

# **UNIT PLANNING TEMPLATE**

Grade/Course: 7th/Math

Unit: Operations and Algebraic Thinking:

Expressions/Equations

## **Desired Outcomes**

#### Transfer

Missional Outcomes (7Cs)/Disciplinary Practices: What kinds of long-term, independent accomplishments are desired?

- Use experience, knowledge, reason, and belief to form carefully considered judgments and solve problems (7Cs.4)
- Make sense of problems and persevere in solving them (M1)

### Meaning

**Big Ideas:** What specifically do you want students to understand?

 The consistency of mathematical order of operations and principles demonstrates the orderliness and precision of God's creation and universe. Essential Questions: What thought-provoking questions will foster inquiry, meaning making, and transfer?

 What do mathematical principles reveal about God's ordered universe?

#### Acquisition

Standards: What facts, concepts, and skills/processes should students know and be able to do?

- Use properties of operations to generate equivalent expressions (7.EE.1,2)
- Solve real-world and mathematical problems using numerical and algebraic expressions and equations (7.EE.3,4)

Student-friendly Learning Targets (I Can Statements):

- I can rewrite expressions in different forms in a problem context.
- I can solve problems using positive and negative rational numbers in any form.

#### **Essential Vocabulary:**

- Add, coefficient, equivalent, expand, expression, factor, linear, operation, order of operations, property, quantity, rational, relate, strategy, subtract
- Algebraic, arithmetic, estimation, decimal, equation, fraction, graph, inequality, integer, mathematical, mental computation, negative, operation, percent, positive, rational number, real life, reasonable, solution set, strategy, variable, whole number, word problem

## Assessment Evidence

Assessments: What evidence will you collect to determine whether Stage 1 goals were achieved—transfer, meaning, acquisition?

- Performance Tasks—pp. 41-44 in text
- Supplementary Evidence conferences, discussions, exercises with short or extended answers, observations, self-assessments,

Success Criteria: What criteria will be used to evaluate attainment of the desired outcomes?

- Performance Task Rubrics
- Teacher-created Rubrics and Checklists
- Chapter Review Answer Keys
- P-scales for Standards



# learning logs, pre-assessments, quizzes and tests

# Learning Plan

Teaching/Learning Experiences: What teaching and learning experiences will be used to help students achieve Stage 1 goals—transfer, meaning, acquisition?

- Direct Instruction/Modeling
- Guided Practice
- Independent Practice
- Performance Tasks

**Resources:** What resources will be used to achieve Stage 1 goals—transfer, meaning, acquisition?

- Big Ideas, Grade 7
  - 0 3.1, 3.2, 3.3, 3.4, 6.4, 6.5, 6.6, 9.2
  - 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 7.4
- Learn Zillion
- xtraMath