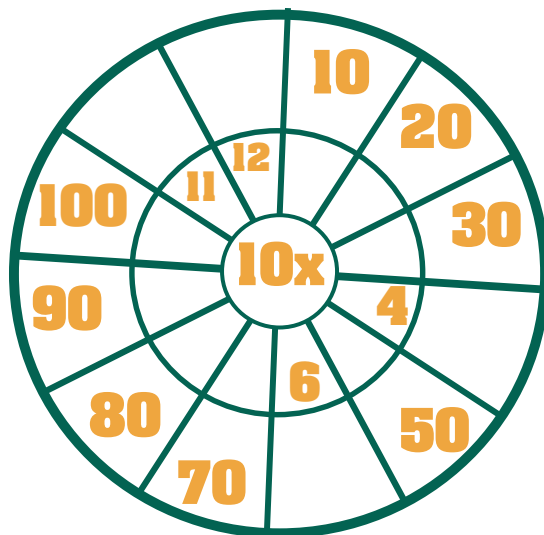
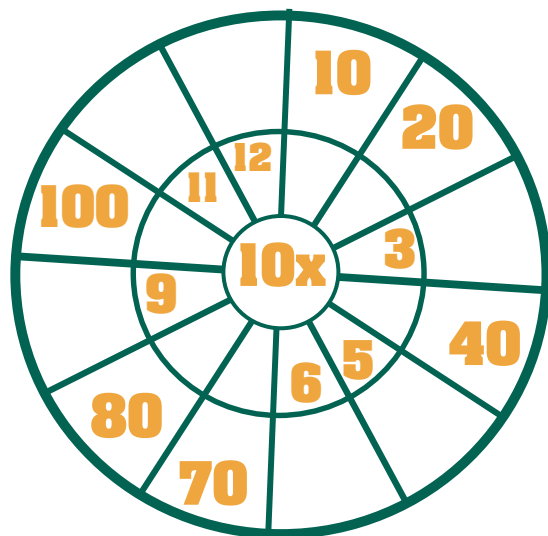
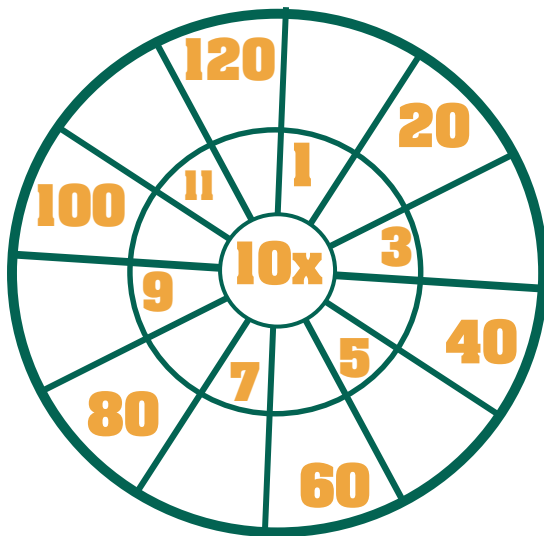
BALLOON RACE



MULTIPLICATION WHEELS



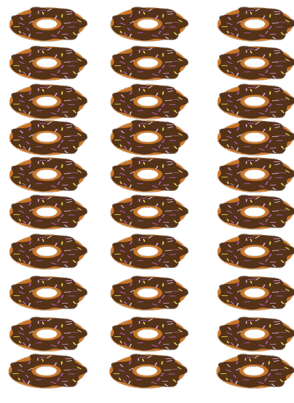
MULTIPLICATION WHEELS



PICTURE FACT FAMILY



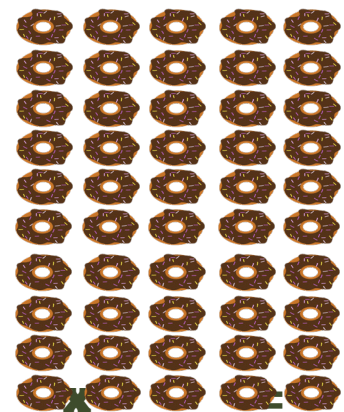
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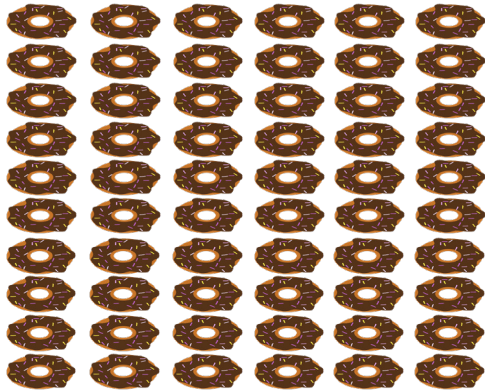


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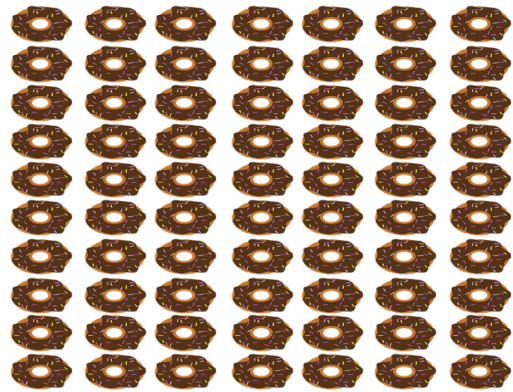


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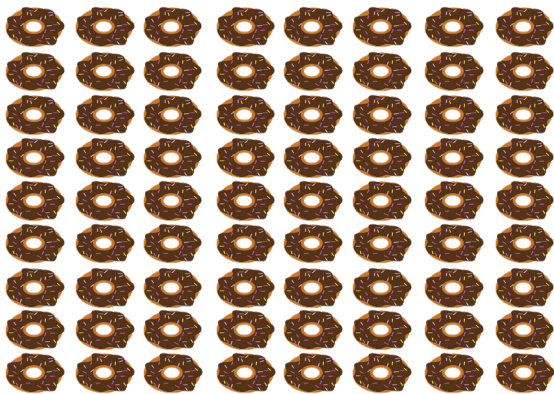
PICTURE FACT FAMILY



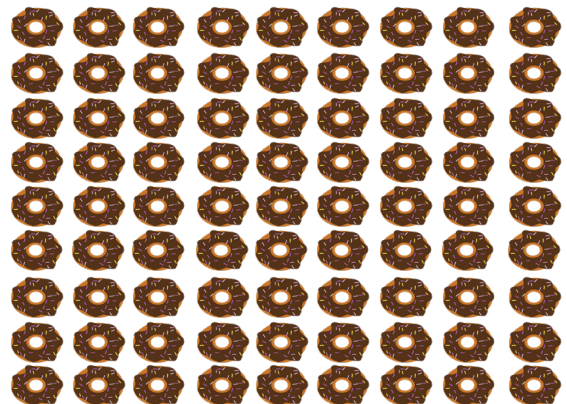
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$$\begin{array}{rcl} \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \end{array}$$

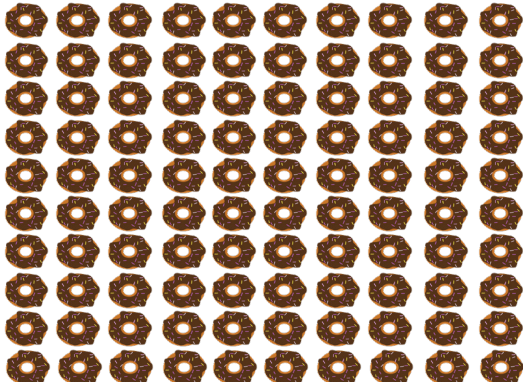


$$\begin{array}{rcl} \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \end{array}$$



$$\begin{array}{rcl} \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \end{array}$$

PICTURE FACT FAMILY

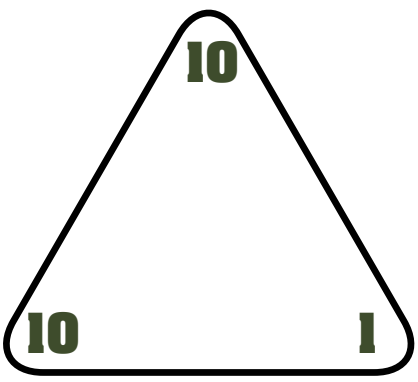


_____ $\times$ _____ = _____
_____ $\times$ _____ = _____
_____ $\div$ _____ = _____
_____ $\div$ _____ = _____

MAKE YOUR OWN

_____ $\times$ _____ = _____
_____ $\times$ _____ = _____
_____ $\div$ _____ = _____
_____ $\div$ _____ = _____

TRIANGLE FACT FAMILY



10

10

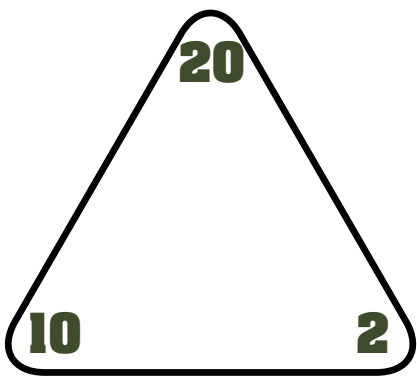
1

_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____



20

10

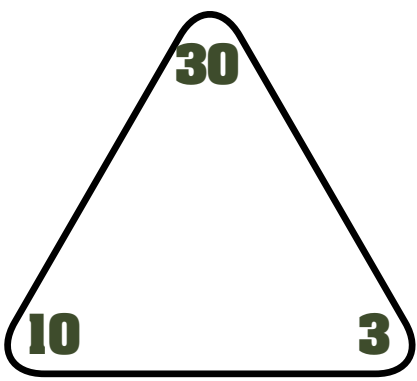
2

_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____



30

10

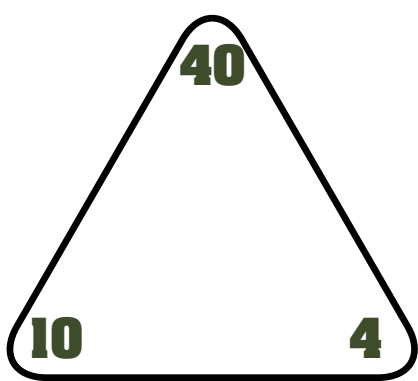
3

_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____



40

10

4

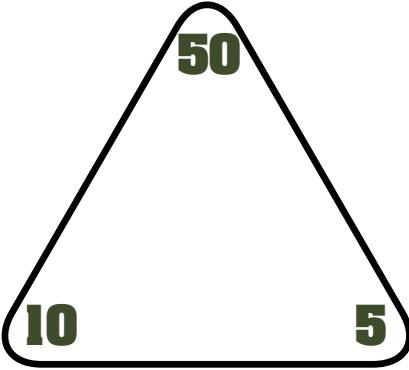
_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

TRIANGLE FACT FAMILY



50

10

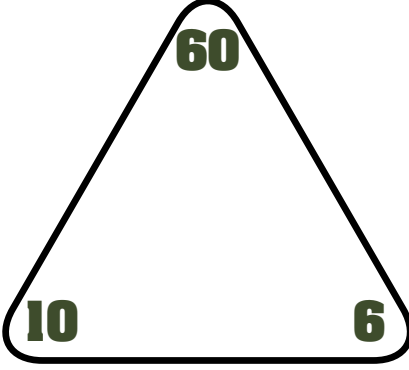
5

_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____



60

10

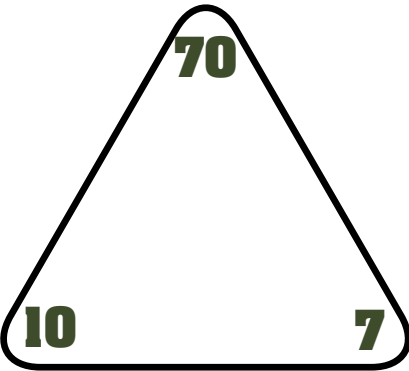
6

_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____



70

10

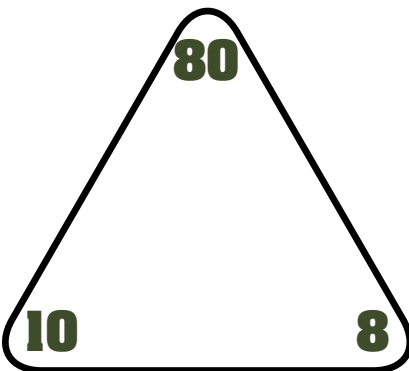
7

_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____



80

10

8

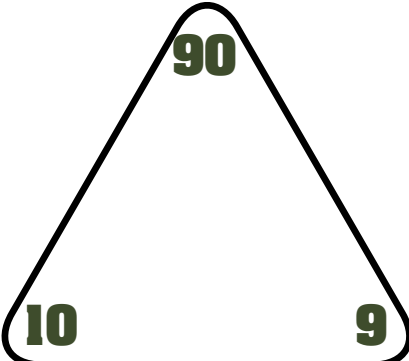
_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

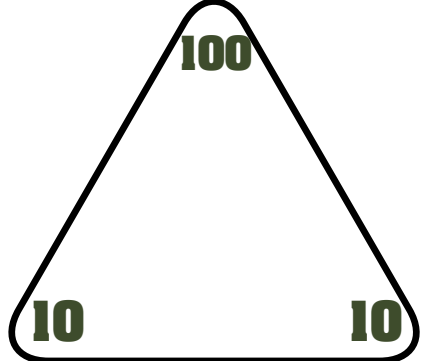
_____ ÷ _____ = _____

TRIANGLE FACT FAMILY



A triangle with the number 90 at the top vertex, 10 at the bottom-left vertex, and 9 at the bottom-right vertex.

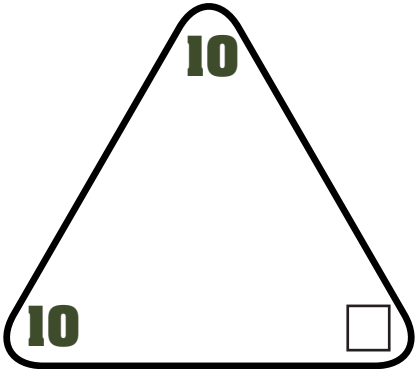
_____	x	_____	=	_____
_____	x	_____	=	_____
_____	÷	_____	=	_____
_____	÷	_____	=	_____



A triangle with the number 100 at the top vertex, 10 at the bottom-left vertex, and 10 at the bottom-right vertex.

_____	x	_____	=	_____
_____	x	_____	=	_____
_____	÷	_____	=	_____
_____	÷	_____	=	_____

TRIANGLE FACT FAMILY

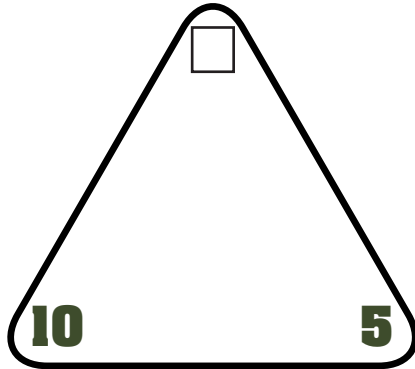


$\times$ =

 $\times$ =

 $\div$ =

 $\div$ =

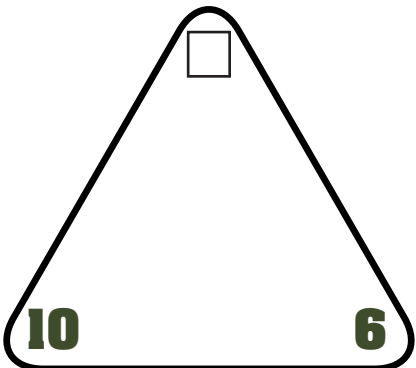


$\times$ =

 $\times$ =

 $\div$ =

 $\div$ =

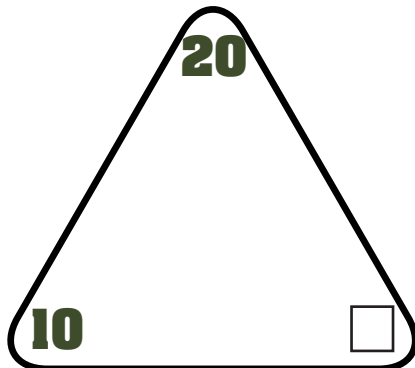


$\times$ =

 $\times$ =

 $\div$ =

 $\div$ =



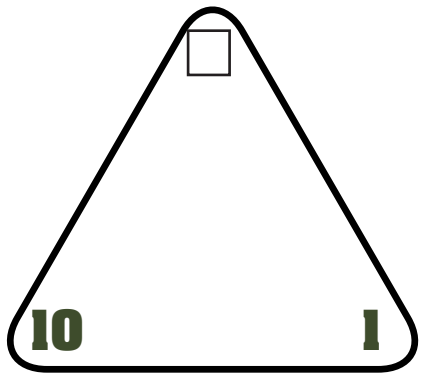
$\times$ =

 $\times$ =

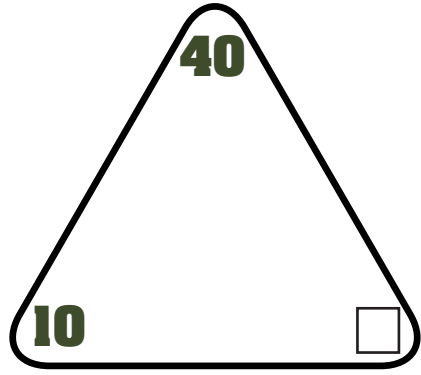
 $\div$ =

 $\div$ =

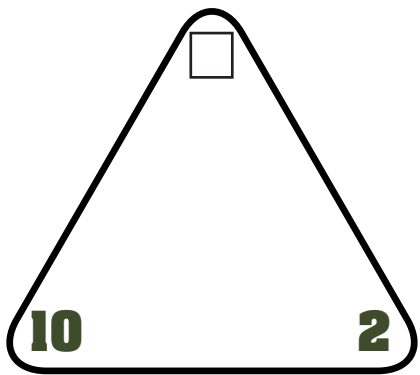
TRIANGLE FACT FAMILY



$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
 $\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
 $\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
 $\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$



$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
 $\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
 $\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
 $\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$



$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
 $\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
 $\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
 $\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

WORD PROBLEM

MODEL YOUR THINKING AND SOLVE THE PROBLEM

THE BAKERY HAD 10 ROWS OF DONUTS. THERE WERE 6 DONUTS IN EACH ROW. HOW MANY DONUTS DID THEY HAVE ALTOGETHER?

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

THE BAKERY HAD 10 BOXES WITH 5 DONUTS IN EACH. HOW MANY DONUTS DID THEY HAVE?

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

THERE WERE 10 BAGS OF DONUTS IN THE BAKERY. EACH BAG HAD 3 DONUTS INSIDE. HOW MANY DONUTS WERE THERE ALTOGETHER?

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

THE BAKERY HAD 10 BOXES OF DONUTS WITH 9 DONUTS IN EACH BOX. HOW MANY DONUTS DID THEY HAVE ALTOGETHER?

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

QUIZ

Write an 10's fact in each box. Then follow the instructions in each box to match the fact.

**I CAN SKIP COUNT
BY 10'S!**

**I CAN REPRESENT 10'S
WITH EQUAL GROUPS.**

**I CAN REPRESENT
10'S WITH ARRAYS!**

**I CAN REPRESENT 10'S
ON THE NUMBER LINE.**

**I CAN USE REPEATED
ADDITION FOR MY 10'S.**

**MY STRATEGY FOR
THINKING ABOUT 10'S IS..**

CERTIFICATE

★ GREAT MATH WORK! ★

HAS SUCCESSFULLY PRACTICED THE
10 TIMES TABLES!

GREAT JOB!

TEACHER: _____ DATE: _____

10

Multiplication

$$10 \times 1 = 10$$

$$10 \times 2 = 20$$

$$10 \times 3 = 30$$

$$10 \times 4 = 40$$

$$10 \times 5 = 50$$

$$10 \times 6 = 60$$

$$10 \times 7 = 70$$

$$10 \times 8 = 80$$

$$10 \times 9 = 90$$

$$10 \times 10 = 100$$

Hint: Think Place value.
The value of the digit
becomes 10 times
bigger.

10

MULTIPLICATION

$$10 \times 1 = 10$$

$$10 \times 2 = 20$$

$$10 \times 3 = 30$$

$$10 \times 4 = 40$$

$$10 \times 5 = 50$$

$$10 \times 6 = 60$$

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$$10 \times 5 = 50$$

$$10 \times 6 = 60$$

$$10 \times 7 = 70$$

$$10 \times 8 = 80$$

$$10 \times 9 = 90$$

$$10 \times 10 = 100$$

Hint: Think Place
value. The value of the
digit becomes 10
times bigger.