Name
Brighter Choice Charter School for Boys
$\qquad$

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

## Week 16



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 <br> of the channel | $\longrightarrow$ | Melissa Lewis |
| :--- | :--- | :--- |

or

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

The reminders below have been modified, please take note of points 2,3 and 4.-Thank you!

- Please do not separate either packet or remove any pages from any packet.
- ALL math exit tickets will be done remotely. They will be submitted either via edlight or google form.
- ALL math homework with also be done $100 \%$ remotely. Homework with MOSTLY be submitted via google form, occasionally via edlight.
- My GOAL is for families NOT to have to turn in ANY math packet.


Name: $\qquad$
BCCS-B

Week 16 Day 1 Date: $\qquad$
Howard Morehouse Hampton

LEQ: How can I find whole number quotients using a division algorithm?
Objective: I can find whole number quotients by using a place value chart to support a standard division algorithm

## Do Now

$75 \div 3$

$3 \longdiv { 7 5 }$

Check Your Work
quotient $=$ $\qquad$
remainder $=$ $\qquad$

Today we are going to review dividing $\qquad$ digit $\qquad$ .
First, let's review some important terms:
Dividend: $\qquad$
Divisor: $\qquad$
Quotient: $\qquad$

Name: $\qquad$
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## Input

We are going to watch a quick video that reviews the steps of long division. After, we will review the steps in our tool kit and do some practice.
https://www.youtube.com/watch?v=VvQelzRQe7k
LONG DIIISION

## Divisort a number divided into another number.

Dividend: a number that is to be divided by another number
Quetient the number that repults from the.division of one number by another 2 THE ANSWER?
Remainder: the amount left over when a number cannot be divided exactly by another number.


Monkeys
Smell
Bad

Name:
BCCS-B
Input

## Problem 1:

5 tens 7 ones $\div 3$
Rewrite this equation in standard form: $\qquad$
Draw a place value chart:
$\square$

## Standard Algorithm:

Your Turn:
4 tens 8 ones $\div 4$
Rewrite in standard form: $\qquad$


Standard Algorithm:

Name:
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Input

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Problem 2: 8 tens 6 ones $\div 5$

Rewrite in standard form: $\qquad$
Place Value Chart
Standard Algorithm:
$\square$

Your turn:
6 tens 3 ones $\div 4$
Rewrite in standard form:
Place Value Chart
Standard Algorithm

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Input
Problem 3: Solve without a place value chart
7 tens 4 ones $\div 8$
Standard form: $\qquad$
Solve:

Your Turn

6 tens 4 ones $\div 7$

Standard form: $\qquad$
Solve:

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Here's a few more to try on your own:

| $87 \div 9$ | $76 \div 5$ |
| :--- | :--- |

## Application Problem

Malory's family is going to buy oranges. The Grand Market sells oranges at 3 pounds for 87 cents. How much does 1 pound of oranges cost at Grand Market?

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## Exit Ticket-google form

Solve using the standard algorithm.

1. $93 \div 7$
2. $99 \div 8$

Homework-google form

| $1.84 \div 2$ | 2. | $84 \div 4$ |
| :--- | :--- | :--- | :--- |
|  |  |  |
|  |  |  |
| $48 \div 3$ | 4. | $80 \div 5$ |



Name: $\qquad$
BCCS-B

Week 16 Day 2 Date: $\qquad$
Howard Morehouse Hampton

LEQ: How can I describe a remainder?
Objective: I can describe remainders when dividing and solving word problems.

## Do Now

Two friends start a business writing and selling comic books. After 1 month, they have earned $\$ 38$. How can they fairly share their earnings? Use CUBES to solve.

Input
Problem 1: Model division with remainders in the tens and ones places using place value disks, and then relate it to a long division model.
$41 \div 3$

| Place value | Standard algorithm |
| :--- | :--- |
|  |  |

Name:

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Input
Your Turn
$37 \div 3$

| Place value | Standard algorithm |
| :--- | :--- |
|  |  |

We can say that $\qquad$ divided by $\qquad$ equals $\qquad$ with a remainder of $\qquad$ .

We can check our quotient by $\qquad$ .

Check:
Problem 2: Share $\$ 64$ as 6 tens and 4 ones equally among 4 friends Place Value Chart:
$\qquad$ . We can just by doing $\qquad$ .

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Input

## Your Turn

Share $\$ 45$ as 4 tens and 5 ones equally among 3 friends/
Place Value Chart:

Each friend will get $\qquad$ . I can check by doing _.

Check:

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## Application Problem

The place value disk model is showing $72 \div 3$. Complete the model. Explain what happens to the 1 ten that is remaining in the tens column.


## Exit Ticket-ed light

Molly's photo album has a total of 97 pictures. Each page of the album holds 6 pictures. How many pages can Molly fill? Will there be any pictures left? If so, how many? Use place value disks to solve.

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Howard Morehouse Hampton

## Homework

The place value disk model is showing $67 \div 4$. Complete the model. Explain what happens to the 2 tens that are remaining in the tens column.

| 10 |  |
| :--- | :--- |
| 10 |  |
| $(10)$ |  |
| $(10$ | 1 |
| $(10)$ |  |
| $(10)$ |  |

The $\mathbf{2}$ tens that are remaining in the tens column $\qquad$
$\qquad$
$\qquad$
$\qquad$


Name: $\qquad$
BCCS-B
LEQ: How can I use an area model to solve division problems without remainders?
Objective: I can use an area model to show division that does not include remainders.

## Do Now <br> A

Number correct: $\qquad$

| 1. | $20 \div 2=$ |  |
| :---: | :---: | :--- |
| 2. | $4 \div 2=$ |  |
| 3. | $24 \div 2=$ |  |
| 4. | $30 \div 3=$ |  |
| 5. | $6 \div 3=$ |  |
| 6. | $36 \div 3=$ |  |
| 7. | $40 \div 4=$ |  |
| 8. | $8 \div 4=$ |  |
| 9. | $48 \div 4=$ |  |
| 10. | $2 \div 2=$ |  |
| 11. | $40 \div 2=$ |  |
| 12. | $42 \div 2=$ |  |
| 13. | $3 \div 3=$ |  |
| 14. | $60 \div 3=$ |  |
| 15. | $63 \div 3=$ |  |
| 16. | $4 \div 4=$ |  |
| 17. | $80 \div 4=$ |  |
| 18. | $84 \div 4=$ |  |
|  |  |  |


| 23. | $68 \div 2=$ |  |
| :---: | :---: | :---: |
| 24. | $96 \div 3=$ |  |
| 25. | $86 \div 2=$ |  |
| 26. | $93 \div 3=$ |  |
| 27. | $88 \div 4=$ |  |
| 28. | $99 \div 3=$ |  |
| 29. | $66 \div 3=$ |  |
| 30. | $66 \div 2=$ |  |
| 31. | $40 \div 4=$ |  |
| 32. | $80 \div 4=$ |  |
| 33. | $60 \div 4=$ |  |
| 34. | $68 \div 4=$ |  |
| 35. | $20 \div 2=$ |  |
| 36. | $40 \div 2=$ |  |
| 37. | $30 \div 2=$ |  |
| 38. | $36 \div 2=$ |  |
| 39. | $30 \div 3=$ |  |
| 40. | $39 \div 3=$ |  |

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B
Number correct: $\qquad$

| 1. | $30 \div 3=$ |  |
| :---: | :---: | :---: |
| 2. | $9 \div 3=$ |  |
| 3. | $39 \div 3=$ |  |
| 4. | $20 \div 2=$ |  |
| 5. | $6 \div 2=$ |  |
| 6. | $26 \div 2=$ |  |
| 7. | $80 \div 4=$ |  |
| 8. | $4 \div 4=$ |  |
| 9. | $84 \div 4=$ |  |
| 10. | $2 \div 2=$ |  |
| 11. | $60 \div 2=$ |  |
| 12. | $62 \div 2=$ |  |
| 13. | $3 \div 3=$ |  |
| 14. | $90 \div 3=$ |  |
| 15. | $93 \div 3=$ |  |
| 16. | $8 \div 4=$ |  |
| 17. | $40 \div 4=$ |  |
| 18. | $48 \div 4=$ |  |
| 19. | $50 \div 5=$ |  |
| 20. | $60 \div 5=$ |  |
| 21. | $70 \div 5=$ |  |


| 23. | $86 \div 2=$ |  |
| :---: | :---: | :---: |
| 24. | $69 \div 3=$ |  |
| 25. | $68 \div 2=$ |  |
| 26. | $96 \div 3=$ |  |
| 27. | $66 \div 3=$ |  |
| 28. | $99 \div 3=$ |  |
| 29. | $88 \div 4=$ |  |
| 30. | $88 \div 2=$ |  |
| 31. | $40 \div 4=$ |  |
| 32. | $80 \div 4=$ |  |
| 33. | $60 \div 4=$ |  |
| 34. | $64 \div 4=$ |  |
| 35. | $20 \div 2=$ |  |
| 36. | $40 \div 2=$ |  |
| 37. | $30 \div 2=$ |  |
| 38. | $38 \div 2=$ |  |
| 39. | $30 \div 3=$ |  |
| 40. | $36 \div 3=$ |  |
| 41. | $42 \div 3=$ |  |
| 42. | $60 \div 3=$ |  |
| 43. | $54 \div 3=$ |  |

Name:
BCCS-B

Week 16 Day 3 Date: $\qquad$
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Input
Problem 1: Decompose $48 \div 4$ from whole to part.
Draw an area model showing 48 as the area and 4 as the width.

Break the area model above into tens and ones.

There are $\qquad$ tens in 48 and $\qquad$ ones.

4 goes into 40 $\qquad$ times.

4 goes into 8 $\qquad$ times.

This tells us that $48 \div 4=$ $\qquad$

Draw a number bond to match:

Name:
BCCS-B

Input
Your Turn
Decompose $69 \div 3$ from whole to part.
Draw an area model showing 69 as the area and 3 as the width.

Break the area model above into tens and ones.
There are $\qquad$ tens in 69 and $\qquad$ ones.

3 goes into 60 $\qquad$ times.

3 goes into 9 $\qquad$ times.

This tells us that $69 \div 3=$ $\qquad$
Draw a number bond to match:

Now lets relate both of the previous problems to a standard algorithm:

| $48 \div 4$ | $69 \div 3$ |
| :--- | :--- |
|  |  |

Name:
BCCS-B

Week 16 Day 3 Date: $\qquad$
Howard Morehouse Hampton

Input
Review of long division:


Problem 2:
$96 \div 4=$ $\qquad$ Check:

Name:
BCCS-B

Input

## Your turn

$45 \div 3=$ $\qquad$

CFU

Try a few more on your own

| $34 \div 3=$ | $76 \div 4=$ | $57 \div 4$ |
| :--- | :--- | :--- |
| Check: |  |  |
|  | Check: | Check: |

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BCCS-B

Week 16 Day 3 Date: $\qquad$ Howard Morehouse Hampton

## Application Problem

Solve $96 \div 6$ using an area model and the standard algorithm.

## Exit ticket-ed light

Tony drew the following area model to find an unknown length. What division equation did he model?


Equation: $\qquad$ $\div$ $\qquad$
$\qquad$
Solve using a long division algorithm:

Name: $\qquad$

## BCCS-B

Week 16 Day 3 Date: $\qquad$
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## Homework-google form

1. Maria solved a division problem by drawing an area model.
a. Look at the area model. What division problem did Maria solve?


Equation: $\qquad$ $\div$ $\qquad$ $=$ $\qquad$
Solve using a long division algorithm:

Solve the following using a long division algorithm

| $45 \div 3=\ldots$ | $57 \div 4=\ldots$ |
| :--- | :--- |



Name:
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Week 16 Day 4 Date: $\qquad$
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LEQ: How can I use an area model to show the division of numbers with remainders?

Objective: I can solve division problems with remainders using the area model.
Do Now

A rectangle has an area of 36 square units and a width of 2 units. What is the unknown side length?

Input
Problem 1: $76 \div 3$
Draw an area model and solve with a long division algorithm

Name:
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$67 \div 3=$ $\qquad$

## Your Turn:

Week 16 Day 4 Date: $\qquad$
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Draw an area model and solve with a long division area model.

## Problem 2:

Solve $37 \div 2$ using an area model. Use long division and the distributive property to record your work.

## Your Turn

Solve $76 \div 3$ using an area model. Use long division and the distributive property to record your work.

Name: $\qquad$

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CFU

Week 16 Day 4 Date: $\qquad$
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Solve the following problems using the area model. Support the area model with long division or the distributive property.

| 4. $48 \div 3$ | $5.49 \div 3$ |
| :--- | :--- |
|  |  |
|  |  |

## Application Problem

Seventy-three students are divided into groups of 6 students each. How many groups of 6 students are there? How many students will not be in a group of 6 ?

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## Exit Ticket-google form

1. Kyle drew the following area model to find an unknown length. What division equation did he model?

2 | 40 | 18 |
| :--- | :--- | \(\begin{gathered}1 \begin{array}{l}square <br>

unit\end{array}\end{gathered}\)
Equation: $\qquad$
2. Solve $93 \div 4$ using the area model, long division, and the distributive property.

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Week 16 Day 4 Date: $\qquad$ Howard Morehouse Hampton

Homework-google form

1. Solve $35 \div 2$ using an area model. Use long division and the distributive property to record your work.
2. Solve $79 \div 3$ using an area model. Use long division and the distributive property to record your work.


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Week 16 Day 5 Date: $\qquad$
Howard Morehouse Hampton

LEQ: How can I prove my understanding of Topic E?
Objective; I can prove my understanding of topic E by scoring an $80 \%$ or better on my quiz.

Do Now-sprint


Number Correct: $\qquad$

| 1. | $8 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| :---: | :---: | :---: | :---: |
| 2. | $9 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 3. | $4 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 4. | $5 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 5. | $7 \div 5$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 6. | $8 \div 5$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 7. | $5 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 8. | $6 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 9. | $8 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 10. | $9 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 11. | $2 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 12. | $3 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 13. | $7 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 14. | $8 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 15. | $9 \div 3$ | $\mathrm{Q}=$ | $R=$ |


| 23. | $6 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| :---: | :---: | :---: | :---: |
| 24. | $7 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 25. | $3 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 26. | $4 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 27. | $6 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 28. | $7 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 29. | $6 \div 6$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 30. | $7 \div 6$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 31. | $4 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 32. | $5 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 33. | $9 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 34. | $9 \div 5$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 35. | $7 \div 7$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 36. | $9 \div 9$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 37. | $13 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |

Name:
BCCS-B


Division with Remainders

| 1. | $9 \div 8$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| :---: | :---: | :---: | :---: |
| 2. | $8 \div 8$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 3. | $9 \div 6$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 4. | $8 \div 6$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 5. | $5 \div 5$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 6. | $6 \div 5$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 7. | $7 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 8. | $6 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 9. | $5 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 10. | $6 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 11. | $2 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 12. | $3 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 13. | $3 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 14. | $4 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 15. | $8 \div 7$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |

Week 16 Day 5 Date: $\qquad$
Howard Morehouse Hampton

Number Correct: $\qquad$
Improvement: $\qquad$

| 23. | $4 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| :---: | :---: | :---: | :---: |
| 24. | $5 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 25. | $8 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 26. | $9 \div 4$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 27. | $9 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 28. | $8 \div 3$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 29. | $9 \div 5$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 30. | $6 \div 6$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 31. | $7 \div 6$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 32. | $9 \div 9$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 33. | $7 \div 7$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 34. | $9 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 35. | $8 \div 2$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 36. | $37 \div 8$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |
| 37. | $50 \div 9$ | $\mathrm{Q}=$ | $\mathrm{R}=$ |

Name:
BCCS-B

Week 16 Day 5 Date: $\qquad$
Howard Morehouse Hampton

Quiz review
Dividing with a place value chart and standard algorithm
$45 \div 3=$ $\qquad$
Place value chart
Standard Algorithm
$67 \div 4=$ $\qquad$
Place value chart
Standard Algorithm

Henry bough 37 cookies for the party and he was going to share them with 5 of his co-workers. How many cookies would each of his co-workers get? Would there be any left over for Henry?

Name
Brighter Choice Charter School for Boys
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## $4^{\text {th }}$ Grade Math Remote Learning Packet

## Week 17



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 <br> of the channel | $\longrightarrow$ | Melissa Lewis |
| :--- | :--- | :--- |

or

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

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Name:

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Week 17 Day 1 Date: $\qquad$
Howard Morehouse Hampton

LEQ: How do I use factor pairs to determine if a number is prime or composite?
Objective: I can find factor pairs for numbers to 100 and use understanding of factors to define prime and composite.

Do Now
$8 \times \ldots=96$. Find the unknown side length, or factor. Use an area model to solve the problem.

Area Model
Standard Algorithm

Input
Review of terms:
Factors: $\qquad$
Product: $\qquad$
https://www.youtube.com/watch?v=2hVQLG-QTfI
Prime number: $\qquad$
Composite number: $\qquad$
Factor Pair: $\qquad$

Name:
BCCS-B

Week 17 Day 1 Date: $\qquad$
Howard Morehouse Hampton

Input
Problem 1: Identify the factors and product represented in an array.
Draw a $1 \times 8$ array and a $2 \times 4$ array

| $1 \times 8$ | $2 \times 4$ |
| :--- | :--- |
|  |  |
|  |  |

What are the factors and product in $1 \times 8=8$ ?
The factors are $\qquad$ and $\qquad$ . The product is $\qquad$ .

What are the factors and product in $2 \times 4=8$ ?
The factors are $\qquad$ and $\qquad$ . The product is $\qquad$ .

So we can say the factors of 8 are $\qquad$ .

The factor pairs of 8 are:


Name:
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Input
Your turn
Draw an array to represent $1 \times 18$ and $2 \times 9$

| $1 \times 18$ | $2 \times 9$ |
| :--- | :--- |
|  |  |
|  |  |

What are the factors and product in $1 \times 18=18$ ?
The factors are $\qquad$ and $\qquad$ . The product is $\qquad$ .

What are the factors and product in $2 \times 9=18$ ?
The factors are $\qquad$ and $\qquad$ . The product is $\qquad$ .

So we can say the factors of 18 are $\qquad$ .

The factor pairs of 8 are:


Name: $\qquad$
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Input
Problem 2: Identify factors to define prime and composite numbers.
$2 \times 8=16$
What are the factors is the number sentence above? $\qquad$
What are 2 other multiplication number sentences with the same product? and $\qquad$
So the factors of 16 are: $\qquad$
Is this number prime or composite and how do you know?
This number is $\qquad$ because $\qquad$
$1 \times 7=7$

What are the factors is the number sentence above? $\qquad$
Is there any other multiplication sentence that gives us the same product? $\qquad$
How do you know? $\qquad$
So the factors of 7 are $\qquad$ .

Is this number prime or composite and how do you know?
This number is $\qquad$ because $\qquad$
$\qquad$

Name: $\qquad$

BCCS-B
Input
Your turn
$2 \times 5=10$

What are the factors in this number sentence? $\qquad$
What is another way to get the same product? $\qquad$
The factors of 10 are $\qquad$
Is 10 prime or composite and how do you know? $\qquad$

Problem 3: Identify factors of numbers and determine if they are prime or composite.

Let's use a table to record the factor pairs of 35 .


Is 35 prime or composite and why?

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Input

## Factor pairs of 23 ?

Is 23 prime or composite and why?

## Your Turn

Factor pairs of $27 ?$


Is 27 prime or composite and why?

Name: $\qquad$
BCCS-B

CFU

Record the factors of the given numbers as multiplication sentences and as a list in order from least to greatest. Classify each as prime (P) or composite (C). The first problem is done for you.

|  | Multiplication Sentences | Factors | P or C |
| :--- | :--- | :--- | :---: |
| a. | 4 | The factors of 4 are: <br> $1,2,4$ | C |
| b. | 6 | The factors of 6 are: |  |
| c. | $7 \times 2=4$ | The factors of 7 are: |  |
| d. | 9 | The factors of 9 are: |  |

## Application problem

Sheila has 28 stickers to divide evenly among 3 friends. She thinks there will be no leftovers. Use what you know about factor pairs to explain if Sheila is correct.
$\square$

Name:
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Week 17 Day 1 Date: $\qquad$
Howard Morehouse Hampton

## Exit ticket-ed light

Record the factors of the given numbers as multiplication sentences and as a list in order from least to greatest. Classify each as prime (P) or composite (C).

|  | Multiplication Sentences |  | Factors |
| :--- | :--- | :--- | :--- |
| a. | 9 | The factors of 9 are: | Prime (P) <br> or <br> Composite (C) |
| b. | 12 | The factors of 12 are: |  |
| c. | 19 | The factors of 19 are: |  |

Name: $\qquad$

BCCS-B

Week 17 Day 1 Date: $\qquad$
Howard Morehouse Hampton

Homework-google form
Record the factors of the given numbers as multiplication sentences and as a list in order from least to greatest. Classify each as prime (P) or composite (C). The first problem is done for you.

| Multiplication Sentences | Factors <br> a. <br> b. | 10 | P or C |
| :--- | :--- | :--- | :---: |
| c. | 11 | The factors of 8 are: <br> $1,2,4,8$ | C |
| d. | 14 | The factors of 10 are: |  |
| e. | 17 | The factors of 11 are: |  |
| f. | 20 | The factors of 17 are: |  |



Name: $\qquad$
BCCS-B

Week 17 Day 2 Date: $\qquad$
Howard Morehouse Hampton

LEQ: How can I use division to determine if a number is a factor of another number?

Objective: I can use division to determine if a number is a factor of another number.

Do Now
Sasha says that every number in the twenties is a composite number because 2 is even. Amanda says there are two prime numbers in the twenties. Who is correct? How do you know?

Circle the composite numbers.

$$
20212223242526272829
$$

$\qquad$ is right because $\qquad$

Input
Problem 1: Use division to find factors of larger numbers.
$28=7 x$ $\qquad$

Is 10 a factor of 28 ? $\qquad$ How do you know? $\qquad$
$\qquad$

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Input

Week 17 Day 2 Date: $\qquad$
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How can we determine if 3 is a factor of 54? $\qquad$
Long division algorithm:

Your Turn:
Determine if 2 is a factor of 54 by using division:

Is there another way to determine if 2 is a factor of 54 ?
$\qquad$
$\qquad$
Rule: All $\qquad$ numbers will have $\qquad$ as a factor.

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CFU

Explain your thinking or use division to answer the following.


## Application Problem

Greg said that all odd numbers are prime, is this statement correct? How do you know?
$\qquad$
$\qquad$
$\qquad$

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## Exit ticket-google form

Explain your thinking or use division to answer the following.

| a. Is 2 a factor of 34 ? | b. Is 3 a factor of 34 ? |
| :--- | :--- |
|  |  |

Homework-google form

Explain your thinking or use division to answer the following.

| a. Is 2 a factor of $72 ?$ | b. Is 2 a factor of $73 ?$ |
| :--- | :--- | :--- |
| c. Is 3 a factor of $72 ?$ | d. Is 2 a factor of $60 ?$ |



Name: $\qquad$
BCCS-B

Week 17 Day 3 Date: $\qquad$
Howard Morehouse Hampton

LEQ: How can I determine if a number is a multiple of another number?
Objective; I can determine if a number is a multiple by using what I know about skip counting and multiplication

## Do Now

$8 \mathrm{~cm} \times 12 \mathrm{~cm}=96$ square centimeters. Imagine a rectangle with an area of 96 square centimeters and a side length of 4 centimeters. What is the length of its unknown side?
$\square$

Input
https://www.youtube.com/watch?v=PRERRxSRNCO
What is a multiple?

Is 12 a multiple of 3 ? $\qquad$ why? $\qquad$

Is 24 a multiple of 6 ? $\qquad$ why? $\qquad$

Name: $\qquad$

BCCS-B
Input
How is a multiple different from a factor? $\qquad$
$\qquad$
$\qquad$
Is 4 a multiple of $24 ?$ $\qquad$
How do you know? $\qquad$
Is 5 a multiple of 24? $\qquad$
How do you know? $\qquad$
Your turn
Is 8 a multiple of 24 ? $\qquad$
How do you know? $\qquad$

List the factor and multiples of the following:

| Number | Factors | Multiples (first 5) |
| :--- | :--- | :--- |
| 4 |  |  |
| 9 |  |  |
| 12 |  |  |

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Week 17 Day 3 Date: $\qquad$
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CFU

For each of the following, time yourself for 1 minute. See how many multiples you can write.
a. Write the multiples of 5 starting from 100.
b. Write the multiples of 4 starting from 20.
c. Write the multiples of 6 starting from 36 .

## Exit Ticket-google form

1. Fill in the unknown multiples of 11 .
$5 \times 11=$
$6 \times 11=$ $\qquad$
$7 \times 11=$ $\qquad$
$8 \times 11=$ $\qquad$
$9 \times 11=$ $\qquad$
2. Complete the pattern of multiples by skip-counting.

7, 14, $\qquad$ , 28, $\qquad$ , $\qquad$ _-_ ,

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Week 17 Day 3 Date: $\qquad$ Howard Morehouse Hampton

## Homework-google form

For each of the following, time yourself for 1 minute. See how many multiples you can write.
a. Write the multiples of 5 starting from 75.
b. Write the multiples of 4 starting from 40 .
c. Write the multiples of 6 starting from 24.

Use mental math, division, or the associative property to solve. (Use scratch paper if you like.)
a. Is 12 a multiple of 3 ? $\qquad$ Is 3 a factor of 12 ? $\qquad$
b. Is 48 a multiple of 8 ? $\qquad$ Is 48 a factor of 8 ? $\qquad$
c. Is 56 a multiple of 6 ? $\qquad$ Is 6 a factor of 56 ? $\qquad$


Name: $\qquad$

BCCS-B

Week 17 Day 4 Date: $\qquad$
Howard Morehouse Hampton

LEQ: How can multiples help me determine the properties of prime and composite numbers?

Objective: I determine the properties of prime and composite numbers to 100 by using multiples

## Do Now

Take 1 minute to list as many multiples of 3 as you can:

Take 1 minute to list the factors of 3:

Take 1 minute to list as many multiples of 6 as you can:

Take 1 minute to list the factors of 6:

Input
Looking at the number chart on the next page, what is the smallest prime number you see? How do you know?

What is the largest composite number? How do you know?

Name: $\qquad$
BCCS-B

Input

1. Follow the directions.

Shade the number 1 red.
a. Circle the first unmarked number.
b. Cross off every multiple of that number except the one you circled. If it's already crossed off, skip it.
c. Repeat Steps (a) and (b) until every number is either circled or crossed off.
d. Shade every crossed out number in orange.

| 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
2. a. List the circled numbers.
b. Why were the circled numbers not crossed off along the way?
c. Except for the number 1, what is similar about all of the numbers that were crossed off?
d. What is similar about all of the numbers that were circled?

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BCCS-B

Week 17 Day 4 Date: $\qquad$
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## Exit ticket-ed light

Use the calendar below to complete the following:

1. Cross off all composite numbers.
2. Circle all of the prime numbers.
3. List any remaining numbers.

| Sunday <br> Saturday <br>  Monday Tuesday Wednesday Thursday$\quad$ |
| :--- |
| 3 |

Homework-google form

1. List the first 5 multiples of 4 . $\qquad$
List the factors of 4. $\qquad$
Is 4 prime or composite? $\qquad$
2. List the first 5 multiples of 9 . $\qquad$
List the factors of 9. $\qquad$
Is 9 prime of composite? $\qquad$


Name: $\qquad$
BCCS-B

Week 17 Day 5 Date: $\qquad$
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## LEQ: How can I prove my understanding of Topic F?

Objective; I can prove my understanding of topic $F$ by scoring an $80 \%$ or better on my quiz.

Review for Quiz

|  | Multiplication Sentences | Factors | P or C |
| :--- | :--- | :--- | :---: |
| a. | 4 <br> $1 \times 4=4 \quad 2 \times 2=4$ | The factors of 4 are: <br> $1,2,4$ | C |
| b. | 6 | The factors of 6 are: |  |
| c. | 7 | The factors of 7 are: |  |
| d. | 9 | The factors of 9 are: |  |
| e. | 12 | The factors of 12 are: |  |
| f. | 13 | The factors of 13 are: |  |
| g. | 15 | The factors of 15 are: |  |
| h. | 16 | The factors of 16 are: |  |
| i. | 18 | The factors of 18 are: |  |
| j. | 19 | The factors of 19 are: |  |
| k. | 21 | The factors of 21 are: |  |
| l. | 24 |  |  |

Name: $\qquad$
BCCS-B

Week 17 Day 5 Date: $\qquad$
Howard Morehouse Hampton
2. Find all factors for the following numbers, and classify each number as prime or composite. Explain your classification of each as prime or composite.

| Factor Pairs for 25 |  |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |


| Factor Pairs for 28 |  |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |


| Factor Pairs for 29 |  |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**there is no MATH homework today or MATH exit ticket**

