**Factors**

**Factors** are numbers that you can multiply together to get another number.

 Example:

 2 and 3 are factors of 6

…because 2 X 3 = 6 6 6

 (1)(6) same as 1 X 6

 (2)(3) 2 X 3

**The factors of 6 are: 1,2,3,6**

Real Life Examples:

Cupcake Pan 12 cupcakes total

If you share the cupcakes with a total of 2 people, each person could get\_\_\_\_\_\_cupcakes.

If you share the cupcakes with a total of 4 people, each person could get\_\_\_\_\_\_cupcakes.

If you share the cupcakes with a total of 3 people, each person could get\_\_\_\_\_\_cupcakes.

If you did not share any cupcakes, you – 1 person- would get \_\_\_\_\_\_cupcakes.

Other real life examples:

PRIME & COMPOSITE numbers

**PRIME Numbers**: A number with exactly two different factors, one and itself.

3 is **prime** because the only two whole numbers that can be multiplied to get a product of 3 , they are 1 and 3.

1X3=3

Other Examples of **Prime Numbers**: 2, 3, 5, 7, \_\_\_\_, \_\_\_\_,

2: 1 X 2, 5: 1 X 5 7: 1 X 7 \_\_\_\_\_: 1 X \_\_\_\_

8 is not prime because 1 X 8 and 2 X 4 both =8

 8 is COMPOSITE

**COMPOSITE numbers**: A whole number with more than two factors.

Example: 12 is composite because, 12 12

(1)(12) same as 1 X 12

(2)(6) 2 X 6

(3)(4) same as 3 X 4

 The factors of 12 are 1, 2, 3, 4, 6, & 12 (a COMPOSITE number because

12 is a COMPOSITE number because\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Find other COMPOSITE numbers by finding the factor pairs.