

Career Corps

Lesson Plan Template

Course Title: 7th Grade Math **Course Number:** **Total Duration:** 1 day **Date/s:**
Overview/Annotation: Career Opportunities: Distribution Center Employment

Essential Question: What are real-world applications to properties of operations? **Background/Preparation:**

| Content Standards | Correlation to Alabama COS | | | |
|--|---|--|---|-------------------------|
| M. 7.7.1: Define linear expression, rational, coefficient, and rational coefficient. M. 7.7.2: Simplify an expression by dividing by the greatest common factor (Ex. $18x + 6y = 6(3x + y)$). M. 7.7.3: Simplify expressions with parenthesis (Ex. $5(4 + x) = 20 + 5x$). M. 7.7.4: Recognize the property demonstrated in a given expression. M. 7.7.5: Combine like terms of a given expression. M. 7.7.6: Recall how to find the greatest common factor. M. 7.7.7: Give example | AL.7.EE. (7-10) | | | |
| Learning Targets | | | | |
| Algebra and Functions--Create equivalent expressions using the properties of operations. | | | | |
| 6. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. | | | | |
| 7. Generate expressions in equivalent forms based on context and explain how the quantities are related. | | | | |
| Solve real-world and mathematical problems using numerical and algebraic expressions, equations, and inequalities. | | | | |
| 8. Solve multi-step real-world and mathematical problems involving rational numbers (integers, signed fractions and decimals), converting between forms as needed. Assess the reasonableness of answers using mental computation and estimation strategies. | | | | |
| 9. Use variables to represent quantities in real-world or mathematical problems and construct algebraic expressions, equations, and inequalities to solve problems by reasoning about the quantities. | | | | |
| a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p , q , and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. | | | | |
| b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q , and r are specific rational numbers. Graph the solution set of the inequality, and interpret it in the context of the problem. | | | | |
| Varied Learning Activities Procedures/Activities Safety Instructions | Materials/Equipment/ Technology Resources | Assessment Strategies | | |
| Varied Learning Activities: Target Distribution Introduction https://www.youtube.com/watch?v=GEMNhcVEN4E A Career in Warehousing and Distribution https://www.youtube.com/watch?v=QTrzEzJEX0c Procedures/Activities: See Attached Safety Instructions: | x | Textbook | | Check homework |
| | | Printer/Copier machine | | Test/Quiz |
| | | Workbook/Handouts | | Project |
| | x | Internet | x | Participation |
| | | Computers | x | Class work |
| | | Microsoft Office Software | | Review |
| | | Newspapers/Magazines | | Presentation |
| | x | LCD Projector | x | Oral Responses |
| | | Scanner | | Teacher Observation |
| | | Digital Camera | | Demonstration |
| | | VCR/DVD player | | Peer Evaluation |
| | | Television | | Other: |
| | Other: | | Other: | |
| Lesson Evaluation/Notations for Lesson Enhancement | Remediation and Accommodations Provisions for Individual Differences | | Integrated Curriculum | |
| Distributive property Kuta worksheet practice—IXL practice Combining like terms practice—mathaides.com worksheet practice—IXL practice | x | Extended Time | | _Employability Skills |
| | | Preferential Seating | | _Problem Solving Skills |
| | | Testing Accommodation | | _Management Skills |
| | | Copy of Teacher Notes | | _High-order Reasoning |
| | x | Extended Assignment Length | | _Work Ethic |
| | | | _Integrated CTSO Exper. | |
| | | | Integrated Academics: | |
| | | | _M _S _R _W _SS _CS | |
| Teamwork Activities | | Modifications Enhancements Remediation | Course/Program Culminating Product | |
| Career Readiness Indicators (CRIs) / Industry Credential/s (only applicable to high school) | | Communication | | |
| | x | Peer Tutor | | |
| | | Other | | |

**I authorize The Shelby County Chamber and 58INC. to publicize this lesson plan on their public webpage and distribute it as they see fit. Printed Name: Geoffrey K Wymer
Signature: _____**

Warehouse & Distribution Algebra Lesson

I. Introduction to the Distributive property

A. Definition:

1. To distribute means “to pass out”
2. A distribution center is where companies pass their products out
3. Watch the Target video

B. Problem

1. $15d(2b + 3m + 6t)$ multiplying by the distributive property
2. The Pradco distribution center wants to send 15 deer (d) targets to each store. There are 2 stores in Birmingham (b), 3 stores in Montgomery (m), 6 stores in Tuscaloosa (t)
3. How many deer are they sending to each city?

C. Solution

1. $30db + 45dm + 90dt$
2. 30 deer to Birmingham and 45 deer to Montgomery and 90 deer to Tuscaloosa
3. Watch the Careers in Warehousing and Distribution video

II. Expansion

A. Combining like terms

1. This can be expanded to different products but then linked by cities (like terms)
2. This is hope palletization is done in a distribution center to ship products to retailers.

B. Students generate their own examples based on products they shop for in a variety of stores.

III. Careers

A. Discuss the variety of positions found in a distribution center

B. Discuss the importance of each position to the process

C. Follow-up

1. Have the kids identify and research a particular position in the distribution process (human resources, order picker, receiver, etc)
2. Present what they learned to a small group or the whole class