Core Content

Cluster Title: Interpret the structure of expressions.

Standard A.SSE.1: Interpret expressions that represent a quantity in terms of its context.
    a. Interpret parts of an expression, such as terms, factors, and coefficients.
    b. Interpret complicated expressions by viewing one or more of their parts as a single entity. *For example, interpret P (1+r)^n as the product of P and a factor not depending on P.*

Concepts and Skills to Master
• Given an expression identify the terms, bases, exponents, coefficients, and factors. • Determine the real world context of the variables in an expression. • Identify the individual factors of a given term within an expression. • Explain the context of different parts of a formula.

Supports for Teachers

Critical Background Knowledge	
• Understand the meaning of symbols indicating mathematical operations, implied operations (e.g.2x), the meaning of exponents, and grouping symbols.	
Academic Vocabulary	
Exponents, factors, terms, bases, coefficients, expression	
Suggested Instructional Strategies	**Resources**
• Given a word problem and a formula have students examine the structure and explain the context of different parts of the formula. • Design a game around identifying terms, bases, exponents, coefficients, and factors. • Create formulas based on context.	
Sample Formative Assessment Tasks	
Skill-based Task Consider the formula Surface Area=2B+Ph • What are the terms of this formula? • What are the coefficients?	**Problem Task** Interpret the expression: $5 - 3(x - y)^2$. Explain the output values possible.

I.1.Algebra. Seeing Structure in Expressions