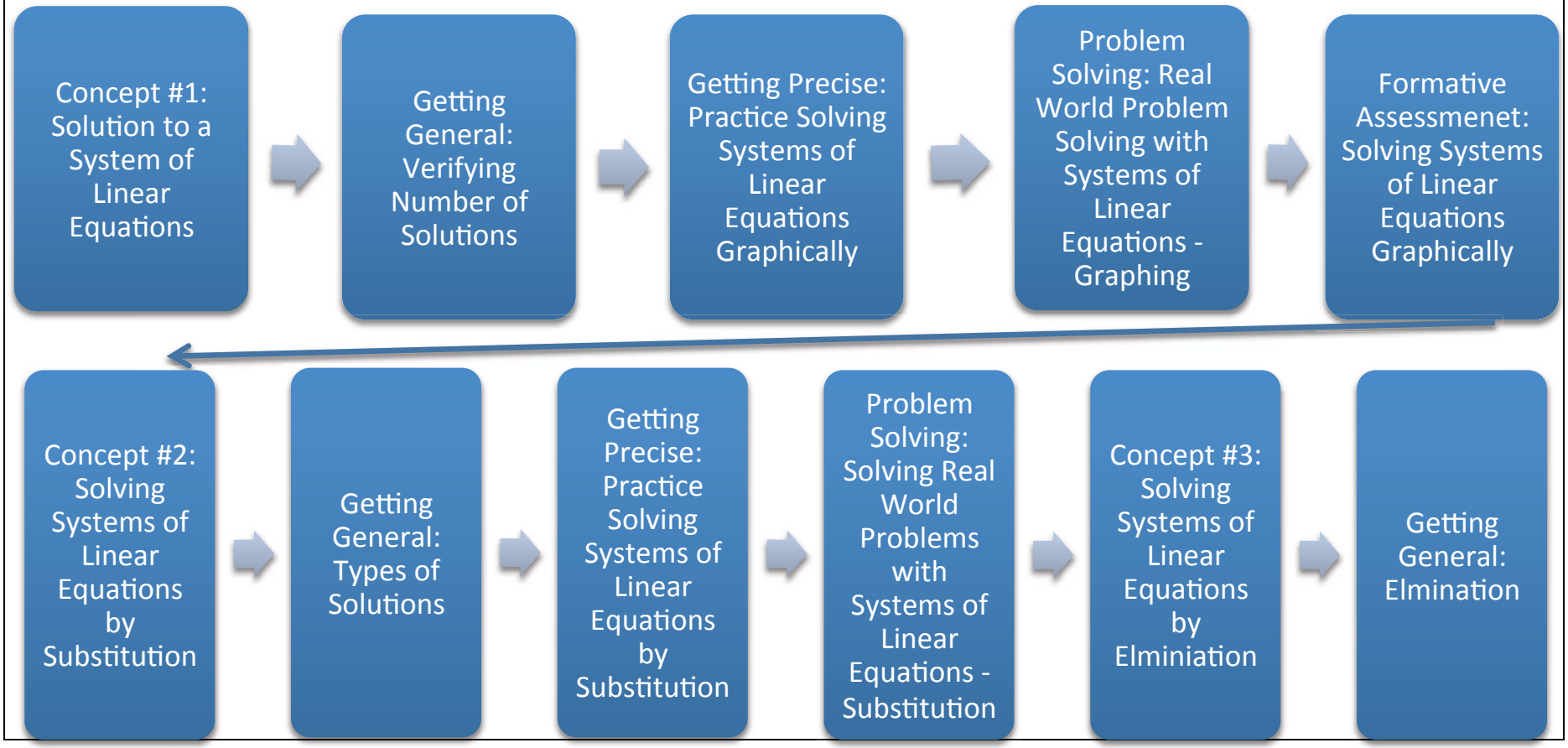
Common Core Math Unit Plan

Unit Name:	Systems of Linear Equations	**Course:** CC Math 2	**Time Frame:** 4 Weeks (Approximately)
Sub-Topics	Determining Types of Solutions in Systems of Linear Equations (One, Consistent, Inconsistent) Writing Equations from Words & Solve Real-World and Mathematical Problems in Two Variables Solving Systems of Equations by Graphing, Elimination, & Substitution		
Big Idea	• Systems of linear equations can be written to model problems involving rates, or constant growth and solved to offer suggestions as to which option would be the best in certain scenarios.		

Story Board/ Unit Flow



Rationale: The progression of students solving equations began developing as early as kindergarten, where students informally solved problems such as + 3 = 4 and continued through grade seven, where students formalized their conceptual understanding of what a variable means and increased procedural fluency in solving single-variable equations. The progression of "solving" will culminate in grade eight as students learn to write, analyze and solve one-variable and pairs of simultaneous linear equations in order to solve real-world mathematical problems algebraically and graphically.

Essential Questions:

- What is a solution to a pair of simultaneous linear equations?
- How can I use the structure of an equation(s) to determine the number and/or type(s) of solution(s)?
- How is solving a pair of simultaneous equations similar or different from solving a linear equation?
- Can an equation, or a system of linear equations model this real-life scenario?
- Which method of solving works best in each situation?

Key Vocabulary	**Prior Knowledge**
Solve Isolate Transform Manipulate Verify Equation Expression Distributive Property Constant Variable Coefficient Evaluate Intersect Solution Eliminate Substitute Graph Function Rate of Change Like Terms Inconsistent Solution Coincident	Solve Multi-step Equations (including combining like terms, distributive property and variables on both sides) Graphing Linear Equations Substitution Distributive Property