## Expressions and Equations

## Grade Seven Expressions and Equations HLC

Operate with signed numbers and create equivalent expressions.
September $\longrightarrow$ Grade Seven (EE) Learning Progressions $\longrightarrow$ June

Students must use visual representations to build understanding along this learning progression. Algebra tiles are strongly recommended since students use tiles to model in elementary through high school mathematics. $\quad{ }^{* * B e}$ VERY cautious of introducing algorithms before conceptual understanding is SOLID**

Critical Strategies: Zero pairs are useful tools when working with signed numbers.

## Understanding Integers

Possible contexts: temperature, money/debt, elevation

## Models:

- Number line
(horizontal + vertical)
- 2 sided chips/Algebra tiles


## Students should:

- Compare integers by thinking about their distance from zero and using $>,<,=$
- Use zero pairs


1 zero pair $1+-1=0$


2 zero pairs
$2+-2=0$

## Build and Create Equivalent Expressions

Possible contexts: temperature, money/debt, elevation, area, perimeter, emotions scale


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## Grade Seven HLC Learning Progressions - DRAFT

(Expressions and Equations)


