A **multiple** of a number is the product of that number and any other *whole* number. *This means that every number is a __multiple__ of __each__ of its factors.*

Examples:

18 is a multiple of 3 because 6 x 3 = 18.

18 is also a multiple of 1, 2, 6, 9 and 18 because each of these numbers is a factor of 18.

18 is a multiple of 3. But it is not the only multiple of 3. The numbers 0, 3, 6, 9, 12, and 15 are also multiples of 3. *WHY?*

Every number has an infinite number of multiples.

For example, the multiples of 4 are: 0, 4, 8, 12, 16, 20 . . . (The list goes on and on.)

1. What are the first six multiples of 5?

2. What are the first six multiples of 8?

3. What number is a multiple of every number? _____

4. Circle the numbers below which are multiples of __both__ 6 and 9.

    0   9   12   18   24   27   36   42   45

5. What is the smallest multiple (other than zero) of both 3 and 9?

6. What is the smallest multiple (other than zero) of both 4 and 6?

7. List all the *factors* of 9:

List the first six multiples of 9:

8. List all the factors of 6:

List the first six multiples of 6:

9. What is the smallest multiple (other than zero) of both 6 and 9?

10. What is the smallest multiple (other than zero) of *both* 9 and 12?

11. What is the greatest common factor (largest factor of *both*) 9 and 12?

12. Which of the following is a multiple of 12?

28   35   49   65   72