## Chapter 4 Math Vocab

## Multiplication Properties:

Associative Property of Multiplication- The property that states that the grouping of the factors does not change the product.

Example: $3 \times(6 \times 2)=(3 \times 6) \times 2$
Commutative Property of Multiplication - The property that states that the order in which two numbers are multiplied does not change the product.

Example: $7 \times 2=2 \times 7$
Distributive Property of Multiplication - To multiply a sum by a number, you can multiply each addend by the same number and add the products.

Example: $4 \times(1+3)=(4 \times 1)+(4 \times 3)=16$
Identity Property of Multiplication - When any number is multiplied by 1, the product is that number

Example: $7 \times 1=7$
Zero Property of Multiplication - When any number is multiplied by 0, the product is zero
Example: $45 \times 0=45$

## Division Rules:

Zeroes in Division - When you divide a 0 by any number other than 0 , the quotient is 0 . It is not possible to divide by 0 .

Example: $0 \div 3=0$

## Ones in Division -

1. When you divide any number by 1 , the quotient is always the dividend.

Example: $3 \div 1=3$
2. When you divide a number by itself, the quotient is always 1.

Example: $5 \div 5=1$
Fact Family- a group of related facts using the same numbers.
Example: $5 \times 3=15,3 \times 5=15,15 \div 5=3,15 \div 3=5$
Factor - a number that divides into a whole number evenly. Also a number that is multiplied by another number.

Example: 1, 2, 3, and 6 are all factors of 6
Multiple - a multiple of a number is the product of that number and any whole number.
Example: 15 is a multiple of 5 because $3 \times 5=15$
Product - the answer to a multiplication problem
Quotient - the answer to a division problem

