

Richmond Public Schools
Department of Curriculum and Instruction
Curriculum Pacing and Resource Guide – Unit Plan



Course Title/ Course #: Math Grade 7

Unit Title/ Marking Period # (MP): 2

Start day:

Meetings (Length of Unit): 7 days

<i>Desired Results ~ What will students be learning?</i>
<u>Standards of Learning/ Standards</u>
SOL 7.14 The student will a) solve one- and two-step linear equations in one variable; and b) solve practical problems requiring the solution of one- and two-step linear equations
<u>Essential Understandings/ Big Ideas</u>
When solving an equation, why is it important to perform identical operations on each side of the equal sign? An operation that is performed on one side of an equation must be performed on the other side to maintain equality.
<u>Key Essential Skills and Knowledge</u>
<ul style="list-style-type: none">• Represent and demonstrate steps for solving one- and two-step equations in one variable using concrete materials, pictorial representations and algebraic sentences.• Solve one- and two-step linear equations in one variable.• Solve practical problems that require the solution of a one- or two-step linear equation.

<u>Vocabulary</u>	
<u>Academic Vocabulary</u>	<u>Content Vocabulary</u>
Equation Inverse Operations Inequality Balance Variable Linear Equation	Simplify Model Illustrate Identify Evaluate
<i>Assessment Evidence ~ What is evidence of mastery? What did the students master & what are they missing?</i>	
<u>Assessment/ Evidence</u>	
<ul style="list-style-type: none"> • Interactive Achievement (10– 15 questions) • Gizmo Assessments 	
<i>Learning Plan ~ What are the strategies and activities you plan to use?</i>	
<u>Learning Experiences/ Best Practice</u>	
Teacher Resources: <ul style="list-style-type: none"> • Use Frayer Model and/or Marzano for new vocabulary terms • Modeling equations be sure to use cups and chips for models • Math Playground Solving one and two step equations model using alge-blocks and a moving scale • Graphic Organizer on Inverse Operations • Task Cards to review concepts when students are finished working on an activity • Given a problem, can students find and correct the error? 	

Interactive Skill Practice:

- [One Step Equations](#)
- [Two Step Equations](#)
- [Soccer Math – One Step Equations](#)
- [Hoop Shoot Two Step Equations](#)

Interactive Student Video(s):

[One Step Equations – Khan Academy Video](#)

Technology Integrations**Technology:**[Gizmo Lessons](#) -

7.14a – Modeling One Step Equations – Activity B

7.14a - Modeling and Solving Two Step Equations

7.14b – Solving Two Step Equations

[Brain Pop](#) -

Two Step Equations

Equations w/ Variables

Resources**Text:**

Virginia Math Connects, Course 2, ©2012, Price, et al, McGraw-Hill School Education Group 1:

One Step Equations, page(s) 204 – 219; Two Step Equations, page(s) 228 - 234

Virginia, SOL Coach, New Gold Edition, Mathematics, Grade 7,

One and Two -Step Equations, page(s) 198 - 205

Virginia Department of Education Lesson Plan(s):

[One and Two Step Equations](#)

Other Sites:**Lesson Plans and Activities:**

- [One Step Equations](#)
- [Using Cups and Counters – One Step Equations](#)

Cross Curricular Connection

Materials

<u>Manipulatives</u>	<u>Technology Resources</u>	<u>Student Supplies</u>
Cups Counters Alge – blocks Alge- blocks math	LCD Projector Speakers Computer w/Internet Connection and SmartBoard Software SmartBoard Computer Cart	Whiteboards/Markers Frayer Model/ Marzano Interactive Student Notes