

Prime and Composite Numbers

Vocabulary

- **Factor** – a number that can be divided into a larger number.
 - For example, 2 is a factor of every even number. The number 1 is a factor of all numbers.
- **Prime Number** – a number that has **two** factors, 1 and **itself**.
- **Composite Number** – a number that has **more** than two factors.

Prime Numbers

- The number 1 is neither prime nor composite.
 - Why?
- Name the first 6 prime numbers.
2,3,5,7,11,13

Prime and Composite Numbers

- Identify the number as prime or composite.

24

17

19

51

99

30

Factors

- Name the factors of the number:

99

18

7

42

39

57

Greatest Common Factor

- **Greatest Common Factor (GCF)** – The GCF of two or more numbers is the largest factor that each of the numbers has.

Greatest Common Factor

- For example:

Find the GCF of 42 and 36

List the factors of each number:

42-1, 2, 3, 6, 7, 14, 42

36-1, 2, 3, 4, 6, 9, 12, 18, 36

- Circle the common factors
- Pick the largest number circled.
- So, the GCF of 42 and 36 is 6.

Try

- Find the GCF of 14 and 28.
- Find the GCF of 8 and 10.
- Find the GCF of 17 and 19.

Greatest Common Factor

- Another method for doing this uses **factor trees**.

Try

- Find the GCF of 9 and 12.
- Find the GCF of 55 and 99.
- Find the GCF of 68 and 28.

How is this used?

- Your favorite thing--- Fractions
 - Its used for reducing.