Variables and Expressions Class Work

✍ **You will be able to…** identify components of expressions and write algebraic expressions or equations to model situations

★ **Do Now:** What comes to mind when you hear the word "variable?"

❧ Components of Expressions

✫ Variable: ✫ Coefficient: ✫ Constant:

✎ **Practice:** Identify the variables, constants, and coefficients in each expression. Then state how many terms are in each expression.

1. $3x + 4 - 8y$

Variable(s): _____

Constant(s): _____

Coefficients(s): _____

How many terms? _____

2. $2d - 3b + d - 9$

Variable(s): _____

Constant(s): _____

Coefficients(s): _____

How many terms? _____

3. $5f^2 + 3g^2 - h^3 + 8$

Variable(s): _____

Constant(s): _____

Coefficients(s): _____

How many terms? _____

❧ Writing Expressions/Equations to Model Situations

★ Always decide on your variable(s) first.

★ Then, determine which symbol(s) the phrase indicates, and write your expression/equation. ☺

Addition	Subtraction	Multiplication	Division	Equality

✎ **Practice:** Write an expression or equation to represent each situation.

1. 9 more than a number

2. Eight less than a number

3. Seven less than twice a number

4. The product of a number and -2

5. the quotient of a number and 13

6. The difference of 18 and a number

7. The sum of triple a number and 4

8. 25% of a number

9. Mark has $3 less than Jane.

10. The number of slices left from an 8-slice pizza after you have eaten some.

11. Jason has one-third the amount of songs on his iPod as Jose does

12. The amount of money in a bag with a certain amount of quarters only in it

13. The amount of money in a bag with some quarters and some dimes in it

14. Two less than the product of a number and 7

15. the perimeter of a square

16. Ken invited five people less than twice the amount Kara did to a party.

✹ **CLOSER:**

Choose any **C**oncept you **L**earned today:

State **O**ne **S**pecific **E**xample:

How is this concept **R**elevant to you, or how do you think it will be useful in the future?: