

Name: \_\_\_\_\_ Mr. Hoffman classwork  
Factors, Prime, Composite notes organizer

\_\_\_\_\_ are numbers we multiply together to get another **number**, and are those positive whole numbers that divide evenly into that **number**.

Ex: the factors of 18 are {1, 2, 3, 6, 9, 18} Called the LIST METHOD in ascending order (low to high).

1 x 18   2 x 9   3 x 6   RAINBOW FACTORIZATION



In ascending order, ALWAYS START WITH 1 AND ITSELF and work inwards as pairs:

List the factors of 40 \_\_\_\_\_

List the factors of 72 \_\_\_\_\_  
(use your divisibility rules to help you)

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**What are all the factors of 17?** \_\_\_\_\_

**This kind of number is called a \_\_\_\_\_ number.**

\_\_\_\_\_ number: A whole number greater than 1 with only two factors; 1 and itself.

Examples: \_\_\_\_\_

***Think “PRivate conversation” only between two people.***

On the line below, list **all the prime numbers up to 25:**

\_\_\_\_\_

What is the SMALLEST prime number? \_\_\_\_\_

What is the ONLY EVEN prime number? \_\_\_\_\_

There is a name for a number that has THREE OR MORE factors:

A \_\_\_\_\_ number: A whole number greater than 1, with three or more factors.

Examples \_\_\_\_\_

*Think **COMP**any; when you have three or more people over your house!*

Write (P) if PRIME, (C ) if COMPOSITE, or (N) Neither

0 \_\_\_\_\_ 1 \_\_\_\_\_ 9 \_\_\_\_\_ 31 \_\_\_\_\_ 43 \_\_\_\_\_ 51 \_\_\_\_\_ 57 \_\_\_\_\_ 77 \_\_\_\_\_ 87 \_\_\_\_\_

| #   | List all the FACTORS (ascending order) | Prime (P) or Composite (C)<br>Neither (N) |
|-----|----------------------------------------|-------------------------------------------|
| *0  |                                        |                                           |
| *1  |                                        |                                           |
| *2  |                                        |                                           |
| 3   |                                        |                                           |
| 6   |                                        |                                           |
| 7   |                                        |                                           |
| 8   |                                        |                                           |
| 11  |                                        |                                           |
| 12  |                                        |                                           |
| 13  |                                        |                                           |
| 16  |                                        |                                           |
| 17  |                                        |                                           |
| 18  |                                        |                                           |
| 19  |                                        |                                           |
| 20  |                                        |                                           |
| 21  |                                        |                                           |
| 22  |                                        |                                           |
| 24  |                                        |                                           |
| 25  |                                        |                                           |
| *51 |                                        |                                           |
| *57 |                                        |                                           |
| *87 |                                        |                                           |

NAME: \_\_\_\_\_ Math Grade 6 Hoffman

Prime and Composite Numbers "P&C" HOMEWORK

If a number is prime; write the word "PRIME" on the line.

If a number is composite, list all its factors in ascending order (low to high).

\*Use your divisibility rules to help you!

\*SELF CHECK: there are **93** total factors on the page from the composite numbers.

A) 6 \_\_\_\_\_

B) 3 \_\_\_\_\_

C) 5 \_\_\_\_\_

D) 12 \_\_\_\_\_

E) 18 \_\_\_\_\_

F) 2 \_\_\_\_\_

G) 13 \_\_\_\_\_

H) 10 \_\_\_\_\_

I) 11 \_\_\_\_\_

J) 14 \_\_\_\_\_

K) 17 \_\_\_\_\_

L) 20 \_\_\_\_\_

M) 19 \_\_\_\_\_

N) 16 \_\_\_\_\_

O) 7 \_\_\_\_\_

P) 15 \_\_\_\_\_

Q) 8 \_\_\_\_\_

R) 21 \_\_\_\_\_

S) 23 \_\_\_\_\_

T) 27 \_\_\_\_\_

U) 29 \_\_\_\_\_

V) 26 \_\_\_\_\_

W) 24 \_\_\_\_\_

X) 31 \_\_\_\_\_

Y) 51 \_\_\_\_\_

Z) 52 \_\_\_\_\_

AA) 53 \_\_\_\_\_

BB) 56 \_\_\_\_\_

CC) 57 \_\_\_\_\_

DD) 59 \_\_\_\_\_

EE) 77 \_\_\_\_\_

FF) 87 \_\_\_\_\_

GG) 1 \_\_\_\_\_

HH) 0 \_\_\_\_\_

DID YOU COUNT ALL OF YOUR FACTORS ABOVE? circle YES or NO

Did you eventually FIND ALL 93 factors? circle YES or NO

\*Look for short Do Now Quizzes any day (divisibility rules, prime, composite, factors)