***Algebra Unit 1A*: Solving Linear Equations and Inequalities**
(Linear Equations)

Common Core State Standards:

A.SSE.1 Interpret expressions that represent a quantity in terms of its context. (Claim 1,2)
A.CED.1 Create equations and inequalities in one variable and use them to solve problems. (Claim 1,2,4)
A.REI.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. (Claim 1,3,4)
A.REI.3 Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. (Claim 1,2,4)

***Timeline**: 20 days*

***Textbook Lessons:** 2.1, 2.2, 2.3, 2.4*

***Vocabulary**:*

coefficient	*denominator*	*difference*	*distribute*
equation	*equivalent*	*expression(s)*	*distributive property*
numerator	*solution*	*term(s)*	*like terms*

Student Talk:

I _____ (agree/ respectfully disagree) because…

I understand _____ and my point of confusion is...

On this step I _____ because…

On both sides of the equation, I…
(encourage student talk about relationship b/t operations)

Common Core Tasks:

Climb the Ladder – Statistics (Susie's Company)
Task – Inequalities

Engagement Strategies

http://ccssmathactivities.com/engaging-activities/

Warm-Ups to include word problems of all DOK levels

Talk about poster with key parts to pay attention to throughout the unit to clearly communicate to students

Sequential Learning Targets:

1. I can write and solve one-step equations for a single variable by adding or subtracting (using algebra tiles) – *1 day*
   This means I can…
   i. *apply the additive identity property*
   ii. *model an equation symbolically or with algebra tiles (ensure we use to create visual for students)*
   iii. *write an equation to represent a given scenario*
   - One-Step Equations (kuta worksheet)
   - **IAB Exit Slip**
   - Holt Lesson 2.1

2. I can write and solve one-step equations for a single variable by multiplying or dividing (using algebra tiles) – *1 day*
   This means I can…
   i. *apply the multiplicative identity property*
   ii. *model an equation symbolically or with algebra tiles (ensure we use to create visual for students)*
   iii. *write an equation to represent a given scenario*
   - Climb the Ladder – Solving Equations Grade 6
   - Holt Lesson 2.2

Quiz on Targets 1 & 2 **add word problems on quiz**

Tasks – Solving Equations – Picking Apples

3. I can write and solve two-step equations for a single variable using multiple inverse operations and explain why it works – 8 *days*
   This means I can....
   i. *combine like terms (4 day)*
   ii. *use the distributive property (4 days)*
   iii. *write an equation to represent a given scenario*
   - Two-Step Equations (kuta worksheet)
   - One and Two-Step Story Problems
   - IAB Exit Slip
   - Holt Lesson 2.3

Quiz on Target 3

4. I can write and solve equations with a single variable on both sides of the equation – *2 days*
   This means I can...
   i. *apply addition identity property*
   ii. *apply multiplicative identity property*

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iii. *combine like terms*
iv. *use the distributive property*
v. *model an equation symbolically or with algebra tiles*
vi. *write an equation to represent a given scenario*

- Combining Like Terms Expressions (kuta wksht)
- Solving Linear Equations by Combining Like Terms (kuta wksht)
- Two Step and Combining Like Terms wksht
- Combining Like Terms Story Problems
- Linear Equations with Distributive Property
- Distributive Story Problems
- Climb the Ladder x2 – Solving Equations
- Holt Lesson 2.3 & 2.4

Quiz on Targets 4
Optional quiz: **Ready to Go On Holt pg 119 1-20**
Assessment on Solving linear equations 1A **(add more word problems to assessment)**

Add word problem under BASIC
#9 add three different ways and have students identify which is correct and locate error in the other solutions

Maybe keep #9 as is and add another question with multiple solutions

#10 does not belong in mastery section

Intervention:

- Integer Operations (Prerequisite) - Integer Bingo
- Combining Like Terms (Prerequisite) Q-cards
- Modeling strategies (pictures, algebra tiles, symbolic) Q-Cards
- Inverse operations
- Multiple representations of operations
- Reading equations using correct vocabulary

Extension:

- No solution and infinitely many solutions

TACA Data:
Unit 1A TACA Data 2014-15
Unit 1A TACA Data 2015-16
Unit 1A TACA Data 2016-17
Unit 1A TACA Data 2017-18

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