Name_____

Introduction to Factors

__Factors__ are numbers you can multiply together to get another number.
Knowing factors helps when dividing things equally or working with fractions.

Let's use the number 12 as an example!

1. **Start with 1.** 1 is a factor of every number because 1 multiplied by the number itself equals the number. So, 1 and 12 are factors of 12.

2. **Check 2.** 2 is a factor if you can divide the number by 2 without leaving a remainder. 12 ÷ 2 = 6, so 2 and 6 are factors of 12.

3. **Check 3** 12 ÷ 3 = 4, so 3 and 4 are factors of 12.

4. **Keep going.** For this example, you don't need to check more numbers because we've already covered all possible pairs.

Conclusion: *The factors of 12 are: 1, 2, 3, 4, 6, and 12 since all these numbers can be multiplied by one another to get the product 12.*

Directions: Find all the factors of each number. List them in order from least to greatest.

1. 10

2. 18

3. 22

4. 32

5. 42

Introduction to Factors

Factors are numbers you can multiply together to get another number. Knowing factors helps with math problem, like dividing things equally or working with fractions. Plus, it's like solving a number puzzle!

Example: *Let's take the number 12.*

1. **Start with 1.**

1 is a factor of every number because 1 multiplied by the number itself equals the number. So, 1 and 12 are factors of 12.

2. Check 2

2 is a factor if you can divide the number by 2 without leaving a remainder. 12 ÷ 2 = 6, so 2 and 6 are factors of 12.

3. Check 3

12 ÷ 3 = 4, so 3 and 4 are factors of 12.

4. Keep going.

For this example, you don't need to check more numbers because we've already covered all possible pairs.

Conclusion: The factors of 12 are: 1, 2, 3, 4, 6, and 12

Directions: Find all the factors of each number. List them in order from least to greatest.

1. 10

1	2	5	10		

2. 18

1	2	3	6	9	18

3. 22

1	2	11	22		

4. 32

1	2	4	8	16	32

5. 42

1	2	3	6	7	14	21	42