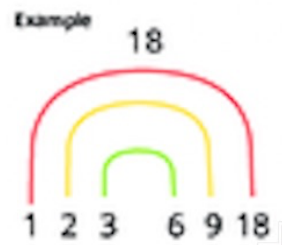


Name: _____ Mr. Hoffman classwork
Factors, Prime, Composite notes organizer

_____ 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)

~~~~~  
**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 and 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**

**II) Go to HOFFKIDS, Zone 4 Math LINKS, Do Math Potato M420. “Prime and Composite” While there you may want to do M405 again (Div drop down ) to prepare for tomorrow!!**

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