Name
Brighter Choice Charter School for Boys

## $4^{\text {th }}$ Grade Modified Math Remote Learning Packet Week 9




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.

## Connect while at Home!

Subscribe to my YouTube Channel to catch up with previously taught lessons or refer back to Math concepts if you are to need additional assistance.


| Look up by the name of the <br> channel | $\longrightarrow$ | Melissa Lewis |
| :--- | :--- | :--- |

or



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Name: $\qquad$
BCCS-B

Week 9 Day 1 Date: $\qquad$ Howard Morehouse Hampton

LEQ: : How can I use what I know about a standard multiplication algorithm to solve 3-4 digit multiplication problems?

Objective: I can solve 3 or 4 digit by 1 digit multiplication problems using a standard algorithm.

## Do Now

The principal wants to buy 8 pencils for every student at her school. If there are 859 students, how many pencils will the principal need to buy? Use CUBES to solve. HINT: You may use your multiplication chart.
$\square$
C
U
B
E
S

## Input

In the place value chart below, we are going to create a multiplication problem by representing it with discs. https://www.didax.com/apps/place-value/

On the lines below the chart, write the equation in standard form

| Thousands | Hundreds | Tens | Ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

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Week 9 Day 1 Date: $\qquad$
Howard Morehouse Hampton

## Input

## Partial Products Method

1. Multiply the ones
2. Multiply the tens
3. Multiply the hundreds
4. Multiply the thousands
5. If there are larger places, multiply them also.
6. Add all partial-products together

## Standard Algorithm Method

1. Multiply the ones place, regroup
if necessary.
2. Multiply the tens place, regroup if necessary.
3. Multiply the hundreds place, regroup if necessary.
4. Multiply the thousands place, regroup if necessary.
5. If there are more places, continue to multiply and regroup until all places have been multiplied.

Problem 1: $5 \times 2,374=$ ?

| Partial Products | Standard Algorithm |
| :--- | :--- |
|  |  |

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## Your Turn

Now, using what I just showed you in my example, I want you to solve the following problem using partial products ONLY.
$3 \times 42=$ $\qquad$

| Partial Products | Standard Algorithm |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

Problem 2: $6 \times 3,817=$ ?

| Partial Products | Standard Algorithm |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

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Howard Morehouse Hampton

## Input

## Your Turn

Now, using what I just showed you in my example, I want you to solve the following problem using partial products and a standard algorithm.
$3 \times 6,212=$ $\qquad$

| Partial Products | Standard Algorithm |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

## Application Problem

There are 365 days in a common year. How many days are in 3 common years? Use CUBES to solve.
$\square$
C
U

B
E
S

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Week 9 Day 1 Date: $\qquad$
Howard Morehouse Hampton

## Exit Ticket

Directions: In the space provided, solve each problem using partial products OR a standard algorithm and then transfer your answers onto the google form in your math classroom.
$2,348 \times 6$
$1,679 \times 7$
$\square$

A farmer planted 4 rows of sunflowers. There were 1,205 plants in each row. How many sunflowers did he plant? Use CUBES to solve


Name: $\qquad$
BCCS-B

Week 9 Day 2 Date: $\qquad$
Howard Morehouse Hampton

Learning Target: How can I use an area model to show a product of multi-digit multiplication?

Objective: I can use an area model to multiply multi digit numbers.

## Do Now

Directions: Write an equation for the area of each rectangle. Then, find the sum of the two areas.

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

Input
Problem 1: multiply a 3 digit number by a 1 digit number using an area model.
$234 \times 8=$ $\qquad$
$\square$

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Input
Problem 2: Multiply a 3 digit number by a 1 digit number using an area model and connecting it to a standard algorithm.

Standard Algorithm
$\square$

Problem 3: A cafeteria makes 4,408 lunches each day. How many lunches are made Monday through Friday? Solve using an area model and CUBES.

C
U
B
E
S

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Week 9 Day 2 Date: $\qquad$
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## CFU

Solve the following expressions using the standard algorithm and an area model.

| Standard Algorithm | Area model |
| :--- | :--- |
| $425 \times 4$ |  |
|  |  |


| Standard Algorithm | Area model |
| :--- | :--- |
| $534 \times 7$ |  |
|  |  |

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Week 9 Day 2 Date: $\qquad$
Howard Morehouse Hampton

## CFU

| Standard Algorithm <br> $209 \times 8$ | Area model |
| :--- | :--- |
|  |  |
|  |  |

## Application Problem

Cayla's school has 258 students. Janet's school has 3 times as many students as Cayla's. How many students are in Janet's school? Solve using CUBES.

C
U
B
E
S

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Week 9 Day 2 Date:
Howard Morehouse Hampton

## Exit Ticket

The monthly school newspaper is 9 pages long. Mrs. Smith needs to print 675 copies. What will be the total number of pages printed? Use CUBES to solve C

U
B
E
S

Solve using any method that you have been taught:
$2,809 \times 4$


This week you have your Math IA. You will be in school on Wednesday and Thursday to take your assessment so there will NOT be a zoom class on these days.


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Week 9 Day 3 Date: $\qquad$
Howard Morehouse Hampton

Learning Target: How can I recognize a 2 step word problem?
Objective: I can use CUBES to help me model and solve a 2 step word problem

## Do Now

Solve $487 \times 3$ using an area model and standard algorithm.

| Area model | Standard algorithm |
| :--- | :--- |
|  |  |

## Input

Today we are going to work on recognizing the difference between a 2 step word problem and a single step word problem. On the next page, there are 2 different problems and one is a 2 step problem. I would like you to choose which you believe is a 2 step problem by circling Problem A or Problem B and then explain why you chose that problem on the lines.

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Week 9 Day 3 Date: $\qquad$
Howard Morehouse Hampton

## Input

## Problem A:

The Turner family uses 548 liters of water per day. The Hill family uses 3 times as much water per day. How much water does the Hill family use per week?

## Problem B:

The Turner family uses 548 liters of water per day. How many liters of water do they use in a week?

I chose problem $\qquad$ because $\qquad$

## Problem 1:

The Turner family uses 548 liters of water per day. The Hill family uses 3 times as much water per day. How much water does the Hill family use per week? Use CUBES to solve

C
U
B
E
S

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Week 9 Day 3 Date: $\qquad$
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## Input

Now I want you to try a problem that is similar to the one that we just solved together.

Sam and his family were taking a trip across the country. On the first day they drove 289 miles. On the next day the family drove 3 times as much as much as they did on the first day. How many miles did Sam and his family drive in the first two days in all? Use CUBES to solve.

C
U
B
E
S

## Problem 2:

The table shows the cost of party favors. Each party guest receives a bag with 1 balloon, 1 lollipop, and 1 bracelet. What is the total cost for 9 guests? Use CUBES to solve.

| Item | Cost |
| :---: | :---: |
| 1 balloon | 26 C |
| 1 lollipop | 14 C |
| 1 bracelet | 33 C |

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Week 9 Day 3 Date: $\qquad$
Howard Morehouse Hampton

## Input

Now I want you to try a problem that is similar to the one that we just solved together.

Jaime and her 2 friends went to the store after school for some snacks. They each bought one of each of the items from the chart below.

| Item | cost |
| :--- | :--- |
| Bag of chips | 32 cents |
| Lollipop | 17 cents |
| juice | 85 cents |

How much money did the 3 girls spend in all at the store? Use CUBES to solve.
C
U
B
E
S

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Week 9 Day 3 Date: $\qquad$
Howard Morehouse Hampton

## EdLight

## Exit Ticket

Jennifer has 256 beads. Stella has 3 times as many beads as Jennifer. Tiah has 104 more beads than Stella. How many beads does Tiah have? Use CUBES to solve.

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## $4^{\text {th }}$ Grade Modified Math Remote Learning Packet Week 10




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(Date)

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or

| With your cell phone open up the camera and focus on the QR code. It will take you to my YouTube channel! | $\longrightarrow$ |  |
| :---: | :---: | :---: |



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Name:
BCCS-B

Week 10 Day 1 Date: $\qquad$
Howard Morehouse Hampton

Learning Target: How can I use patterns and rules to help make multiplying by 10, 100 and 1000 easier?

Objective: I can recognize patterns when multiplying by multiples of 10,100 and 1000 by single digit numbers.

## Do Now

Complete the following:
$3 \times 2=$ $\qquad$
$3 \times 20=$ $\qquad$
$3 \times 200=$ $\qquad$
$30 \times 2=$ $\qquad$
$2 \times 3,000=$ $\qquad$

## Input

Problem 1: Use place value disks to represent multiplication patterns.
2 ones $\times 4$

| Thousands | Hundreds | Tens | Ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Name:

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$\qquad$

2 tens $\times 4$

| Thousands | Hundreds | Tens | Ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

2 hundreds $\times 4$

| Thousands | Hundreds | Tens | Ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

2 thousands $\times 4$

| Thousands | Hundreds | Tens | Ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Name:
BCCS-B

Week 10 Day 1 Date: $\qquad$
Howard Morehouse Hampton

## Input

Now, I want you to try to do what we just did together but this time independently. In the charts below I want you to model each problem with discs just as we did before.

3 ones x 3

| Thousands | Hundreds | Tens | Ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

3 tens $\times 3$

| Thousands | Hundreds | Tens | Ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

3 hundreds $\times 3$

| Thousands | Hundreds | Tens | Ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

Name:
BCCS-B

Week 10 Day 1 Date: $\qquad$ Howard Morehouse Hampton

## Input

3 thousands x 3

| Thousands | Hundreds | Tens | Ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

## Problem 2:

Numerically represent single-digit numbers times a multiple of 10 .
$8 \times 2=$ $\qquad$
$8 \times 20=$ $\qquad$
$8 \times 200=$ $\qquad$
$8 \times 2,000=$ $\qquad$
What are some patterns that you notice? $\qquad$

Now, you try!
Numerically represent single-digit numbers times a multiple of 10.
$4 \times 3=$ $\qquad$ $4 \times 3,000=$ $\qquad$
$4 \times 30=$ $\qquad$
$4 \times 300=$ $\qquad$

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Week 10 Day 1 Date: $\qquad$ Howard Morehouse Hampton

## Input

## Problem 3:

1. Francisco played a video game and earned 60 points for every coin he collected. He collected 7 coins. How many points did he earn for the coins that he collected?
2. Francisco also earned 200 points for every level he completed in the game. He completed 7 levels. How many points did he earn for the levels that he completed?
3. What was the total number of points that Francisco earned?

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Week 10 Day 1 Date: $\qquad$
Howard Morehouse Hampton

## Application Problem

1. John mowed lawns in his neighborhood and earned 80 cents for every lawn he mowed. He mowed 7 lawns. How much did he earn for mowing lawns?
2. John also earned 300 cents for every driveway he shovel during the winter. He shoveled 5 driveways. How much did he earn for shoveling in the winter?
3. How much did John earn in all for mowing and shoveling?

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Week 10 Day 1 Date: $\qquad$
Howard Morehouse Hampton
: $=$

Exit Ticket
Bonnie worked for 7 hours each day for 30 days. How many hours did she work altogether? Use Cubes to solve.

| C. $6 \times 400$ | d. $2 \times 900$ |
| :--- | :--- |
| g. $500 \times 6$ | h. $8 \times 5,000$ |



Name: $\qquad$

BCCS-B

Week 10 Day 2 Date: $\qquad$
Howard Morehouse Hampton

Learning Target: How can I use patterns and rules to help make multiplying by 10, 100 and 1000 easier?

Objective: I can multiply 2-digit multiples of 10 by 2-digit multiples of 10 using an area model.

## Do Now

There are 400 children at Park Elementary School. Park High School has 4 times as many students. How many students in all attend both schools? Use CUBES to solve.
$\square$

## Input

Look at the problem and answer I have below:
$6 \times 500=300$

What did I do wrong? Why did I not use the zero rule correctly, explain.
$\qquad$
$\qquad$
$\qquad$

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Week 10 Day 2 Date: $\qquad$
Howard Morehouse Hampton

## Input

Problem 1: multiply a 2 digit multiple of 10 by a 2 digit multiple of 10
$30 \times 20$

How many zeros? $\qquad$
If we drop both of the zeros we have the basic fact $3 \times 2$.
$3 \times 2=$ $\qquad$
If we bring those 2 zeros back we get $\qquad$
So $30 \times 20=$ $\qquad$
This shows us that no matter where the zeros are in the number we can still apply the zero rule to solve.

## You try:

$40 \times 20$

How many zeros? $\qquad$
The basic fact we have now is $\qquad$
If we bring both zeros back our answer is $\qquad$
So $40 \times 20=$ $\qquad$

Name:
BCCS-B

Week 10 Day 2 Date: $\qquad$ Howard Morehouse Hampton

## Input

Problem 2: Create an area model to represent the multiplication of a two-digit multiple of 10 by a two-digit multiple of 10 .
$40 \times 20$

Draw a rectangle with a side length of 40 and a width of 20.

How many tens are in 40 ? $\qquad$ tens

How many tens are in 20 ? $\qquad$ tens

Now, break apart our rectangle on the number of tens in each number.

## You Try:

$30 \times 20$
Draw a rectangle with a side length of 30 and a width of 20.

How many tens are in 30 ? $\qquad$ tens

How many tens are in 20? $\qquad$ tens

Now, break apart our rectangle on the number of tens in each number.

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Week 10 Day 2 Date: $\qquad$ Howard Morehouse Hampton

## Input

Problem 3: Use an area model to represent the multiplication of a two-digit multiple of 10 by a two-digit multiple of 10 .
$50 \times 40$

Rewrite the problem in units but solve in standard form.

## You Try:

Use an area model to represent the multiplication of a two-digit multiple of 10 by a two-digit multiple of 10 .
$30 \times 60$

Rewrite the problem in units but solve in standard form.

## Application Problem

One ticket to the symphony costs $\$ 50$. How much money is collected if 80 tickets are sold? Use CUBES to solve.

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Week 10 Day 2 Date: $\qquad$
Howard Morehouse Hampton

## EdLight

## Exit Ticket

Draw an area model to represent $20 \times 30$
2 tens x 3 tens

Every night, Eloise reads 40 pages. How many total pages does she read at night during the 30 days of November?


Name: $\qquad$
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Week 10 Day 3 Date: $\qquad$
Hampton Howard Morehouse

Solve the word problems. Show your work.

1. Tommy Turkey ate 12 worms for breakfast, 23 worms for lunch, and ${ }^{1}$ 18 worms for dinner. How many worms did he eat altoge ther?
2. The turkey has 439 feathers. IF he loses 186 feathers one week, how many feathers will he have left?
3. Mary Pilgrim baked 23 apples ples and 4.5 pumpkin ples. If she gives 32 ples away, how many ples does she have left?


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Week 10 Day 4 Date: $\qquad$
Hampton Howard Morehouse

Solve the word problems. Show your work.
4. The Native Americans have 891 ears of corn. IF they shared 4.56 eans of conn with the Plignims, how many do they have left?
5. The Pligrims brought 40 friends to dinner. The Native emerican brought 80 friends to dinner. IF 10 friends could sit at each table, how many tables do they need altoge then?


Name: $\qquad$
BCCS-B Hampton Howard Morehouse

Design and color your own fancy turkey! Use the next page for ideas. You can cut and glue or redraw.



