Brighter Choice
Name

## $3^{\text {rd }}$ Grade Modified Math Remote Learning Packet

Week 3


Dear Educator,
My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

[^0](Date)

Parents please note that all academic are also available on our website at www.brighterchoice.org under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars.


LEQ: How can I find related multiplication facts using addition?

Objective: I can add equal groups to an array model to find related multiplication facts.


Name: $\qquad$
BCCS-B

Week 3 Day 1 Date:
Harvard

Yale
Princeton

## Do Now:

## Multiply by 2 to find the missing products below.


$2 \times 2=$ $\qquad$ $2 \times 1=$ $\qquad$
$2 \times 2=$ $\qquad$
$2 \times 3=$
$\qquad$
$2 \times 1=2 \times 2 \times 2=2 \times 3=$ $\qquad$
$2 \times 4=$ $\qquad$ $2 \times 3=$ $\qquad$
$\qquad$ $2 \times 3=$ $\qquad$

$$
\begin{array}{ll}
2 \times 4= & 2 \times 1=\square
\end{array} \begin{array}{ll}
2 \times 4= & 2 \times 2= \\
2 \times 4= & 2 \times 3= \\
2 \times 4= & 2 \times 5=
\end{array}
$$

$\qquad$ $2 \times 5=$ $\qquad$ $2 \times 3=$ $\qquad$ $2 \times 5=$ $\qquad$
$2 \times 4=$
$2 \times 2=$ $\square$ $2 \times 4=$ $\qquad$ $2 \times 3=$ $\qquad$
$2 \times 5=$ $\qquad$ $2 \times 3=$ $\qquad$
$2 \times 2=$
$\qquad$
$2 \times 4=$
$\qquad$
$2 \times 3=$
$2 \times 5=$
$2 \times 2=$
$2 \times 4=$

Name: $\qquad$ Week 3 Day 1 Date: $\qquad$
BCCS-B Harvard Yale Princeton Input:

We can use $\qquad$ multiplication facts to help us with more complicated ones. Some familiar facts include twos, fives, and tens. In an array, we can add additional $\qquad$ groups or $\qquad$ to our familiar facts. We find the $\qquad$ of the two smaller products to find a larger product.

1. The team organizes soccer balls into 4 rows of 5 . The coach adds 2 rows of 5 soccer balls. Complete the equations to describe the total array.


4 fives +2 fives = $\qquad$ fives ( $5,10,15,20,25,30$ )
$\qquad$ $\times 5=$ $\qquad$
2.

$14+4=$ $\qquad$
$\qquad$ $\times 2=$ $\qquad$

Name: $\qquad$

Week 3 Day 1 Date: $\qquad$

## Problem Set

1) 



$$
9 \times 2=
$$



Draw an array that shows $9 \times 2$
2) The team organizes soccer balls into 2 rows of 5. The coach adds 3 rows of 5 soccer balls. Complete the equations to describe the total array.
a. $(5+5)+(5+5+5)=$ $\qquad$
b. 2 fives +3 fives $=$ $\qquad$ fives
c. $\qquad$ $\times 5=$ $\qquad$

Name: $\qquad$ BCCS-B
$\qquad$ Harvard Yale

Princeton
3. Franklin collects stickers. He organizes his stickers in 5 rows of four.
a. Draw an array to represent Franklin's stickers. Use an $\mathbf{x}$ to show each sticker. $X \times X \times \longleftarrow$ First row done for you.

## Add two more rows

b. Solve the equation to find Franklin's total number of stickers. $5 \times 4=$ $\qquad$
c. Franklin adds $\mathbf{2}$ more rows. Use circles to show his new stickers on the array in above.
d. Complete the equation to show how you add the totals of 2 multiplication facts to find Franklin's total number of stickers.
$\qquad$ $+$ $\qquad$ $=28$
e. Complete the unknown to show Franklin's total number of stickers.

$$
\ldots \times 4=28
$$

Name: $\qquad$
$\qquad$


## Application:

Mr. Mercado puts his work tools in an array of $6 \times 5$. His friend Mr. John adds his tools in an array of 3 rows of 5 . How many tools do they have together? Write a complete multiplication sentence.


## Total tools

$\qquad$
$\qquad$ $x$ $\qquad$ $=$

Name: $\qquad$

Week 3 Day 1 Date:
Harvard Yale

## Exit Ticket:

Add equal group of five to fill in the blanks below.


Name： $\qquad$ BCCS－B
$\qquad$

Homework

## $3 \times 4$

1．Dan organizes his stickers into 3 rows of four．Irene adds 2 more rows of stickers．Complete the equations to describe the total number of stickers in the array．


 そん以 Wh
c． $\qquad$ $\times 4=$ $\qquad$
b． 3 fours $+\ldots 2 \_$fours $=$ $\qquad$ fours

a．$(4+4+4)+(4+4)=$ $\qquad$
（12）
（8）

2． $7 \times 2=$

$12+2=$ $\qquad$
$\qquad$

3．Mrs．Mclean puts her make－up brushes in an array of $\mathbf{7 \times 5}$ ．Her sister Jess adds her make－up brushes in an array of $\mathbf{3}$ rows of 5．How many make－up brushes do they have together？Write a complete multiplication sentence．（this problem has 4 steps）

$\qquad$ $+$ $\qquad$ $=$ $\qquad$
$\qquad$ X $\qquad$ $=$ $\qquad$


Name: $\qquad$ BCCS-B
$\qquad$
Harvard Yale Princeton

LEQ: How can I find related multiplication facts using subtraction?

Objective: I can subtract equal groups in array models to find related multiplication facts.

## Vocabulary:

$>$ Array: a way to represent multiplication and division using rows and columns. Difference: the answer in a subtraction problem.
$>$ Product: the answer in a multiplication problem.

Name: $\qquad$
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Week 3 Day 2 Date:
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Yale
Princeton

Do Now:

$\qquad$ $2 \times 3=$ $\qquad$
$2 \times 5=$
$\qquad$ $2 \times 3=$ $\qquad$

$$
\begin{aligned}
& 2 \times 4= \\
& 2 \times 1= \\
& 2 \times 4= \\
& 2 \times 2= \\
& 2 \times 4= \\
& 2 \times 3= \\
& 2 \times 4= \\
& 2 \times 5= \\
& 2 \times 4= \\
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& 2 \times 5= \\
& 2 \times 3= \\
& 2 \times 5= \\
& 2 \times 4= \\
& 2 \times 2= \\
& 2 \times 4= \\
& 2 \times 3=
\end{aligned}
$$

$2 \times 5=$ $\qquad$
$\qquad$ $2 \times 2=$ $\qquad$ $2 \times 4=$ $\qquad$
$2 \times 3=$ $\qquad$ $2 \times 5=$
$2 \times 2=$
$2 \times 4=$

Name: $\qquad$ Week 3 Day 2 Date: $\qquad$
BCCS-B Harvard Yale Princeton

## Input:

I can subtract $\qquad$ known smaller facts in array models to solve a $\qquad$ known fact. For example, $9 \times 3$ is very close to $\qquad$ .
$10 \times 3$ is easier to solve because it's easier to count by $\qquad$ than it is to count by 9 . We can use $10 \times 3=$ $\qquad$ to solve for $9 x 3$.
10 threes- 1 three= 9 threes
30 - $\qquad$ $=$
1.

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

30 - $\qquad$ $=$ $\qquad$
$7 \times 3=$ $\qquad$
2.

Mr. Thompson organizes his shirts into an array of $\mathbf{1 0}$ rows of 4 . He removes 1 row of 4 shirts to set up his outfits for work. How many shirts did Mr.
Thompson leave organized in the array? ( removes means to take away) 10 rows of 4
$9 \times 4=$ $\qquad$

Name: $\qquad$
$\qquad$

Mrs. Stines slices potatoes for chips. She places 10 rows of two potato slices on a baking sheet.


1. Write an equation to describe the number of potato slices Mrs. Stines bakes.


$\qquad$


2. When the potatoes are baked, Mrs. Stines uses some for a recipe. There are $\mathbf{3}$ rows of two potato slices left on the pan. (subtraction, cross out all the potatoes used)
a. Complete the equation below to show how many potato slices Mrs. Stines uses.
$\qquad$ twos - $\qquad$ twos $=$ $\qquad$ twos
b. 20 - $\qquad$ $=14$

c. Write an equation to describe the number of potato slices Mrs. Stines uses. $\square$ $\qquad$ $\times 2=$ $\qquad$

Name: $\qquad$

## BCCS-B

## Problem Set:

1. 



$$
20-\ldots=18
$$

$$
9 \times 2=
$$

$\qquad$

$$
9+9=
$$

$\qquad$

Week 3 Day 2 Date: $\qquad$
Harvard Yale Princeton


$$
\begin{aligned}
& 30-6= \\
& 8 \times 3=
\end{aligned}
$$

subtract
3) Mr. Young organizes his sneakers into an array of 10 rows of 5 . He removes 1 row of 5 sneakers to set up his outfits for work. How many sneakers did Mr. Young leave organized in the array? ( add what he has left)
$\times \times \times \times$ $\qquad$ First row done
$9 \times 5=$ $\qquad$

Name: $\qquad$ Week 3 Day 2 Date: $\qquad$
BCCS-B Harvard Yale Princeton

Mrs. Mercado slices oranges for breakfast. She places 10 rows of two orange slices on a tray.








1. Write an equation to describe the number of orange slices Mrs. Mercado cuts.
$\qquad$
$\qquad$ $=$ $\qquad$
2. Mrs. Mercado uses some orange slices for a recipe. There are $\mathbf{4}$ rows of two orange slices left on the tray. ( subtract what was used)
a. Complete the equation below to show how many orange slices Mrs. Mercado uses.
$\qquad$ twos - $\qquad$ twos $=$ $\qquad$ twos
b. $20-$ $\qquad$ $=12$
c. Write an equation to describe the number of orange slices Mrs. Mercado uses.
$\qquad$ $\times 2=$ $\qquad$

Name: $\qquad$
$\qquad$


Application:

Jenny has an array of $\mathbf{3}$ by $\mathbf{1 0}$ pieces of chocolate. She eats one row and gives another row to her mother. ( Two rows are now missing)

How many pieces of chocolate does Jenny have left?
$\square$

Name: $\qquad$
BCCS-B Week 3 Day 2 Date: $\qquad$ Harvard

## Exit Ticket:



Mrs. Stern roasts bread. She places 10 rows of two buns on a baking sheet.
$\bigcirc$ $\square$
$\bigcirc$


O




O


O

$\bigcirc$


O
$\bigcirc$





$\qquad$ twos - $\qquad$ twos $=$ $\qquad$ twos
b. 20- $\qquad$ $=16$
c. Write an equation to describe the number of garlic cloves Mrs. Stern uses.
$\qquad$ $\times 2=$ $\qquad$

Name: $\qquad$

## BCCS-B

## Homework:

$\qquad$ Harvard
2. Shade in $8 \times 3$. ( color in)

$$
8 \times 3=
$$

$\qquad$
 < $10 \times 3=$ $\qquad$

$\square$

$\square$
 $\square$

$1 \times 3=$ $\qquad$

$30-3=$ $\qquad$
$9 \times 3=$ $\qquad$
3. Kenny has an array of $\mathbf{6}$ by $\mathbf{1 0}$ cookies. He eats one row and gives another row to his mother. How many pieces of chocolate does Kenny have left? XXXXXXXXXX


Name: $\qquad$ Week 3 Day 3 Date: $\qquad$
BCCS-B Harvard

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LEQ: How can I review my skills in topics A-C to prepare for the Mid Module Assessment?

Objective: I can take good notes, and ask/answer questions to review my skills in topics A-C to prepare for the Mid Module Assessment.

## Third Grade <br> Mid-Module Math Assessment <br> REVIEW

Name: $\qquad$
$\qquad$

Choose one answer for each problem below. Please make sure that your bubble sheet matches your answer for each question.

1) Mrs. Clute organizes her 10 strawberries equally into 2 shelves. How many strawberries did Mrs. Clute put on each shelf?
a. 4
b. 5
c. 10
d. 2

## Draw it

2) What is the product of 4 sixes? $4 \times 6$
a. 10
b. 24
c. 12
d. 18
```
Draw it
```

3) Ms. Sherman, Mrs. Boomhower, Mrs. Blomgren, and Mr. Moore each write a multiplication equation for the array below. Who do you agree with?
a. Ms. Sherman: $3 \times 4=12$
b. Mrs. Boomhower: $4 \times 3=12$


Name： $\qquad$
$\qquad$

4）Which array shows $4 \times 6$ ？
a．
b．
c．
d．


动为
出会

5）Mrs．Wise has a home garden．She plants 4 rows of 3 tomato plants．How many tomato plants did Mrs．Mercado plant in all？
a． 9
b． 3
c． 12
d． 18
Draw it

Name: $\qquad$ BCCS-B Week 3 Day 3 Date: $\qquad$ Harvard Yale Princeton
7) Mr. Young organizes $\mathbf{3 0}$ markers into bags equally. If Mr. Young used $\mathbf{6}$ bags, how many markers did he put in each bag?
a. 30
b. 4
c. 5
D. 36


Draw how many markers go into each bag evenly.
8) Which expression below can be used to find the total number of hot dogs?

a. $2 \times 3$
b. $3 \times 3$
9) Which equations below show the commutative property?
a. $4 \times 2=8$ and $8 \times 1=8$
b. $4 \times 3=12$ and $3 \times 4=12$

Name: $\qquad$
$\qquad$

Harvard
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10) Use the array to the right to solve for $9 \times 2=$
a. 20
b. 18
c. 11
d. 9

Answer the problems below directly on your packet:

11) Xavier makes 6 equal groups of carrots using the image below. .


12 total
a. Make 6 equal groups of carrots to show Xavier's work.
b. What is the size of each group? ( how many carrots are in each group) Each group has $\qquad$ carrots.

Name: $\qquad$
$\qquad$
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12) Mrs. Page draws ducks. She draws 2 feet on each duck for a total of 16 feet.
a. Skip count to find the number of ducks Mrs. Page draws. Make a drawing to match your counting. 2, 4, $\qquad$ , $\qquad$ , , $\qquad$
$\qquad$
b. Write a division or multiplication sentence to represent the problem.
13) Ms. Morton and her family are going apple picking. They placed equal amounts of apples in $\mathbf{6 \text { bags. }}$. Ms. Morton and her family collected a total of 24 apples.
a. draw a model to represent the problem above.
$\square$
b. write a division sentence to find the number of apples in each bag
$24 \div$ $\qquad$ $=$ $\qquad$


Name:
BCCS-B

Week 3 Day 4 Date:
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Princeton

## Third Grade Mid-Module Math Assessment

Name: $\qquad$ BCCS-B Week 3 Day 4 Date: $\qquad$ Harvard Yale Princeton

Choose one answer for each problem below. Please make sure that your bubble sheet matches your answer for each question.

1) What is the product of $\mathbf{3}$ sevens? $3 \times 7$ Draw an array.
a. 10
b. 20
c. 21
2) Ms. Sherman organizes her 12 teddy bears equally into 3 shelves. How many teddy bears did Ms. Sherman put on each shelf?
a. 4
b. 3
c. 12
3) Ms. Young organizes 20 markers into bags equally. If Ms. Young used 5 bags, how many markers did she put in each bag?
a. 10
b. 4
c. 5
4) Which array shows $3 \times 4$ ?
a.
b.
c.
d.


Name: $\qquad$
BCCS-B
$\qquad$
5) Which multiplication sentence does the diagram below represent?

a. $7 \times 2=14$
b. $5 \times 2=10$
c. $2 \times 2=4$
6) Ms. Neville, Mrs. Mercado, and Mrs. Blomgren each write a multiplication equation for the array below. Who do you agree with?
a. Ms. Neville: $2 \times 4=8$
b. Mrs. Mercado: $4 \times 2=8$
c. Mrs. Blomgren: $8 \div 2=4$


Name: $\qquad$
$\qquad$
BCCS-B Harvard

Yale
Princeton
7) Which expression below can be used to find the total number of hot dogs?

a. $3+4$
b. $3 \times 3$
c. $3 \times 4$
8) Which equations below shows the commutative property? More than one answer.
a. $4 \times 2=8$ and $2 \times 4=8$
b. $4 \times 3=12$ and $12 \times 1=12$
d. $8 \times 2=16$ and $2 \times 8=16$
9) Mrs. Mercado has a home garden. She plants 3 rows of 6 tomato plants. How many tomato plants did Mrs. Mercado plant in all?
a. 9
b. 3
c. 18
10) Use the array to the right to solve for $9 \times 3=$ $\qquad$
a. 30
b. 27
c. 3


Name: $\qquad$
$\qquad$
BCCS-B Harvard Yale Princeton

## Answer the problems below directly on your packet:

11) Jaivion makes 5 equal groups of triangles.

a. Make 5 equal groups of triangles to show Jaivion's work.
b. What is the size of each group?

Each group has $\qquad$ triangles.
12) Mrs. Blomgren draws chickens. She draws 2 feet on each chicken for a total of 10 feet.
a. Skip count to find the number of chickens Mrs. Blomgren draws. Make a drawing to match your counting. 2,4 $\qquad$ , $\qquad$ , $\qquad$
$\square$
b. Write a division or multiplication sentence to represent the problem.

Name: $\qquad$ BCCS-B
$\qquad$
Harvard Yale Princeton
13) Anthony and his family are going pumpkin picking. They placed equal amounts of pumpkins in 4 bags. Anthony and his family collected a total of 28 pumpkins.
a. draw a model to represent the problem above.
$\square$
b. write a division sentence to find the number of pumpkins in each bag
$28 \div$ $\qquad$ $=$ $\qquad$


Name: $\qquad$ BCCS-B
$\qquad$

LEQ: How can I model the distributive property with arrays?

Objective: I can decompose arrays into two groups and add the product of each new array to model the distributive property.


Name: $\qquad$
BCCS-B
Do Now:
$2 \times 9=\quad 2 \times 10=\quad 2 \times 5=\quad 2 \times 6=$
$2 \times 5=$ $\qquad$
$2 \times 7=$
$\qquad$
$2 \times 5=$
$\qquad$ $2 \times 8=$ $\qquad$

| $2 \times 5=$ | $2 \times 9=$ | $2 \times 5=$ |
| :--- | :--- | :--- |
| $2 \times 6=$ | $2 \times 10=$ |  |
| $2 \times 6=$ | $2 \times 7=$ |  |
| $2 \times 8=$ | $2 \times 6=$ |  |

$\qquad$ $2 \times 7=$ $\qquad$ $2 \times 6=$ $\qquad$
$2 \times 7=$
$\qquad$
$2 \times 8=$ $\qquad$
$2 \times 8=$
$2 \times 7=$ $\qquad$ $2 \times 9=$ $\square$ $2 \times 7=$ $\qquad$
$2 \times 6=$ $\qquad$ $2 \times 8=$ $\qquad$ $2 \times 7=$ $\qquad$
$2 \times 8=$
$2 \times 9=$
$2 \times 9=$
$2 \times 6=$ $\qquad$

$$
\begin{array}{ll}
2 \times 9= & 2 \times 7=\square \\
2 \times 9= & 2 \times 9=\square
\end{array}
$$

$2 \times 7=$

$$
2 \times 9=
$$

$\qquad$ $2 \times 6=$ $\qquad$ $2 \times 8=$ $\qquad$
$2 \times 9=$
$2 \times 7=$ $\qquad$ $2 \times 6=$
$2 \times 8=$

Name: $\qquad$
$\qquad$

## Input:

$6+12=3$ sixes

In the equation above, both sides of the equal sign must be the $\qquad$ for the equation to be true. There is $\qquad$ six in 6 and $\qquad$ sixes in 12. $12+6=18$. 3 sixes $=18$, so the equation is true. Another way to write this equation is by using the distributive property to make groups of 6 with parentheses and add the sums to find the product of 3 sixes.

$3 \times 6=$ $\qquad$


Name: $\qquad$
$\qquad$

1. $8 \times 3=(5 \times 3)+(3 \times 3)=$ $\qquad$

$(5 \times 3)+(3 \times 3)=15+$ $\qquad$
$15+$ $\qquad$ $=$
2. Ms. Morton makes a photo album. One page is shown below. Ms. Morton puts 3 photos in each row. Fill in the equations on the right. Use them to help you draw arrays that show the photos on the top and bottom parts of the page.


Name: BCCS-B
$\qquad$

## Problem Set:

Name: $\qquad$
$\qquad$
3. $7 \times 3=$ $\qquad$


1 $\qquad$ $\times 3)=$ $\qquad$

$\times 3)=$ $\qquad$
$(5 \times 3)+(2 \times 3)=15+$ $\qquad$
$7 \times 3=$ $\qquad$ $+$ $\qquad$

$$
7 \times 3=
$$

$\qquad$
4. Ruby makes a photo album. One page is shown below. Ruby puts 3 photos in each row. Fill in the equations on the right. Use them to help you draw arrays that show the photos on the top and bottom parts of the page.

$\qquad$ $\times 3=6$
$\qquad$ $\times 3=9$

Name: $\qquad$
$\qquad$


Application:
A guitar has $\underline{6}$ strings. How many strings are there on $\underline{4}$ guitars?

## Write a multiplication equation to solve.

X $\qquad$ $=$ $\qquad$

Name: $\qquad$ BCCS-B

## Exit Ticket:

1. $6 \times 3=$ $\qquad$


Name: $\qquad$ BCCS-B

Week 3 Day 5 Date: $\qquad$

Yale
Princeton

## Homework:

1. $6 \times 3=$ $\qquad$

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

$$
12+6=
$$

$6 \times 3=$ $\qquad$
2. $8 \times 2=$ $\qquad$


$$
\begin{aligned}
&(4 \times 2)+(4 \times 2)= \\
& \times 2= \\
& \ldots
\end{aligned}
$$

A guitar has 6 strings. How many strings are there on 6 guitars? Write a multiplication equation to solve.
$\qquad$ X $\qquad$ $=$ $\qquad$

## Name

$\qquad$

## $3^{\text {rd }}$ Grade Modified Math Remote Learning Packet

Week 4


Dear Educator,
My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

Parents please note that all academic are also available on our website at www.brighterchoice.org under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars.


Name: $\qquad$ BCCS-B Week 4 Day 1 Date: $\qquad$
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LEQ: How can I model division as the unknown factor in multiplication?

Objective: I can use a tape diagrams to model division as the unknown factor in multiplication (the size of the group OR the number of groups).


Name: $\qquad$
BCCS-B

Week 4 Day 1 Date: $\qquad$

Yale
Princeton

Do Now:
$3 \times 1=3 \quad 3 \times 2=6 \times 3=9 \times 4=12$
$3 \times 5=$ $\qquad$ $3 \times 1=$ $\qquad$ $3 \times 2=$ $\qquad$ $3 \times 1=$ $\qquad$
$3 \times 3=$ $\qquad$ $3 \times 1=$ $\qquad$ $3 \times 4=$ $\qquad$ $3 \times 1=$ $\qquad$
$3 \times 5=$ $\qquad$ $3 \times 1=$ $\qquad$ $3 \times 2=$ $\qquad$ $3 \times 3=$ $\qquad$
$3 \times 2=$ $\qquad$ $3 \times 4=$ $\qquad$ $3 \times 2=$ $\qquad$ $3 \times 5=$ $\qquad$
$3 \times 2=$ $\qquad$ $3 \times 1=$ $\qquad$ $3 \times 2=$ $\qquad$ $3 \times 3=$ $\qquad$
$3 \times 1=\square 3 \times 3=\quad 3 \times 2=\quad 3=$
$3 \times 4=$ $\qquad$ $3 \times 3=$ $\qquad$ $3 \times 5=$ $\qquad$ $3 \times 3=$ $\qquad$
$3 \times 4=$ $\qquad$ $3 \times 1=$ $\qquad$ $3 \times 4=$
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$3 \times 4=$ $\qquad$ $3 \times 3=$ $\qquad$ $3 \times 4=$ $\qquad$ $3 \times 5=$ $\qquad$
$3 \times 4=$ $\qquad$
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$3 \times 5=$ $\qquad$ $3 \times 1=$ $\qquad$ $3 \times 5=$ $\qquad$
$3 \times 5=$ $\qquad$ $3 \times 3=$ $\qquad$ $3 \times 5=$ $\qquad$
$3 \times 4=$ $\qquad$ $3 \times 2=$ $\qquad$ $3 \times 4=$ $\qquad$ $3 \times 3=$ $\qquad$
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$3 \times 2=$
$\qquad$ $3 \times 4=$ $\qquad$
$3 \times 3=$
$3 \times 5=$ $\qquad$ $3 \times 2=$
$3 \times 4=$

Name: $\qquad$
BCCS-B

Week 4 Day 1 Date: $\qquad$
Harvard

## Input:

A Tape Diagram is a $\qquad$ that helps us see what's happening in a problem. Tape diagrams are similar to arrays in that they have 3 parts: the total number, group size, and number of groups. This is similar to an array where the rows show $\qquad$ and the columns show $\qquad$ .


To model division as the unknown factor in multiplication, we need at least one
$\qquad$ (group size OR number of groups) and the $\qquad$ .

Mrs. Clute has 12 oranges. She puts 2 oranges in each bag. How many bags does she have?


## 2 oranges



Mrs. Clute has $\qquad$ bags of oranges.

| Unknown Factor (x) | Quotient ( $\div$ ) |
| :---: | :--- |
| $2 \times \ldots=12$ | $12 \div \ldots=2$ |

Name: $\qquad$ BCCS-B

Week 4 Day 1 Date: $\qquad$

Yale
Princeton

1. Mrs. Blomgren has $\underline{14}$ apples. She puts $\underline{2}$ apples in each bag. How many bags does she have?
a. Draw an array where each column shows a bag of apples.

b. Redraw the apples in each bag as a unit in the tape diagram. The first unit is done for you. As you draw, label the diagram with known and unknown information from the problem.


Name: $\qquad$ BCCS-B Week 4 Day 1 Date: $\qquad$ Harvard Yale Princeton
2. Twenty-one (21) shopping baskets are stacked equally in 7 piles. How many baskets are in each pile? Model the problem with both an array and a labeled tape diagram. Show each column as the number of baskets in each pile.

3. Ms. Sherman saves $\$ 2$ a week to buy a purse. The purse costs $\$ 18$. How many weeks will it take her to save enough to buy the purse?
The first three have been done for you. How many more weeks are needed to have $\mathbf{\$ 1 8 . 0 0}$ ?

| I week |
| :--- |
| $\$ 2.00$ |

2 weeks
$\$ 2.00$

3 Weeks
\$2.00

Name: $\qquad$
$\qquad$
BCCS-B Harvard Yale

Princeton

## Problem Set:

1. Mrs. King has 10 pumpkins. She puts 2 pumpkins in each basket. How many baskets does she have?
a. Draw an array where each column shows a basket of pumpkins.

$\qquad$ $\div 2=$ $\qquad$ 5 $\qquad$
b. Redraw the pumpkins in each bag as a unit in the tape diagram. The first unit is done for you. As you draw, label the diagram with known and unknown information from the problem.


Name: $\qquad$ Week 4 Day 1 Date: $\qquad$ BCCS-B Harvard Yale Princeton

1. Mrs. Page arranges 18 plums into 6 bags. How many plums are in each bag? Model the problem with both an array and a labeled tape diagram. Show each column as the number of plums in each bag.

| Array Draw 6 bags. How many plums in <br> each bag? | Tape Diagram |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

There are $\qquad$ plums in each bag.
2. Fourteen (14) shopping baskets are stacked equally in 7 piles. How many baskets are in each pile? Model the problem with both an array and a labeled tape diagram. Show each column as the number of baskets in each pile.

| Array: Draw seven columns. How many <br> baskets are in each column? | Tape Diagram |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |

There are $\qquad$ baskets in each pile.

Name: $\qquad$ BCCS-B

Week 4 Day 1 Date: Harvard


Yale Princeton


## Application:

Ms. Maisenbacher packs 24 bell peppers equally into 8 bags. How many bell peppers are in each bag? Model the problem with both an array and a labeled tape diagram. Show each column as the number of bell peppers in each bag.


Array
Tape Diagram

Name: $\qquad$ Week 4 Day 1 Date:
BCCS-B

## Exit Ticket:

 How many homework papers does she have? Model the problem with both an array and a labeled tape diagram.

| Array | Tape Diagram |
| :--- | :--- |
|  |  |
|  |  |

Name: $\qquad$
$\qquad$

## Homework:

1. Fred has 10 pears. He puts 2 pears in each basket. How many baskets does he have?
a. Draw an array where each column represents the number of pears in each basket.

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$\qquad$
10 $\div 2=$
b. Redraw the pears in each basket as a unit in the tape diagram. Label the diagram with known and unknown information from the problem.

2. Ms. Meyer organizes 15 clipboards equally into $\underline{3}$ boxes. How many clipboards are in each box? Model the problem with both an array and a labeled tape diagram. Show each column as the number of clipboards in each box.

| Array |  | Tape Diagram |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |



Name: $\qquad$ BCCS-B
$\qquad$

LEQ: How can I interpret the quotient as the number of groups using units of 2 and 3 ?

Objective: I can interpret the quotient using the number of objects given to create equal groups.


Name: $\qquad$
BCCS-B

Week 4 Day 2 Date: $\qquad$
Harvard Yale Princeton

Do Now:
$3 \times 1=3 \quad 3 \times 2=6 \quad 3 \times 4=4=9$
$\qquad$ $3 \times 6=$ $\qquad$ $3 \times 7=$ $\qquad$ $3 \times 8=$ $\qquad$
$3 \times 9=$
$3 \times 10=$
$3 \times 5=$
$3 \times 6=$ $\qquad$
$3 \times 5=$
$3 \times 7=$ $\qquad$
$3 \times 5=$ $\qquad$
$3 \times 8=$ $\qquad$

$3 \times 6=$ $\qquad$ $3 \times 7=$ $\qquad$
$3 \times 6=$ $\qquad$
$3 \times 7=$ $\qquad$
$3 \times 8=$
$3 \times 7=$
$3 \times 9=$ $\qquad$ $3 \times 7=$ $\qquad$
$\qquad$ $3 \times 6=$ $\qquad$ $3 \times 8=$ $\qquad$ $3 \times 7=$ $\qquad$
$3 \times 8=$ $\qquad$
$3 \times 9=$ $\qquad$
$3 \times 9=$ $\square$ $3 \times 9=$ $\qquad$ $3 \times 6=$ $\qquad$
$3 \times 7=$ $\qquad$ $3 \times 9=$ $\qquad$ $3 \times 8=$ $\qquad$
$3 \times 9=$
$3 \times 7=$ $\qquad$
$3 \times 8=$ $\qquad$

$$
3 \times 6=
$$

$\qquad$

$$
3 \times 9=
$$

$\square$
$3 \times 9=$ $\qquad$
$3 \times 6=$ $\qquad$
$3 \times 8=$ $\qquad$
$3 \times 9=$
$3 \times 7=$
$3 \times 6=$ $\qquad$ $3 \times 8=$
$\square$
$\qquad$

Name: $\qquad$
$\qquad$
BCCS-B Harvard

Yale
Princeton

## Input:

When given a total number of objects and the $\qquad$ of each group, we can create equal groups to find the number of groups or quotient.

There are 8 crackers, each student gets 2 . How many students get crackers?


Mr. Young bakes oatmeal raisin cookies. He puts $\underline{3}$ raisins on each cookie. If he uses 21 raisins, how many cookies did he bake?

Draw 21 raisins!

Name: $\qquad$
$\qquad$
BCCS-B
Harvard
Yale
Princeton

## Problem Set:

1. There are $\underline{8}$ birds at the pet store. Two birds are in each cage. Circle to show how many cages there are.


There are

$$
8 \div 2=
$$

$\qquad$
$\qquad$ cages of birds.
2. Peter eats $\underline{\mathbf{2}}$ cereal bars every morning. Each box has a total of $\underline{\mathbf{1 2}}$ bars. How many days will it take Peter to finish 1 box?
One bar is drawn for you.

3. Mr. Dan picks tomatoes from his garden. He divides the tomatoes into bags of 3 .
a. Circle to show how many bags he packs. Then, skip-count to show the total number of tomatoes.

b. Draw and label a tape diagram to represent the problem.

Name: $\qquad$ BCCS-B
$\qquad$
4. Ms. Maisenbacher buys a sheet of stamps that measures $\mathbf{1 5}$ centimeters long. Each stamp is $\mathbf{3}$ centimeters long. How many stamps does Ms. Maisenbacher buy? Draw and label a tape diagram to solve.

Ms. Maisenbacher buys $\qquad$ stamps.
5. Susan buys 10 flowers with $\mathbf{3}$ petals each. How many petals are there in all? Draw and label a tape diagram to solve. Hint: you are multiplying.

There are $\qquad$ petals in all.
6. Fill in the blanks to make true number sentences.


Name: $\qquad$
$\qquad$
BCCS-B Harvard Yale Princeton


## 3. Application:

A chef arranges 4 rows of 3 red peppers on a tray. He adds 2 more rows of $\underline{3}$ yellow peppers. How many peppers are there altogether?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\leftrightarrows$


Name: $\qquad$ BCCS-B

##  <br> 

Week 4 Day 2 Date:
Harvard

Yale
Princeton

## Exit Ticket:

 does Saad's mom make? Draw and label a tape diagram to solve.


Name: $\qquad$ Week 4 Day 2 Date: $\qquad$

Homework :
Ten (10) people wait in line for the roller coaster. Two (2) people sit in each car. Circle to find the total number of cars needed.

$10 \div 2=$ $\qquad$
There are $\qquad$ cars needed.
2. An earthworm digs $\mathbf{3}$ centimeters into the ground each day. The earthworm tunnels at the same pace every day. How many days will it take the earthworm to dig $\mathbf{1 5}$ centimeters? 15 우 $3=$


Name: $\qquad$ BCCS-B
$\qquad$

LEQ: How can I interpret the quotient as the objects in each group using units of 2 and 3 ?

Objective: I can interpret the quotient by putting one object in each of the given groups until I reach the total (dividend).


Name: $\qquad$ BCCS-B

## Do Now:

## Multiply or Divide by 2

| 1. | $2 \times 2=$ | 4 |
| :---: | :---: | :---: |
| 2. | $3 \times 2=$ | 6 |
| 3. | $4 \times 2=$ | 8 |
| 4. | $5 \times 2=$ | 10 |
| 5. | $1 \times 2=$ |  |
| 6. | $4 \div 2=$ |  |
| 7. | $6 \div 2=$ |  |
| 8. | $10 \div 2=$ |  |
| 9. | $2 \div 1=$ |  |
| 10. | $8 \div 2=$ |  |
| 11. | $6 \times 2=$ |  |
| 12. | $7 \times 2=$ |  |
| 13. | $8 \times 2=$ |  |
| 14. | $9 \times 2=$ |  |
| 15. | $10 \times 2=$ |  |
| 16. | $16 \div 2=$ |  |
| 17. | $14 \div 2=$ |  |
| 18. | $18 \div 2=$ |  |
| 19. | $12 \div 2=$ |  |
| 20. | $20 \div 2=$ |  |
| 21. | $\ldots \times 2=10$ |  |
| 22. | $\ldots \times 2=12$ |  |


| 23. | $\ldots \times 2=20$ | 10 |
| :---: | :---: | :---: |
| 24. | $\ldots \times 2=4$ | 2 |
| 25. | $\ldots \times 2=6$ |  |
| 26. | $20 \div 2=$ |  |
| 27. | $10 \div 2=$ |  |
| 28. | $2 \div 1=$ |  |
| 29. | $4 \div 2=$ |  |
| 30. | $6 \div 2=$ |  |
| 31. | $\ldots \times 2=12$ |  |
| 32. | $\ldots \times 2=14$ |  |
| 33. | $\ldots \times 2=18$ |  |
| 34. | $\ldots \times 2=16$ |  |
| 35. | $14 \div 2=$ |  |
| 36. | $18 \div 2=$ |  |
| 37. | $12 \div 2=$ |  |
| 38. | $16 \div 2=$ |  |
| 39. | $11 \times 2=$ |  |
| 40. | $22 \div 2=$ |  |
| 41. | $12 \times 2=$ |  |
| 42. | $24 \div 2=$ |  |
| 43. | $14 \times 2=$ |  |
| 44. | $28 \div 2=$ |  |

Name: $\qquad$
$\qquad$
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## Input:

When given a total number of objects and $\qquad$ we can put the same number of objects in each group to find the group size or quotient.

A school buys 12 boxes of pencils. Each classroom gets 3 boxes. How many classrooms get boxes of pencils?


12 boxes


12 boxes
? classrooms

Mr. Banks makes treat bags for his son's birthday party. He places the same number of toys in each treat bag. If he uses a total of $\mathbf{2 0}$ toys and $\mathbf{1 0}$ bags, how many toys are in each bag?

Name: $\qquad$
BCCS-B

## Problem Set:

1. The pet store sells 10 fish. They equally divide the fish into $\mathbf{5}$ bowls. Draw fish to find the number in each bowl.

$5 \times$ $\qquad$ $=10$
$10 \div 5=$ $\qquad$
There are $\qquad$ fish in each bowl.
2. Mrs. Modest buys 14 meters of ribbon. She cuts her ribbon into 2 equal pieces. How many meters long is each piece? Label the tape diagram to represent the problem, including the unknown.


Each piece is $\qquad$ meters long.
3. Math each division expression to its quotient.


Name: $\qquad$ BCCS-B
$\qquad$
4. Sarah and Esther equally share the cost of a present. The present costs $\boldsymbol{\$ 1 6}$. How much does Sarah pay?

 of her bookcase. How many books are on each shelf?

Name: $\qquad$
$\qquad$


## Application:

Ahmed spends \$15 on $\mathbf{3}$ video games. Each game costs the same amount. Find the cost of each game.

$=$ $\qquad$

Name: $\qquad$
BCCS-B Week 4 Day 3 Date:
Harvard Yale Princeton

## Exit Ticket:

1. Sebastian and Teshawn go to the movies. The tickets cost $\$ 16$ in total. The boys share the cost equally. How much does Teshawn pay?


Name: $\qquad$ BCCS-B

Week 4 Day 3 Date: $\qquad$
Harvard
Yale
Princeton

## Homework :

1. Mr. Ramirez divides $\mathbf{1 8}$ frogs equally into $\mathbf{6}$ groups for students to study. Draw frogs to find the number in each group. Label known and unknown information on the tape diagram to help you solve.

$6 \times$ $\qquad$ $=12$
$12 \div 6=$ $\qquad$
There are $\qquad$ frogs in each group.
2. Betsy pours $\mathbf{1 6}$ cups of water to equally fill $\mathbf{2}$ bottles. How many cups of water are in each bottle?


There are $\qquad$ cups of water in each bottle.


Name: $\qquad$ BCCS-B

Week 4 Day 4 Date: $\qquad$ Harvard Yale Princeton

LEQ: How can I build fluency with multiplication using units of 4?

Objective: I can skip-count objects in models to build fluency with multiplication using units of 4 .


Name: $\qquad$ BCCS-B

Week 4 Day 4 Date: $\qquad$ Harvard

Yale
Princeton

## Do Now:

Skip-count by 4 to circle every fourth number on the hundreds chart below. The first three numbers of the fours skip-counting sequence ( 4,8 , and 12 ) have been circled for you.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

Name: $\qquad$ BCCS-B

## Input:

Week 4 Day 4 Date: $\qquad$
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Let's skip count by four to label the last circle in each group as a of 4. Each row represents: Row Number x 4

## $1 \times 4=4$




Name: $\qquad$
BCCS-B

## Problem Set:

1. Skip-count by fours. Match each answer to the appropriate expression.


Name: $\qquad$ BCCS-B
$\qquad$ Harvard Yale Princeton
2. Mr. Schmidt replaces each of the $\mathbf{4}$ wheels on $\mathbf{7}$ cars. How many wheels does he replace? Draw and label a tape diagram to solve.
$\square$

Mr. Schmidt replaces $\qquad$ wheels.
3. Trina makes 4 bracelets. Each bracelet has $\mathbf{6}$ beads. Draw and label a tape diagram to show the total number of beads Trina uses.
4. Find the total number of sides on 5 rectangles.

Name: $\qquad$
$\qquad$
Yale Princeton


## Application:

Jacky buys 40 pizzas for a party. He places 4 pizzas on each table. How many tables are there?

Name: $\qquad$
$\qquad$
BCCS-B

## Exit Ticket:

1. Arthur has $\mathbf{4}$ boxes of chocolates. Each box has 6 chocolates inside. How many chocolates does Arthur have altogether? Draw and label a tape diagram to solve.

2. Lisa places $\mathbf{5}$ rows of $\mathbf{4}$ juice boxes in the refrigerator. Draw an array and skip-count to find the total number of juices.
$\qquad$ juice boxes in total.

Name: $\qquad$ Week 4 Day 4 Date: $\qquad$

## BCCS-B

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## Homework :

1. Skip-count by fours. Match each answer to the appropriate expression.


Name: $\qquad$
BCCS-B

## Homework:

2. Mrs. Blomgren has four boxes of pencils. There are 4 pencils in each box. How many pencils does Mrs. Blomgren have in all?

[^0]:    (Parent Signature)

