The Unit Organizer

Date: 1/18/19

(4) BIGGER PICTURE

Name: Spencer, Von Ehren, Swangren, Bordelon, Romero

When students have an unknown number, they will be able to use expressions, equations, or inequalities to solve for the variable.

(2) LAST UNIT /Experience
Representing Numerical Data

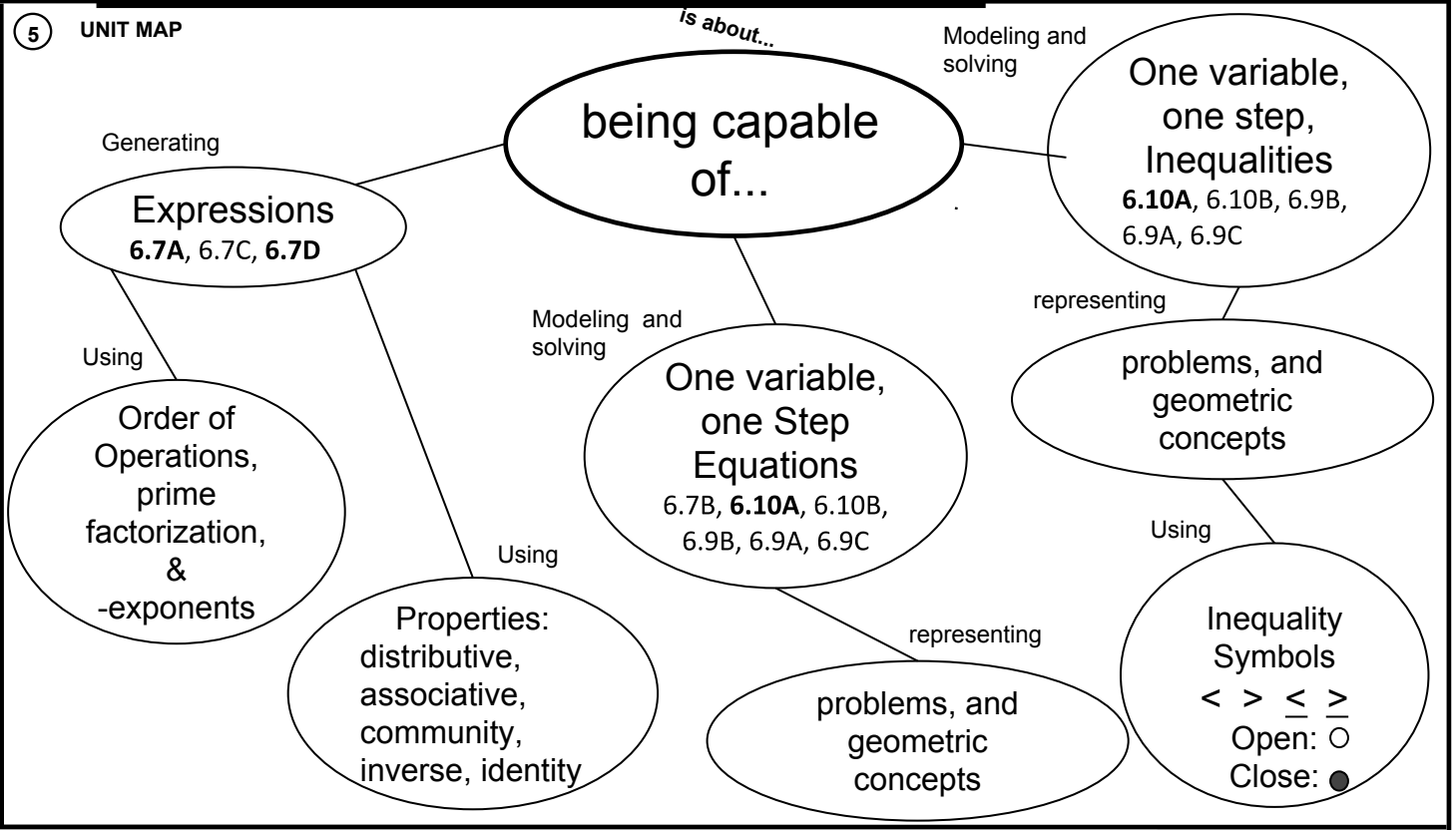
(1) CURRENT UNIT
Expressions, Equations, & Inequalities

(3) NEXT UNIT /Experience
Multiple Representations

(8) UNIT SCHEDULE

1/18 Intro to Unit 6
1/22-23 GEMDAS
1/24 - 1/25 Prime Factorization
1/28 - 2/1 Algebraic Expressions
2/4 - 2/8 Equations
2/11 - 2/13 Inequalities
2/14 Review
2/15 Common Assessment (Test)

(5) UNIT MAP



Vital Vocabulary

Expression vs. Equation

expression	equation
does not have an equal sign (only + or -)	has an equal sign separating two expressions

Inequality symbols: > ≥ < ≤

Equality vs. Inequality

two quantities have the same value	two quantities have different values
symbol: =	symbols: < > ≤ ≥ ≠
examples: 3 + 4 = 7, x − 3 = 5	examples: x + 3 < 10, 4x ≥ 18

Variable

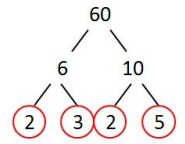
$1 + x = 3$ (x: variable)

Order of Operations
GEMDAS

Exponents

$4^3 = 4 \cdot 4 \cdot 4$ (3: exponent; 3 times)

Prime Factorization



Either way, the result is:
2 x 2 x 3 x 5 or 2^2 x 3 x 5

- Generate
- Model
- Solve
- Represent

(6) Unit Relationships

Expanded Unit Map

The Unit Organizer

Expressions, Equations, Inequalities

is about...

being capable of...

Generate

Expressions
6.7A, 6.7C, **6.7D**

Model and solve

One variable, one step, Inequalities
6.10A, 6.10B, 6.9B, 6.9A, 6.9C

Write as an inequality, solve and place on the number line:

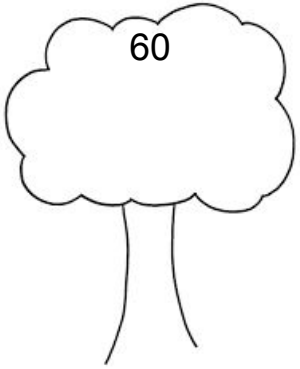
Sri, who is not yet 10 years old, is two years older than Lily

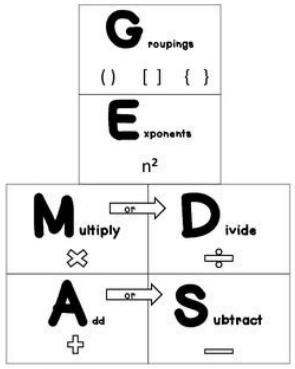
Model and solve

One variable, one Step Equations
6.7B, **6.10A**, 6.10B, 6.9B, 6.9A, 6.9C

Write as an equation and solve:

How many packages of diapers can you buy with $40 if one package costs $8?





$15-4^2 \div -2+8$

Standard Form:

Expanded Form:

NEW UNIT SELF-TEST QUESTIONS

- Why is equivalence an important part of solving problems?
- How is solving equations related to Order of Operations?
- How can an equation or inequality be used to represent a given situation?
- How is solving an inequality similar to solving an equation?