Unit: Fraction Operations
Student Handout 1

Name _____

Date _____Pd_____

FACTORS AND MULTIPLES

FACTORS

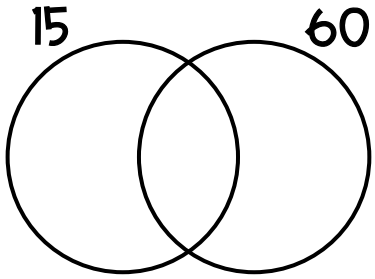
- A number is _____ of other numbers, called factors.
- For example, $2 \cdot 3 = 6$
  - _____ and _____ are factors of _____
- When a set of numbers has the same factor, it is called a _____ factor. The _____ is the largest factor that a set of numbers has in common.

There are several methods to help find the greatest common factor.

VENN DIAGRAMS

Determine the factors of 15 and 60 using a factor tree. Then, organize the prime factors into the Venn diagram below.

15 60



LADDER METHOD

Use the ladder method to divide out the common prime factors. Then, determine the GCF.

20	16

24	40

Use your understanding of greatest common factor to answer the questions below.

1. Find the GCF of 24 and 6.	2. Find the GCF of 18, 24, and 60.

MULTIPLES

- A multiple of a number is the_____ of multiplying that number by another number.

Ex: the first five multiples of 7 are _____

- The least common multiple is the _____ common multiple a set of numbers has in common.

List out the first ten multiples of each number. Then, determine the least common multiple.

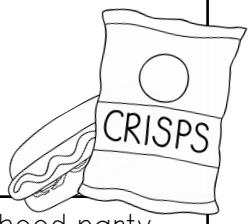
3.	4.
4 and 9	3 and 7
4: _____	3: _____
9: _____	7: _____
LCM: _____	LCM: _____

Apply your understanding of factors and multiples to answer the questions below.

5. Amari and Ethan planned an end-of-season soccer party. They purchased 45 hot dogs and 30 individual bags of chips.

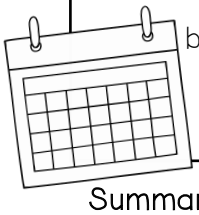
a. If each person will receive the same amount of food, what is the greatest number of people that they can feed without having any leftovers?

b. What will each person receive?



6. The Vasquez family visits their grandmother every 3 weeks and hosts a neighborhood party every 8 weeks. Every 16th week, the Vasquez family takes a day to go hiking.

a. After how many weeks will the Vasquez family both visit their grandmother and host the neighborhood party?



b. After how many weeks will all three events occur?

Summarize today's lesson: