

Name: \_\_\_\_\_

Date: Aug 19

Hour: 7<sup>th</sup>

### Unit 1 Day 1: Terms

Focus Question: What are the parts of a mathematical term?

#### A. Simplify

1. What are two other ways to write  $5 + 5 + 5 + 5 + 5 + 5$  <sup>30</sup>

$5 \cdot 6$      $15 + 15$      $10 + 10 + 10$      $5 \cdot 5 + 5$

2. What are two other ways to write  $5 \cdot 5 \cdot 5 \cdot 5$

$5 + 25$   
 $25 \cdot 25$      $25^2$   
exponent  $\rightarrow 4$   
base  $\rightarrow 5$

3. Simplify means Write in fewer symbols

4. Simplify each of the following

a.  $2 \cdot 8$

b.  $7 \cdot 7$

c.  $3 \cdot 3 \cdot 3 \cdot 3$

d.  $4 \cdot 5 \cdot 5 \cdot 5$  <sup>20.25</sup>

$16$

$7^2$  or  $49$

$9^2$  or  $81$  or  $3^4$

$4 \cdot 5^3$

5. To make sure you really know what you are doing, math introduced variables (letters) into problems...Simplify each of the following:

a.  $a \cdot b$

b.  $h \cdot h$

c.  $m \cdot m \cdot m \cdot m$

d.  $4 \cdot x \cdot x \cdot x$

$ab$

$h^2$

$m^4$

$4x^3$

#### B. Vocabulary of Terms:

1. When a number is written out in a longer way that shows its factors, it is called **expanded form**.

When it has been simplified, it is called a **term**. Terms are made up of two parts, a number part and a letter part.

The number part of a term is called the coefficient.

The letter part of the term is called the variable part. **It is made up of the variable and the exponent.**

⚡ If a term has only a coefficient, and no variable part, it can also be called a constant.

⚡ If a term appears to have only a variable part, the coefficient is secretly a one.

A variable part can be more than 1 letter. (you do this in algebra 1)

The IMPLIED operation between a coefficient and variable is multiplication.

2. Fill in the table together to work on the vocabulary of terms

Term	$4x^3$	$-5a^2$	$y$	$-10$
Coefficient	$4$	$-5$	$1$	$-10$
Variable part	$x^3$	$a^2$	$y$	
Can also be called...				constant
Expanded...	$4 \cdot x \cdot x \cdot x$	$-5 \cdot a \cdot a$	$1 \cdot y$	$-5 \cdot 2$

Side Note:

Repeated Addition is known as

Multiplication

Repeated Multiplication is known as

Exponents

base

$8$   
 $1 \cdot n^3$



### 3. Partner Practice (Rally Coach)

Partner that Writes and Explains	A	B
Term	$2x^4$	$-3m^2$
Coefficient	2	-3
Variable Part	$x^4$	$m^2$
Expanded	$2 \cdot x \cdot x \cdot x \cdot x$	$-3 \cdot m \cdot m$
Can or cannot be called a constant because...	No b/c there is a variable	No b/c of the variable

Partner that Writes and Explains	A	B
Term	$-g^3$	8
Coefficient	-1	8
Variable Part	$g^3$	none
Expanded	$-1 \cdot g \cdot g \cdot g$	2.4
Can or cannot be called a constant because...	No b/c of the variable	Yes b/c no variable

### 4. Individual Practice

Term	$6w^4$	-5	$-2m$	$3x^2$
Coefficient	6	-5	-2	3
Variable Part	$w^4$	none	$m$	$x^2$
Expanded	$6 \cdot w \cdot w \cdot w \cdot w$	-1.5	$-2 \cdot m$	$3 \cdot x \cdot x$
Can or cannot be called a constant because...	Not b/c of variable	Can b/c no variable	Not b/c of variable	Not b/c of variable