# 4th Grade Math Hybrid Learning Packet <br> Week of: 1/4-1/7 

Spelman


College ${ }_{\text {® }}$

## Monday

## Date: January 4

Learning Target: Solve division problems using multiple strategies. Standards: 4.NBT. 6

## Do Now:

1) If $5 \times 2=10$, then $50 \times 2=$ $\qquad$
2) If $4 \times 5=20$, then $40 \times 5=$ $\qquad$
3) If $3 \times 10=30$, then $30 \times 10=$
4) If $9 \times 3=27$, then $90 \times 3=$ $\qquad$
5) If $7 \times 3=21$, then $70 \times 3=$ $\qquad$
6) If $5 \times 8=40$, then $50 \times 8=$ $\qquad$
7) If $6 \times 9=54$, then $60 \times 9=$ $\qquad$
8) If $7 \times 6=42$, then $70 \times 6=$ $\qquad$
9) If $6 \times 5=30$, then $60 \times 5=$ $\qquad$
10) If $6 \times 1=6$, then $60 \times 1=$ $\qquad$
11) If $4 \times 8=32$, then $4 \times 80=$ $\qquad$
12) If $6 \times 10=60$, then $6 \times 100=$ $\qquad$

## Quick Review

$3 \times 12=$
$6 \times 214=$
$3 \times 2,670=$

## Concept Development

Solve $37 \div 2$ using any strategy you have learned. Check your answer with multiplication.

## Note Catcher:

## I wonder?

## Let's Work Together!

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Solve $76 \div 3$ using any strategy you have learned. Check your answer with multiplication.

## You Try!

| 4. $48 \div 3$ | 5. $49 \div 3$ |
| :--- | :--- | :--- |


| $8.66 \div 5$ | $9.79 \div 3$ |
| :--- | :--- |
|  |  |

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 ?

Ninety-seven lunch trays were placed equally in 4 stacks. How many lunch trays were in each stack? How many lunch trays will be left over?

## EXIT TICKET

Name: $\qquad$
BCCSG

Date: $\qquad$ William Smith / Spelman

Learning Target: I can solve division problems with remainders using multiple strategies.
Standards: 4NBT. 6

Directions: Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

| 4. $42 \div 3$ | $5.43 \div 3$ |
| :--- | :--- |
|  |  |
|  |  |
| $52 \div 4$ | $7.54 \div 4$ |

## Tuesday

Date: January 5

Learning Target: Find factor pairs for numbers to 100, and use understanding of factors to define prime and composite.
Standards: 4.NBT. 5 4NBT. 6 4.OA. 4

## Do Now:

Solve for the missing factor in each equation.

$$
\begin{aligned}
& 3 \times \ldots=9 \\
& 4 \times \ldots=16 \\
& 5 \times \ldots=45 \\
& 6 \times \ldots=42 \\
& 7 \times \ldots=56 \\
& 9 \times \ldots=72 \\
& 6 \times \ldots=54 \\
& 7 \times \ldots=63 \\
& 9 \times \ldots
\end{aligned}
$$



Factor:
Product:
Prime:
Composite:


## Let's Work Together!

## $\Sigma$

1. 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. | 8 <br> $1 \times 4=8 \quad 2 \times 4=8$ | The factors of 8 are: <br> $1,2,4,8$ | C |
| b. | 10 | The factors of 10 are: |  |
| c. | 11 | The factors of 11 are: |  |
| d. | 14 | The factors of 14 are: |  |
| e. | 17 | The factors of 17 are: |  |
| f. | 20 | The factors of 20 are: |  |
| g. | 22 | The factors of 22 are: |  |
| h. | 23 | The factors of 23 are: |  |
| f. | 25 | The factors of 25 are: |  |
| k. | 27 | 28 | The factors of 27 are: |
| l. |  |  |  |
| The factors of 26 are: 28 are: |  |  |  |

## You Try!

1. 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. | $\begin{aligned} & 4 \\ & 1 \times 4=4 \quad 2 \times 2=4 \end{aligned}$ | The factors of 4 are: $1,2,4$ | 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: |  |
| 1. | 24 | The factors of 24 are: |  |

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 |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

3. Bryan says all prime numbers are odd numbers.
a. List all of the prime numbers less than 20 in numerical order.
b. Use your list to show that Bryan's claim is false.
4. 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.

## EXIT TICKET

Name: $\qquad$
BCCSG

## Date:

$\qquad$
William Smith / Spelman

Learning Target: Find factor pairs for numbers to 100 , and use understanding of factors to define prime and composite. Standards: 4.NBT.5 4.NBT. 6 4.OA. 4

Directions: Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

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).

|  | $\begin{array}{c}\text { Multiplication Sentences }\end{array}$ |  | $\begin{array}{c}\text { Prime (P) } \\ \text { or }\end{array}$ |
| :--- | :--- | :--- | :--- |
| Composite (C) |  |  |  |$]$

# Wednesday 

Date: January 6

Learning Target:Use division and the associative property to test for factors and observe patterns.
Standards: 4.NBT.5 4.OA. 4

Do Now:

## Which list shows all the factors of 36 ?

A

$$
1,2,3,4,9,12,18,36
$$

B
$0,1,2,3,4,9,12,18,36$
C $1,2,3,4,6,9,12,18,36$
D $0,1,2,3,4,6,9,12,18,36$

## Concept Development

Use the associative property to find more factors of 12 and 30.
a. $12=6 \times 2$
b. $30=$ $\qquad$ $\times \quad 5$
$=(\ldots \times 2) \times 2$
$=\ldots(2 \times 2)$
$=$ $\qquad$ $\times$
$\qquad$
$=1$ $\qquad$ $\times 3) \times 5$
$=$ $\qquad$

$$
\times(3 \times 5)
$$

$=$ $\qquad$ $\times 15$
$\qquad$

## Note Catcher:

## I wonder?

## I notice:

## Let's Work Together!



1. 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 $60 ?$ |
| e. Is 6 a factor of 72 ? |  |

## You Try!

1. Explain your thinking or use division to answer the following.

| a. Is 2 a factor of 84 ? | b. Is 2 a factor of 83 ? |
| :--- | :--- |
| c. Is 3 a factor of 84 ? | d. Is 2 a factor of 92 ? |
| e. Is 6 a factor of 84 ? |  |

2. Use the associative property to find more factors of 24 and 36 .
a. $24=12 \times 2$
$\qquad$ $\times 3$
3) $\times 2$
$=$ $\qquad$ $\times(3 \times 2)$
$=$ $\qquad$ $\times 6$
$=$ $\qquad$
b. $36=$ $\qquad$ $\times \quad 4$
$=1$ $\qquad$ $\times 3) \times 4$
$=\quad \times(3 \times 4)$
$=$ $\qquad$ $\times 12$
$=$ $\qquad$
3. In class, we used the associative property to show that when 6 is a factor, then 2 and 3 are factors, because $6=2 \times 3$. Use the fact that $8=4 \times 2$ to show that 2 and 4 are factors of 56,72 , and 80 .
$56=8 \times 7$
$72=8 \times 9$
$80=8 \times 10$
4. The first statement is false. The second statement is true. Explain why, using words, pictures, or numbers.

If a number has 2 and 4 as factors, then it has 8 as a factor.
If a number has 8 as a factor, then both 2 and 4 are factors.

## EXIT TICKET

Name:

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\begin{aligned}
& \text { Date: } \\
& \text { William Smith / Spelman }
\end{aligned}
$$

BCCSG

## Learning Target:Use division and the associative property to test for factors and observe patterns. <br> Standards: 4.NBT.5 4.OA. 4

Directions: Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

1. Explain your thinking or use division to answer the following.

| a. Is 2 a factor of 34 ? | b. Is 3 a factor of 34 ? |
| :--- | :--- |
| c. Is 4 a factor of 72 ? | d. Is 3 a factor of 72 ? |

2. Use the associative property to explain why the following statement is true. Any number that has 9 as a factor also has 3 as a factor.

## Thursday

Date: January 7

Learning Target: Determine if a whole number is a multiple of another number.
Standards: 4.0A. 1 4.0A. 4 4.0A. 5

## Do Now:

| Count by 2's to 20 | $2,4,6,8,10,12,14,16,18,20$ |
| :--- | :--- |
| Count by 3 's to 30 |  |
| Count by 4 's to 40 |  |
| Count by 5's to 50 |  |
| Count by 6's to 60 |  |

Determine if each number is prime or composite.

| 36 | 15 | 42 |
| :---: | :---: | :---: |
| 7 | 16 | 17 |

## Concept Development

| Count by 2's to 20 | $2,4,6,8,10,12,14,16,18,20$ |
| :--- | :--- |
| Count by 3's to 30 | $3,6,9,12,15,18,21,24,27,30$ |
| Count by 4's to 40 | $4,8,12,16,20,24,28,32,36,40$ |
| Count by 5's to 50 | $5,10,15,20,25,30,35,40,45,50$ |
| Count by 6's to 60 | $6,12,18,24,30,36,42,48,54,60$ |

## Note Catcher:

## Let's Work Together!



## Why is 24 a multiple of 4 ?

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 ? $\qquad$

## You Try!

1. 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 .
2. List the numbers that have 24 as a multiple.
3. Use mental math, division, or the associative property to solve. (Use scratch paper if you like.)
a. Is 12 a multiple of 4 ? $\qquad$ Is 4 a factor of 12 ? $\qquad$
b. Is 42 a multiple of 8 ? $\qquad$ Is 8 a factor of 42 ? $\qquad$
c. Is 84 a multiple of 6 ? $\qquad$ Is 6 a factor of 84 ? $\qquad$

Follow the directions below.

| 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 |

a. Circle in red the multiples of 2 . When a number is a multiple of 2 , what are the possible values for the ones digit?
b. Shade in green the multiples of 3 . Choose one. What do you notice about the sum of the digits? Choose another. What do you notice about the sum of the digits?
c. Circle in blue the multiples of 5 . When a number is a multiple of 5 , what are the possible values for the ones digit?
d. Draw an X over the multiples of 10. What digit do all multiples of 10 have in common?

## EXIT TICKET

Name:

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\begin{aligned}
& \text { Date: } \\
& \text { William Smith / Spelman }
\end{aligned}
$$

BCCSG

Learning Target: Determine if a whole number is a multiple of another number.
Standards: 4.0A. 1 4.0A. 4 4.0A. 5

Directions: Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

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

7, 14, $\qquad$ 28, $\qquad$ --$\longrightarrow$
3. a. List the numbers that have 18 as a multiple.
b. What are the factors of 18 ?
c. Are your two lists the same? Why or why not?

