

MATH ABE PACING GUIDES <COMMON CORE BASICS- McGraw-Hill Education>

TEXT AND CCR STANDARDS	UNIT DESCRIPTIONS AND ASSESSMENT STANDARDS	COMPONENTS OF EFFECTIVE INSTRUCTION
<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 1 (pages 26-45)</p> <p>TOPIC: NUMBER SENSE & OPERATIONS</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:8-9, 11-12, 15-29, 32-37</i></p> <p><i>Number Power- Addition, Subtraction, Multiplication, Division: 6-10, 17-22, 35-43, 60-69, 87-99</i></p> <p><i>Number Power-Algebra: 152-153</i></p> <p><i>Number Power-Word Problems: 19-36, 59-71, 138-141</i></p> <p><i>Number Power-Problem-Solving/ Test-Taking Strategies: 18-71, 108-111,120-123</i></p> <p><i>Number Power-Pre-Algebra: 32-41</i></p> <p><i>Number Power-Review: 10-21, 32-53</i></p> <p><i>Number Power-Financial Literacy: 225-228</i></p> <p><i>Workplace Skills: Applied Mathematics-Lessons 1, 10, 14</i></p> <p>DIGITAL RESOURCES: <i>Instruction Targeted for TABE Success, Level D, Mathematics :</i></p> <ul style="list-style-type: none"> Unit 1(Number and Number Operations) , Lessons 1.1, 1.2 Unit 2 (Multiplication of Whole Numbers) Unit 3 (Division of Whole Numbers) Unit 6 (Computation in Context) Lesson 6.1 Unit 9 (Estimation) Unit 15 (Problem Solving and Reasoning) <p><i>Workforce Connects: Applied Mathematics, Lessons 1.1-1.3, 2.1-2.2, 2.5, 3.1</i></p>	<p>WEEK 1</p> <p>UNIT TITLE: 1- NUMBER SENSE & OPERATIONS</p> <p>LESSON(S) TITLE: WHOLE NUMBERS (<i>1.1- Place Value; 1.2- Add & Subtract Whole Numbers; 1.3- Multiply & Divide Whole Numbers; 1.4- Factoring; 1.5- Rounding & Estimation; 1.6- Arithmetic Expressions; 1.7- Problem Solving</i>)</p> <p>TEXT LESSON OBJECTIVES:</p> <ul style="list-style-type: none"> 1.4- Determine the set of factors of a number; determine the greatest common factor of two numbers; identify and apply patterns 1.5- Identify situation in which rounding or estimating is appropriate; round numbers to the nearest specified place vale; use estimation appropriately 1.6- Understand that operations must be performed in a specific order; solve problems involving the order of operations; use mental math to solve problems without paper and pencil 1.7- Use the five-step approach to solve word problems; use various strategies to solve word problems; judge the reasonableness of answers <p>BEFORE, DURING & AFTER READING STRATEGIES:</p> <p>Make meaning-use prior knowledge to match vocabulary with word meanings-IRB97</p> <p>Relate words to other words (build word group maps), paraphrase data- IRB99</p> <p>Word bench (take apart a phrase to determine meaning of individual parts) IRB101</p> <p>Connect to life experiences (use sentences with vocabulary & experiences) IRB103</p> <p>ADDITIONAL STRATEGIES:</p> <p>Model with Mathematics- use a chart as a visual model of a concept- IRB 92</p> <p>Draw Evidence from Text- clues from context guide how to solve a problem-IRB 95</p> <p>Build Solution Pathways- follow a set of steps to find solution or reach goal – IRB 97</p> <p>Paraphrase Data- restate information as a method to understand, remember-IRB 99</p> <p>Make Use of Structure- mathematical structures include relationships among values- IRB 101</p> <p>Attend to Precision- careful attention to details- IRB 103</p> <p>HOME LEARNING: Lessons 1.1-1.3 (pages 12-25) review place value, add & subtract whole numbers, multiply & divide whole numbers may be assigned to reinforce readiness for this week’s objectives. Use “Additional Text” resources.</p>	<p>BELL RINGER:</p> <ul style="list-style-type: none"> 1.4-Use mental math to answer multiplication problems in a “round robin” format IRB 97 1.5-Ask students to solve addition and division problems with rounded numbers IRB 99 1.6-Present problems that involve a series of operations IRB 101 1.7-Assign students to 4 groups, each writes simple problems using one operation to share with class IRB 103 <p>VOCABULARY:</p> <ul style="list-style-type: none"> 1.4-Commutative Property of Multiplication, Distributive Property of Multiplication, greatest common factor, expression, operation 1.5-compatible numbers, front-end digits, estimate 1.6-mental math, order of operations, strategy 1.7-irrelevant, reasonable, solution <p>STUDENT PRODUCT/PROJECT:</p> <p>Math Link- apply Commutative Property of Multiplication to determine factors of given numbers (page 30)</p> <p>21st Century Skill- Understand Media Messages- find media stories containing numbers, determine whether they are exact values or rounded/ estimated amount (page 34)</p> <p>Students draw from real life situations / activities where order is important, and where math is used daily (methods of mental math) IRB 101</p> <p>21st Century Skill- share web sites with math tutorial help, signs that site is reliable and of good quality IRB 104</p> <p>EXTENSION/ENRICHMENT ACTIVITY:</p> <p>ELL Instruction: Build estimation line (IRB 100); complete sentences in a cloze paragraph (IRB 102); Work with a partner using the 5-step approach on Skill Review problems (IRB 104)</p> <p>Extension Activity: Solve multiplication problems from news ads IRB 100; Modify equations by inserting parentheses to make them true (IRB 102); Use concepts to solve non-routine problems by writing expressions with variables followed by an scenario represented by the expression (IRB 104)</p> <p>EXIT SLIP: Think About Math Activities: pages 29, 32, 34, 37, 39, 42, 43</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 4, 5, 6, 7 Number System- 1,2</p>	<p>TABE CORRELATION TO TEXT:</p> <ul style="list-style-type: none"> Mathematics Computation: Add Whole Numbers Mathematics Computation: Subtract Whole Numbers Mathematics Computation: Multiply Whole Numbers Mathematics Computation: Divide Whole Numbers Applied Mathematics: Number & Number Operations Applied Mathematics: Computation In Context Applied Mathematics: Estimation Applied Mathematics: Problem Solving & Reasoning 	<p>EVALUATION/ASSESSMENT:</p> <ul style="list-style-type: none"> In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review

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<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 1 (pages 50-69)</p> <p>TOPIC: NUMBER SENSE & OPERATIONS</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:</i>40-50</p> <p><i>Number Power- Addition, Subtraction, Multiplication, Division:</i> 133-145</p> <p><i>Number Power-Fractions, Decimals, Percents:</i>64-68, 74-96</p> <p><i>Number Power-Word Problems:</i> 44-47, 72-74</p> <p><i>Number Power-Pre-Algebra:</i> 26-29</p> <p><i>Number Power-Review:</i> 60-62, 116-131</p> <p><i>Number Power-Financial Literacy:</i> 11-40, 139-172, 211-222, 229-231</p> <p><i>Workplace Skills: Applied Mathematics-Lesson 9</i></p> <p>DIGITAL RESOURCES:</p> <p><i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 4 (Decimals) Unit 6 (Computations in Context), Lesson 6.2</p> <p><i>Workforce Connects: Applied Mathematics, Lesson 1.4</i></p>	<p>WEEK 2</p> <p>UNIT TITLE: 1- NUMBER SENSE & OPERATIONS</p> <p>LESSON(S) TITLE: DECIMALS (2.1- Introduction To Decimals; 2.2- Add & Subtract Decimals; 2.3- Multiply Decimals; 2.4- Divide Decimals)</p> <p>TEXT LESSON OBJECTIVES:</p> <p>2.1- Understand decimals as part of the place-value system; use strategies for rounding decimals; compare and order decimal numbers</p> <p>2.2- Add decimals; subtract decimals</p> <p>2.3- Multiply decimals</p> <p>2.4- Divide decimals</p> <p>BEFORE, DURING & AFTER READING STRATEGIES:</p> <p>Students draw models to explain vocabulary definitions IRB 105</p> <p>Identify known words from vocabulary and context in which used IRB 107</p> <p>As a group students rely on prior knowledge to define terms, record on board IRB109</p> <p>Build word map based on <i>Divide Decimals</i> and connecting vocabulary words IRB 111</p> <p>ADDITIONAL STRATEGIES:</p> <p>Model with Mathematics- draw a place-value chart on board, demonstrate use with whole numbers IRB 105</p> <p>Identify Topic Sentence- find topic sentence or subject in paragraphs (page 55)</p> <p>Apply Number Sense Concepts- show relationship between multiplication and repeated addition IRB 109</p> <p>Evaluate Reasoning- students use evaluation to determine if solutions are reasonable, or can be verified or proven to be true IRB 111</p> <p>HOME LEARNING:</p> <p>Students find and list activities that use decimals (track and field events, grocery receipts) and explain the process used to calculate the statistic (IRB105)</p> <p>Provide store receipts with multiple items, but no total, ask student to determine total cost (IRB 108)</p> <p>Use "Additional Text" resources.</p>	<p>BELL RINGER:</p> <p>2.1- Using a number line/ or chart on the board, labeled in 10's, have students round selected numbers IRB 105</p> <p>2.2- Students solve addition and subtraction problems, both no-grouping and grouping IRB107</p> <p>2.3- Students multiply whole numbers in the hundreds, then add and subtract decimals through the hundredths IRB109</p> <p>2.4- Students find quotients for problems with one and 2 digit divisors, including those with remainders IRB 111</p> <p>VOCABULARY:</p> <p>2.1- decimal point, hundredth, tenth, compare</p> <p>2.2- place value, vertically, organize, topic</p> <p>2.3- product, factor, multiplication</p> <p>2.4- divisor quotient, evaluate, reasoning, summarize</p> <p>STUDENT PRODUCT/PROJECT:</p> <p>Students make place-value charts through the millionths (page 51)</p> <p>21st Century Skill- Productivity & Accountability- using personal examples of schedules, how they help accomplish specific goals- IRB 108</p> <p>Represent Real-World Problems- students draw picture to model a problem before solving it IRB 110</p> <p>21st Century Skill- Communication and Collaboration- students work in small groups to brainstorm and solve a problem (page 66)</p> <p>EXTENSION/ENRICHMENT ACTIVITY:</p> <p>ELL Instruction: Practice pronunciation of place-value names (IBR106); use real-world decimal examples from grocery receipts (IRB108); explain relationships among vocabulary words (IRB 110); retell problems and solutions in own words (IRB 112)</p> <p>Extension Activity: Compare data in sports statistics (IRB 106); students modify decimals in several three-digit numbers to find a sum equal or less than 100 (IRB 108); students show relationships between problems using decimal multiplication and using greater or less than symbols (IRB110); identify patterns in problems [56/7, 56/0.7, 56/0.07](IRB 112)</p> <p>EXIT SLIP:</p> <p>Think About Math Activities: pages 51, 52, 56, 57, 61, 6</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list):</p> <p>Math Practice 4, 6, 8</p> <p>Number System- 1,2</p>	<p>TABE CORRELATION TO TEXT:</p> <p>Mathematics Computation: Decimals</p> <p>Applied Mathematics: Computation In Context</p> <p>Applied Mathematics: Problem Solving & Reasoning</p>	<p>EVALUATION/ASSESSMENT:</p> <p>In each lesson: Vocabulary Review, Skill Review, Skill Practice</p> <p>At end of Chapter: Chapter Review</p>

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<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 1 (pages 74-97)</p> <p>TOPIC: NUMBER SENSE & OPERATIONS</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:53-70</i></p> <p><i>Number Power-Fractions, Decimals, Percents:</i> 11-59</p> <p><i>Number Power-Word Problems:</i> 50-51, 75-81, 109-111</p> <p><i>Number Power-Review:</i> 64-72, 82-105</p> <p><i>Number Power-Financial Literacy:</i> 232-235</p> <p><i>Workplace Skills: Applied Mathematics-Lessons 1, 6, 7, 12</i></p> <p>DIGITAL RESOURCES:</p> <p><i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 1 (Number and Number Operations), Lesson 1.3 Unit 5 (Fractions) Unit 6 (Computation in Context), Lesson 6.3</p> <p><i>Workforce Connects: Applied Mathematics, Lessons 2.4, 4.1-4.3</i></p>	<p>WEEK 3</p> <p>UNIT TITLE: 1- NUMBER SENSE & OPERATIONS</p> <p>LESSON(S) TITLE: FRACTIONS (<i>3.1- Introduction To Fractions; 3.2-Add & Subtract Fractions; 3.3- Multiply & Divide Fractions; 3.4- Mixed Numbers</i>)</p> <p>TEXT LESSON OBJECTIVES:</p> <p>3.1- Understand fractions; name equivalent fractions; compare and order fractions</p> <p>3.2- Add and subtract fractions with like denominators; add and subtract fractions with unlike denominators</p> <p>3.3- Multiply fractions; divide fractions</p> <p>3.4- Add and subtract mixed numbers; multiply and divide mixed numbers</p> <p>BEFORE, DURING & AFTER READING STRATEGIES:</p> <p>Identify words that are similar to the vocabulary words, look for root words IRB 113</p> <p>Building on the definition of <i>denominator</i>, build definitions of <i>like, unlike, common</i> IRB 115</p> <p>Use Latin words and meanings to predict definitions of vocabulary IRB 117</p> <p>Use Latin meanings of prefixes to define vocabulary words IRB 119</p> <p>ADDITIONAL STRATEGIES:</p> <p>Interpret Data Displays- using place- value chart (page 12) and number lines (page 15) ask students to identify the data display, and interpret what is shown IRB 113</p> <p>Recognize Details- using a magazine or website picture, ask students to list details shown IRB113</p> <p>Summarize Supporting Details- Elicit where to find a paragraph’s main idea (topic sentence) and then find the supporting sentences and details IRB 119</p> <p>HOME LEARNING:</p> <p>Represent real-world problems- list items that are bought with a per-pound cost, and figure the total cost of a product (2 ½ pounds) IRB 119</p> <p>Use “Additional Text” resources.</p>	<p>BELL RINGER:</p> <p>3.1- Ask students to shade a blank hundred grid to represent decimals (IRB113)</p> <p>3.2- Ask students to write a set of equivalent fractions for a given fraction, then ask them to rewrite a fraction in its lowest terms (IRB 115)</p> <p>3.3- Ask students to simplify the fractions 8/10, 12/20, 6/24 (IRB 117)</p> <p>3.4- Ask student to write, solve, and explain the processes involved in adding, subtracting, multiplying and dividing fractions (IRB 119)</p> <p>VOCABULARY:</p> <p>3.1- common multiple, denominator, equivalent fractions, fraction, lowest terms, numerator , diagram</p> <p>3.2- common denominator, like denominator, unlike denominator</p> <p>3.3- invert, reciprocal, multiplicative, inverse</p> <p>3.4- reduce, rename, improper fraction, mixed number, proper fraction</p> <p>STUDENT PRODUCT/PROJECT:</p> <p>Math Link- Students draw a number of shapes and explain whether it is possible to divide the shapes into fractional parts (page75)</p> <p>Perform Operations- Students share how they first learned to add and subtract whole numbers, including when they were able to transition from pictures to working without them IRB 116</p> <p>Perform Operations- Students list the steps they follow to divide and multiply fractions, called algorithms. Ask them to write the algorithm for multiplying two fractions IRB 118</p> <p>Math Link- paired students write 3 to 5 mixed numbers then rewrite as improper fractions (page 95)</p> <p>EXTENSION/ENRICHMENT ACTIVITY:</p> <p>ELL Instruction: students explain relationship between two terms on page 76 (IRB 114); students work together to explain the procedures for adding/ subtracting fractions with unlike denominators (IRB 116); use pictures of real objects to understand mixed numbers (IRB 120)</p> <p>Extension Activity: ask students to explain process of using common multiples to rewrite a fraction in lowest terms (IRB 114) ; ask students to write a plan to solve addition and subtraction fraction problems (IRB 116); using a variety of tools, students create visual models of multiplying and dividing fractions (IRB 118); using calculators, students determine which of given mixed numbers when multiplied by itself comes closest to 2 (IRB 120)</p> <p>EXIT SLIP: Think About Math Activities: pages 76, 78, 79, 83, 85, 89, 90, 95</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 8 Number System- 2</p>	<p>TABE CORRELATION TO TEXT: Mathematics Computation: Fractions Applied Mathematics: Computation In Context</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

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<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 2 (pages 104-129)</p> <p>TOPIC: BASIC ALGEBRA</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:</i>10, 73-78, 126</p> <p><i>Number Power-Algebra:</i> 10-23, 110</p> <p><i>Number Power-Pre-Algebra:</i> 18-19, 130-133</p> <p><i>Number Power-Review:</i> 24-25, 202-203</p> <p><i>Number Power-Transitions Math:</i> 65-68</p> <p><i>Workplace Skills: Applied Mathematics-Lessons 4, 11, 18</i></p> <p>DIGITAL RESOURCES</p> <p><i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 7 (Integers) Unit 11 (Geometry and Spatial Sense), Lesson 11.5</p> <p><i>Workforce Connects: Applied Mathematics, Lessons 3.4, 4.6-4.7, 5.7</i></p>	<p>WEEK 4</p> <p>UNIT TITLE: 2- BASIC ALGEBRA</p> <p>LESSON(S) TITLE: INTEGERS (<i>4.1-Introduction to Integers & Absolute Value; 4.2- Add Integers; 4.3-Subtract Integers; 4.4- Multiply & Divide Integers; 4.5- The Coordinate Grid</i>)</p> <p>TEXT LESSON OBJECTIVES:</p> <p>4.1- Identify integers, compare and order integers; find the absolute value of an integer</p> <p>4.2- Use a number line to find the sum of two integers; use integer addition rules to find the sum of two integers</p> <p>4.3- Use a number line to subtract integers; use addition of opposite integers to find the difference between two integers</p> <p>4.4- Multiply two integers; divide two integers</p> <p>4.5- Plot and identify points on a coordinate grid</p> <p>BEFORE, DURING & AFTER READING STRATEGIES:</p> <p>Rely on prior knowledge and context to define words IRB 121</p> <p>Act them out- using 2 sets of cards (one with vocabulary words, the other with definitions) ask volunteer students to act out their words, others guess IRB123</p> <p>Define everyday words- students provide examples of the context in which the vocabulary words were used IRB 125</p> <p>Draw a table on the board and ask students to think of mnemonic devices to distinguish between rows and columns IRB 127</p> <p>Find the vocabulary words and a specific feature of a displayed map IRB 129</p> <p>ADDITIONAL STRATEGIES:</p> <p>Follow a Sequence of Steps-order sentences, then relate to common tasks (pg. 109)</p> <p>Interpret Data Displays- use maps with coordinate grids (N, S, E, W)- IRB 129</p> <p>HOME LEARNING:</p> <p>Provide Sequence diagram (IRB 376) for students to list steps to solving integer problems</p> <p>Record in a table the rise/ fall of temperatures</p> <p>Use a blank checkbook register to enter and balance deposits, withdrawals</p> <p>Use "Additional Text" resources.</p>	<p>BELL RINGER:</p> <p>4.1- Use a labeled number line to find the distance between two numbers on the line IRB 121</p> <p>4.2- Use number lines from 0 to positive 25 to add positive whole numbers IRB 123</p> <p>4.3- Have students practice adding positive and negative integers IRB125</p> <p>4.4- Student match 1-digit by 1-digit products to quotients IRB 127</p> <p>4.5- Draw and label horizontal and vertical number lines with both positive and negative integers IRB 129</p> <p>VOCABULARY:</p> <p>4.1- infinite, opposite, absolute value, integer</p> <p>4.2- negative, positive, sign, addend, illustrate, sequence</p> <p>4.3- point, solve, tic mark</p> <p>4.4- repeated, column, inverse, row, table, title</p> <p>4.5- origin, coordinate plane, ordered pair, perpendicular, x-axis, x-coordinate, y-axis, y-coordinate, grid</p> <p>STUDENT PRODUCT/PROJECT:</p> <p>Represent Real World Problems- negative credit card balance IRB 122</p> <p>Use counters in two colors to practice finding zero sums IRB 124</p> <p>Perform Operations on a self- drawn number line (page 115)</p> <p>Interpret Data Displays- discuss adding row or column to table- (pg.119)</p> <p>Make Sense of Problems- draw coordinate grid showing path (page 126)</p> <p>EXTENSION/ENRICHMENT ACTIVITY:</p> <p>ELL Instruction: Interpret positive/ negative integers using a model thermometer IRB 122; tape a number line to a table and use counters to work problems IRB 124; make a table of time spent watching TV or online IRB128</p> <p>Extension Activity: Collect and Display Data from print or online resources using positive / negative numbers IRB122; research the use of submersibles to explore the layers or zones of the ocean from sea level down IRB124; Find the record high / low temperature for 5 decades IRB126; use Venn diagram to complete details about adding/ subtracting and multiplying/dividing integers IRB128; research Descartes- inventor of Cartesian plane IRB130</p> <p>EXIT SLIP:</p> <p>Think About Math Activities: pages 106, 110, 111, 116, 120, 121, 127</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 1, 2, 5 Number System- 1,2</p>	<p>TABE CORRELATION TO TEXT: Mathematics Computation: Integers Applied Mathematics: Geometry & Spatial Sense</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

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<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 2 (pages 134-161)</p> <p>TOPIC: BASIC ALGEBRA</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:</i>99-101, 103-110</p> <p><i>Number Power-Algebra:</i> 42-53, 56-87</p> <p><i>Number Power-Word Problems:</i> 138-141</p> <p><i>Number Power-Problem-Solving/ Test-Taking Strategies:</i> 72-89</p> <p><i>Number Power-Pre-Algebra:</i> 20-25, 54-65, 140-143, 146-159</p> <p><i>Number Power-Review:</i> 26-29, 110-111, 182-195</p> <p><i>Number Power-Transitions Math:</i> 1-4, 15-51</p> <p>DIGITAL RESOURCES: <i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 14 (Patterns, Functions, Algebra), Lessons 14.1, 14.3, 14.5</p>	<p>WEEK 5</p> <p>UNIT TITLE: 2- BASIC ALGEBRA</p> <p>LESSON(S) TITLE: EXPRESSIONS & EQUATIONS (<i>5.1- Expressions; 5.2- Solve One-Step Equations; 5.3- Solve Two-Step Equations; 5.4- Solve One- And Two-Step Inequalities; 5.5- Identify Patterns</i>)</p> <p>TEXT LESSON OBJECTIVES:</p> <p>5.1- Translate between verbal and symbolic representations of expressions; simplify expressions; evaluate expressions</p> <p>5.2- Understand and write equations; solve one-step equations</p> <p>5.3- Translate verbal sentences into two-step equations; solve two-step equations</p> <p>5.4- Translate verbal statements into inequalities; solve one-step inequalities; solve two-step inequalities</p> <p>5.5- Write expressions to represent patterns; write equations to represent patterns</p> <p>BEFORE, DURING & AFTER READING STRATEGIES:</p> <p>Word Bench-use known words to suggest meanings of vocabulary IRB131</p> <p>Word Map- use Vocabulary Map (IRB 377) listing a word, the definition, an example and a non-example IRB133</p> <p>Define <i>affect</i> and <i>effect</i>- describe situations for each word IRB135</p> <p>I Know These Words!- students use own life experiences, prior knowledge to define words and use in sentences IRB 137</p> <p>Opposites- find computer-related examples of the words <i>input</i> and <i>output</i> IRB 139</p> <p>ADDITIONAL STRATEGIES:</p> <p>Make Sense of Problems- Use the question sentence in a problem to write an answer sentence with a blank before starting to solve the problem IRB134</p> <p>Patterns may be visual (moon phases), auditory (beat in a song) or mathematical, all having a rule for the pattern IRB 139</p> <p>Identify Key Words- page 15</p> <p>HOME LEARNING:</p> <p>Make a table with the high and low temperatures, figure the difference between the temperatures each day (page 157- Core Skill)</p> <p>Use "Additional Text" resources.</p>	<p>BELL RINGER:</p> <p>5.1-Review order of operations with two- & three-step problems IRB131</p> <p>5.2- Ask students to simplify expression $[12x+2x]$, evaluate $[27/3]$ IRB133</p> <p>5.3- Apply order of operations to simplify integer expressions IRB 135</p> <p>5.4- Ask students to solve 1- & 2-step equations IRB 137</p> <p>5.5- Use multiplication chart to find simple patterns of multiples IRB 139</p> <p>VOCABULARY:</p> <p>5.1- variable, algebraic expression, coefficient, constant term, mathematical expression, symbolic expression, verbal expression</p> <p>5.2- solution, equal sign, equation, equivalent equation, inverse operations</p> <p>5.3- affect, isolate, two-step equation</p> <p>5.4- infinite, reverse, inequality</p> <p>5.5- generalize, term, common difference, input variable, numerical pattern, output variable, sequence</p> <p>STUDENT PRODUCT/PROJECT:</p> <p>Make Sense of Problems- pairs of students write simple math problems for each other, exchange and solve IRB 132</p> <p>Represent Real-World Arithmetic Problems- students give examples of use of math operations in daily lives, then write and solve (page 142)</p> <p>Make a Table- use information on page 157 to make a table, then compare tables IRB 140</p> <p>EXTENSION/ENRICHMENT ACTIVITY:</p> <p>ELL Instruction: work in pairs to write verbal situations for problems on page 137- IRB132; read aloud Skill Practice questions identifying key vocabulary for setting up the problem- IRB134; fill in the blanks of a cloze sentence describing solving equations- IRB 136; restate example from the lesson in own words- IRB138; make connections with real-world patterns- IRB 140</p> <p>Extension Activity: research and create a presentation on "What is a variable?" IRB 132; write real-life problems based on hourly rate of work- IRB134; solve problems with 3 or more steps- IRB136; use inequality with costs related to a vacation and determine possible length of vacation within budget- IRB138; make concept maps on input/output relationships in the real-world –IRB140</p> <p>EXIT SLIP:</p> <p>Think About Math Activities: pages 137, 138, 141, 142, 148, 151, 153, 154, 158</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 1, 8 Number System- 2 Expressions & Equations- 1, 2 Functions- 2</p>	<p>TABE CORRELATION TO TEXT: Applied Mathematics: Patterns, Functions, Algebra Applied Mathematics: Problem Solving & Reasoning</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

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TEXT AND CCR STANDARDS	UNIT DESCRIPTIONS AND ASSESSMENT STANDARDS	COMPONENTS OF EFFECTIVE INSTRUCTION
<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 2 (pages 164-183)</p> <p>TOPIC: BASIC ALGEBRA</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Number Power-Algebra:</i> 98-99, 111-115 <i>Number Power-Review:</i> 204-207 <i>Number Power-Transitions Math:</i> 69-82</p> <p>DIGITAL RESOURCES: <i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 14 (Patterns, Functions, Algebra), Lesson 14.4</p>	<p>WEEK 6</p> <p>UNIT TITLE: 2- BASIC ALGEBRA</p> <p>LESSON(S) TITLE: LINEAR EQUATIONS & FUNCTIONS (6.1- <i>Linear Equations</i>; 6.2- <i>Graphing Linear Equations</i>)</p> <p>TEXT LESSON OBJECTIVES: 6.1- Plot a line that represents the linear relationship between two sets of numbers; graphically determine the value of the dependent variable; determine whether an independent and a dependent variable are linearly related; write the equation of a line from a verbal description of the relationship between two sets of numbers 6.2- Use the point-slope form to graph the equation of a line; use the slope-intercept form to graph the equation of a line; use the two-point form to graph the equation of a line</p> <p>BEFORE, DURING & AFTER READING STRATEGIES: Guess the Word- build on the common definitions of the vocabulary to determine the definitions in a mathematical context. IRB141 Relate Word Parts- List the vocabulary and next to the words or word parts [inter, intercept, point, slope, sub] write the history of each [Latin, Old French, Middle English] IRB 143</p> <p>ADDITIONAL STRATEGIES: Compare independent variable to amount of time that a quarter will give on a arcade machine, and dependent variable to the number of quarters players put in the machine-IRB 141 Interpret Graphs and Functions- Use real-world examples such as currency conversion rate between US dollar and British pound, graph the data- IRB 143</p> <p>HOME LEARNING: Collect data on real-world activities as done in Student Product/ project, drawing out the patterns of dependent and independent variables Use “Additional Text” resources.</p>	<p>BELL RINGER: 6.1- Have students plot coordinate pairs on a coordinate grid on the board IRB 141 6.2- Use graphs on pages 170-171 to elicit terms relating to the graphical representation of a linear relationship IRB143</p> <p>VOCABULARY: 6.1- dependent variable, independent variable, rise, run, slope, linear relationship, y-intercept, linear equation 6.2- intersect, subscript, point-slope form, slope-intercept form; two-point form</p> <p>STUDENT PRODUCT/PROJECT: Students draw and complete a data table to show how many miles a driver could travel on 1, 2, 3, 4, and 5 gallons of gas at 30 miles per gallon- IRB 141 21st Century Skills- Critical Thinking and Problem Solving- graph how often and how long students use any electronic device during a day, recognizing any patterns that emerge (page 170) 21st Century Skills- Critical Thinking and Problem Solving-plot real-world data involving personal behavior, spending, and use trends of the past to predict or alter future behavior- IRB 144, page 179</p> <p>EXTENSION/ENRICHMENT ACTIVITY: ELL Instruction: Restate definitions of <i>rise</i> and <i>run</i> using the graph on page 171 and model in pictures or actions- IRB 142; retell one of the forms for finding the equation of a line with visuals- IRB 144 Extension Activity: Investigate a multi-step problem that involves planning and reasoning with a linear relationship for which the slope is negative – IRB142; identify patterns in data from a stock market chart showing the slope of line segments indicating market changes – IRB144</p> <p>EXIT SLIP: Think About Math Activities: pages 171, 178</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Expressions & Equations- 4, 5 Functions- 2</p>	<p>TABE CORRELATION TO TEXT: Applied Mathematics: Patterns, Functions, Algebra</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

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TEXT AND CCR STANDARDS	UNIT DESCRIPTIONS AND ASSESSMENT STANDARDS	COMPONENTS OF EFFECTIVE INSTRUCTION
<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 2 (pages 184-209)</p> <p>TOPIC: BASIC ALGEBRA</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:102</i> <i>Number Power-Algebra: 204-210</i> <i>Number Power-Transitions Math:100-101, 104-107</i></p> <p>DIGITAL RESOURCES: <i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 14 (Patterns, Functions, Algebra), Lesson 14.2</p>	<p>WEEK 7</p> <p>UNIT TITLE: 2- BASIC ALGEBRA</p> <p>LESSON(S) TITLE: LINEAR EQUATIONS & FUNCTIONS (6.3- <i>Pairs Of Linear Equations;</i> 6.4- <i>Scatter Plots;</i> 6.5- <i>Functions</i>)</p> <p>TEXT LESSON OBJECTIVES: 6.3- Solve systems of two linear equations; interpret graphs of two linear equations; use linear equations to solve problems 6.4- Describe the information that a trend line provides about two correlated variables; describe various aspects of the correlation between two variables 6.5- Identify a function; determine whether an equation represents a function</p> <p>BEFORE, DURING & AFTER READING STRATEGIES: Use Context Clues- In groups of 6 students, make flash cards with the vocabulary words to use as a review tool- IRB 145 Guess the Word- Write the vocabulary words on cards, such that there is a card for each student (words will be repeated), students with the same word form groups to write the definitions and a visual on the backs of the cards- IRB147 Picture Dictionary- Groups of students select a drawing or diagram to represent vocabulary words, sharing with class- IRB149</p> <p>ADDITIONAL STRATEGIES: Solve Simple Equations by Inspection- simple equations [$x-4=10$; $9x=63$; $7x=42$] can be solved by looking at them and completing mental math- IRB 145 Vertical line test to determine whether a graph represents a function- students graph capital letters of the alphabet to see if any can be thought of as functions [only V and W are, possibly M]- IRB 149</p> <p>HOME LEARNING: Create a scatter plot- Skill Review item #3 (page 197) and Skill Practice -#2 (page 198) Use “Additional Text” resources.</p>	<p>BELL RINGER: 6.3- Using graph paper, students draw a coordinate plane, use two points on the plane to determine and graph an equation of the line- IRB145 6.4- Students plot a set of points on a coordinate plane – IRB 147 6.5- Students solve simple equations for the variable, and generate more simple equations to work out with partners – IRB149</p> <p>VOCABULARY: 6.3- simultaneous, addition method, equilibrium point, substitution method, system of simultaneous linear equations, eliminate 6.4- cluster, correlation, outlier, trend line, scatter plot 6.5- function, input, output, linear function, nonlinear function, vertical line test</p> <p>STUDENT PRODUCT/PROJECT: Represent Real-World Problems- students measure their height and arm spans and plot measurements on a coordinate plane, revealing a general pattern- IRB 147 Think About Math- students draw a trend line through the points plotted in a scatter plot (page 191) Workplace Connection- Computer Input, Output Values- use a search browser to find examples of input-output functions [converting clothing sizes, monetary currencies, measurements, speed]- IRB150</p> <p>EXTENSION/ENRICHMENT ACTIVITY: ELL Instruction: Identify multiple meanings with the word <i>equilibrium</i> as children on a seesaw or circus performer on a high wire- then relate to math- IRB 146; identify the scatter plot that is most interesting and why- IRB 148; review the picture dictionaries made during the vocabulary activity, revising for clarity- IRB 150 Extension Activity: Students work collaboratively to generate examples of when the intersection of two graphs has practical relevance (intersection of orbits of earth and a meteorite)- IRB 146; find two real-world examples of scatter plots describing common characteristics and conclusions- IRB 148; find graphical representations of exponential functions and use 2-column charts to calculate data points, then plot on a graph- IRB 150</p> <p>EXIT SLIP: Think About Math Activities: pages 186, 191, 195, 203</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Expressions & Equations- 5 Functions- 1, 2 Statistics & Probability- 5</p>	<p>TABE CORRELATION TO TEXT: Applied Mathematics: Patterns, Functions, Algebra</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

TEXT AND CCR STANDARDS	UNIT DESCRIPTIONS AND ASSESSMENT STANDARDS	COMPONENTS OF EFFECTIVE INSTRUCTION
<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 3 (pages 210-229)</p> <p>TOPIC: MORE NUMBER SENSE & OPERATIONS</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:</i>81-87, 96</p> <p><i>Number Power-Fractions, Decimals, Percents:</i> 160-169</p> <p><i>Number Power-Algebra:</i> 92-97</p> <p><i>Number Power-Word Problems:</i> 84-97, 162-165, 170-173</p> <p><i>Number Power-Problem-Solving/ Test-Taking Strategies:</i>90-98, 190-191</p> <p><i>Number Power-Analyzing Data:</i> 22-25</p> <p><i>Number Power-Pre-Algebra:</i> 44-51</p> <p><i>Number Power-Review:</i> 106-109, 196-199</p> <p><i>Number Power-Financial Literacy:</i> 41-48</p> <p><i>Workplace Skills: Applied Mathematics</i>-Lessons 8, 25, 29</p> <p>DIGITAL RESOURCES:</p> <p><i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 1 (Number and Number Operations), Lesson 1.4</p> <p><i>Workforce Connects: Applied Mathematics,</i> Lessons 4.4, 5.3, 5.5, 6.7, 7.3</p>	<p>WEEK 8</p> <p>UNIT TITLE: 3- MORE NUMBER SENSE & OPERATIONS</p> <p>LESSON(S) TITLE: RATIOS & PROPORTIONS (<i>7.1- Ratios & Rates; 7.2- Unit Rates & Proportional Relationships; 7.3- Solve Proportions</i>)</p> <p>TEXT LESSON OBJECTIVES: 7.1- Understand and write ratios; understand and find unit rates and unit prices 7.2- Use unit rates to solve mathematics problems; interpret representations of proportional relationships 7.3- Understand and write proportions; solve proportions</p> <p>BEFORE, DURING & AFTER READING STRATEGIES: Word Maps- Use a template [square divided into 4 parts with a smaller square in the center] to work with vocabulary- center square is the word, the outside squares are definition, picture, example, sentence- IRB 151 Relate Word Parts- Use a dictionary or online etymology website to determine meanings of the parts of each vocabulary word- IRB 153 Prior Knowledge- Ask students to share what they know about the vocabulary words that are familiar- IRB 155</p> <p>ADDITIONAL STRATEGIES: Restate or Paraphrase Information- identify key words and important ideas, then explain them in a clear manner- (page 213) Represent Real-World Problems-display images that are visual models of proportion (found online) such as architecture, car design, art, plants, animals- IRB 155</p> <p>HOME LEARNING: Compile a list of items that one might buy in the grocery store that are sold based on unit price (meat, produce, buy-one-get-one-free). Use these values to determine the “per item” cost of one unit (one apple in a bag of 12 sold for \$4.50) Use “Additional Text” resources.</p>	<p>BELL RINGER: 7.1- Students use greatest common factors to simplify a variety of fractions- IRB 151 7.2- Using words to describe ratios (three oranges for every five apples) have students translate into numbers, writing ratios and simplifying in lowest terms- IRB 153 7.3- Working in pairs, students determine if 2 fractions ($\frac{3}{4}$ and $\frac{1}{12}$) are equivalent, if not then write equivalents for both- IRB 155</p> <p>VOCABULARY: 7.1- rate, ratio, unit price, unit rate, paraphrase 7.2- constant of proportionality, proportional relationship 7.3- equivalent, proportion, value, cross-multiplication</p> <p>STUDENT PRODUCT/PROJECT: 21st Century Skill- Critical Thinking and Problem Solving means looking at a problem in different ways-students describe the relationship between a part and the whole or between two or more parts- (page 124) Compute Unit Rates Associated with Ratios of Fractions- complete table (page 219) –all unit rates have 1 as a denominator- IRB 154 Build Solution Pathways- (page 227)- working in small groups, students try several ways to solve the problem –IRB 156</p> <p>EXTENSION/ENRICHMENT ACTIVITY: ELL Instruction: Connect to Real Life- Find examples of ratios and unit rates in advertisements from local stores-IRB 152; research multiple meanings of the word <i>proportion</i> –IRB 154; ask students to select an example from the lesson to explain (restate) to class- IRB 156 Extension Activity: Draw conclusions from data by researching examples of ratios in different areas (geographic, economic, manufacturing)- IRB152; compare unit rates in examples of ratios in online or print advertisements (particularly the same items at different stores)- IRB 154; Interpret information – find examples of house or room plans with scales and recreate plan to double the size of the house or room- IRB 156</p> <p>EXIT SLIP: Think About Math Activities: pages 214, 215, 219, 221, 226, 227</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 8 Number System- 4, 5 Expressions & Equations- 4</p>	<p>TABE CORRELATION TO TEXT Applied Mathematics: Number & Number Operations Applied Mathematics: Computation In Context Applied Mathematics: Measurement Applied Mathematics: Problem Solving & Reasoning</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

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TEXT AND CCR STANDARDS	UNIT DESCRIPTIONS AND ASSESSMENT STANDARDS	COMPONENTS OF EFFECTIVE INSTRUCTION
<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 3 (pages 230-247)</p> <p>TOPIC: MORE NUMBER SENSE & OPERATIONS</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:</i>88-96 <i>Number Power-Fractions, Decimals, Percents:</i> 101-124, 150-158 <i>Number Power-Word Problems:</i> 115-137, 168-169 <i>Number Power-Review:</i> 74-77, 138-159 <i>Number Power-Financial Literacy:</i> 31-38, 50-56, 79-136, 173-210, 236-238 <i>Workplace Skills: Applied Mathematics-</i>Lessons 3, 5, 16, 17</p> <p>DIGITAL RESOURCES: <i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 1 (Number and Number Operations), Lesson 1.5 Unit 8 (Percents) <i>Workforce Connects: Applied Mathematics,</i> Lessons 3.3, 5.6</p>	<p>WEEK 9</p> <p>UNIT TITLE: 3- MORE NUMBER SENSE & OPERATIONS</p> <p>LESSON(S) TITLE: PERCENTS (7.4- <i>Introduction To Percents</i>; 7.5- <i>Solve Percent Problems</i>; 7.6- <i>Use Percents In The Real World</i>)</p> <p>TEXT LESSON OBJECTIVES: 7.4- Understand and write percents; change fractions to decimals and decimals to fractions; change fractions to percents and percents to fractions; change decimals to percents and percents to decimals 7.5- Write percents as either decimals or fractions to solve problems; use proportions to solve percent problems 7.6- Understand the interest formula; use a formula to find simple interest</p> <p>BEFORE, DURING & AFTER READING STRATEGIES: Use prior experiences to define vocabulary, comparing to descriptions in the text- IRB 157 Write sentences as a class for vocabulary, using suggestions from students- IRB 159 Prior Knowledge- list all definitions that students already have for the vocabulary, then relate to the meaning in the text- IRB 161</p> <p>ADDITIONAL STRATEGIES: Compare and Contrast fractions and decimals (page 231) – working in pairs, students find at least two similarities and two differences from the text- IRB 157</p> <p>HOME LEARNING: Using the interest rates of a local bank, determine the simple interest earned each year on an initial principal of \$100 for 5 years. Use “Additional Text” resources.</p>	<p>BELL RINGER: 7.4- Have students solve simple division problems using whole numbers and decimals- IRB 157 7.5- Write proportions on the board, leaving a numerator or denominator in either fraction empty- ask students to find the missing value- IRB 159 7.6- Write two columns of numbers on the board(60%, 6.6%, 16% and 0.066, 0.16, 0.6) and have students match percent and equivalent decimal- IRB 161</p> <p>VOCABULARY: 7.4- percent, similarity, repeating decimal 7.5- extremes, means, portion 7.6- convert, interest, principal, rate, time, formula</p> <p>STUDENT PRODUCT/PROJECT: Construct Viable Arguments (page 232) In small groups students discuss Ginger’s reasoning and determine the correct tip.- IRB 158 Evaluate Reasoning from an experience in which student purchased something that came with a discount-how did they determine the savings- IRB 160 Solve Real-World Arithmetic Problems- find examples of percents in newspaper, direct mail, and how to calculate tax or discount- IRB 161</p> <p>EXTENSION/ENRICHMENT ACTIVITY: ELL Instruction: Answer questions about lesson [what do percents. fractions, and decimals have in common?]- IRB 158; Volunteers retell how to identify the part, whole and percent in a problem- IRB 160; use the internet to find the annual interest rate for a savings account at a bank- then determine a principal amount and time for the interest earned- IRB 162 Extension Activity: Categorize Everyday Examples of fractions, decimals or percents from newspapers and magazines and the jobs or daily events that pertain to them- IRB 158; Compare discounts [\$40 sweater on sale for 45% off original price or 25% off original and an additional 20% off discounted price]- IRB 160; Collect and display various terms associated with interest [compounded daily, APR] with explanations and examples- IRB 162</p> <p>EXIT SLIP: Think About Math Activities: pages 232, 234, 238, 239, 243</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 1, 3, 8 Number System- 4, 5</p>	<p>TABE CORRELATION TO TEXT: Mathematics Computation: Percents Applied Mathematics: Number & Number Operations Applied Mathematics: Problem Solving & Reasoning</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

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TEXT AND CCR STANDARDS	UNIT DESCRIPTIONS AND ASSESSMENT STANDARDS	COMPONENTS OF EFFECTIVE INSTRUCTION
<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 3 (pages 248-267)</p> <p>TOPIC: MORE NUMBER SENSE & OPERATIONS</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Number Power-Algebra:</i> 26-39 <i>Number Power- Geometry:</i> 52-53 <i>Number Power-Pre-Algebra:</i> 144-145 <i>Number Power-Review:</i> 222-223 <i>Number Power-Transitions Math:</i> 5-12</p> <p>DIGITAL RESOURCES: <i>Instruction Targeted for TABE Success, Level A, Mathematics :</i> Unit 1 (number and Number Operations), Lesson 1.5 Unit 13 (Algebraic Operations), Lesson 13.1</p>	<p>WEEK 10</p> <p>UNIT TITLE: 3- MORE NUMBER SENSE & OPERATIONS</p> <p>LESSON(S) TITLE: EXPONENTS & ROOTS (<i>8.1- Exponents; 8.2- Roots; 8.3- Scientific Notation</i>)</p> <p>TEXT LESSON OBJECTIVES: 8.1- Evaluate exponents; evaluate arithmetic expressions with exponents 8.2- Find square roots; find cube roots 8.3- Translate standard notation to scientific notation; translate scientific notation to standard notation</p> <p>BEFORE, DURING & AFTER READING STRATEGIES: Use visuals to represent vocabulary (students work in groups to draw a picture that might represent a vocabulary word)- IRB 163 Word Sort- Define the words <i>square</i> and <i>cube</i>- ask students to sort words related to each into two columns- IRB 165 Word Maps- Use Vocabulary Map (IRB 377) to record meanings of vocabulary- IRB 167</p> <p>ADDITIONAL STRATEGIES: Mnemonic device- (Math Link- page 250) uses PEMDAS for order of operations, list other devices [Super Man Helps Every One- names of the Great Lakes]- IRB 163 Math Link- Using calculator to find square and cube roots (page 257)</p> <p>HOME LEARNING: Extend the table of squares and cubes (page 255) to include bases of 11 to 20, using paper and pencil. Verify answers with a calculator. Restate the distances of the planets to the sun using scientific notation. Use "Additional Text" resources.</p>	<p>BELL RINGER: 8.1- Write problems of repeated multiplication on the board (2x2x2) and ask student to find the product- IRB 163 8.2- Ask students to find the value of this expression: $[4+3x(10/2)-18(1)]$ and explain how they found the value (order of operations)- IRB 165 8.3- Ask students to evaluate: $10^1, 10^2, 10^3$ – IRB 167</p> <p>VOCABULARY: 8.1- base power, exponent 8.2- square root, squared, cube root, perfect cube, perfect square, radical sign, cell 8.3- scientific notation, standard notation, annex zeros, powers of ten</p> <p>STUDENT PRODUCT/PROJECT: Evaluate Expressions- students solve the problem left to right, then apply PEMDAS and compare results (page 251), IRB 164 Evaluate Reasoning- (page 255) students share experiences in which they worked with others to solve a problem, then in pairs they think of a real-world problem involving square- or cube-roots, and develop a model to share- IRB 166 Perform Operations- (page 262) use scientific notation for the distances of Voyager I and Voyager II from Earth- IRB 168</p> <p>EXTENSION/ENRICHMENT ACTIVITY: ELL Instruction: Clarify exponents in that one does not multiply the base by the exponent IRB164; Use a Venn Diagram (IRB 374) to define "Exponents" and "Roots"- IRB 166; Brainstorm numbers in pairs to practice writing numbers using scientific notation- IRB 168 Extension Activity: Explain Phenomena in Terms of Concepts-use real-life examples in which numbers are squared and cubed to draw relationships to lesson- IRB164; form logical steps by using a calculator to validate estimated square roots- IRB166; collect and display data on very small things in nature (diameter of a red blood cell)- IRB 168</p> <p>EXIT SLIP: Think About Math Activities: pages 251, 252, 257, 261, 262</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 6, 8 Number System- 3 Expressions & Equations- 3</p>	<p>TABE CORRELATION TO TEXT: Applied Mathematics: Number & Number Operations Applied Mathematics: Problem Solving & Reasoning</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

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TEXT AND CCR STANDARDS	UNIT DESCRIPTIONS AND ASSESSMENT STANDARDS	COMPONENTS OF EFFECTIVE INSTRUCTION
<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 4 (pages 268-289)</p> <p>TOPIC: DATA ANALYSIS & PROBABILITY</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:</i>154-163</p> <p><i>Number Power-Graphs, Charts,, Schedules, Maps:</i> 44-55, 174-176</p> <p><i>Number Power-Problem-Solving/ Test-Taking Strategies:</i>141-150, 184-185</p> <p><i>Number Power-Analyzing Data:</i> 30-62, 119-123, 146-163</p> <p><i>Number Power-Pre-Algebra:</i> 70-85</p> <p><i>Number Power-Review:</i> 54-55, 78-79, 134-135, 160-161, 164-171</p> <p><i>Workplace Skills: Applied Mathematics-Lesson 8</i></p> <p><i>Workplace Skills: Locating Information-Lessons 1, 3- 7</i></p> <p>DIGITAL RESOURCES:</p> <p><i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 12 (Data Analysis) Unit 13 (Statistics and Probability), Lesson 13.2</p> <p><i>Workforce Connects: Applied Mathematics, Lesson 4.4</i></p> <p><i>Workforce Connects: Locating Information, Lessons 3.1, 4.1-4.5</i></p>	<p>WEEK 11</p> <p>UNIT TITLE: 4- DATA ANALYSIS & PROBABILITY</p> <p>LESSON(S) TITLE: DATA (9.1- Measures Of Central Tendency & Range; 9.2- Graphs & Line Plots; 9.3- Plots & Misleading Graphs)</p> <p>TEXT LESSON OBJECTIVES: 9.1- Find the mean, median, and mode; find the range; understand measures of central tendency 9.2- Read a bar graph, line graph, and circle graph; read a line plot; understand different types of graphs 9.3- Understand stem-and-leaf plots; identify misleading displays of data</p> <p>BEFORE, DURING & AFTER READING STRATEGIES: Use Prior Knowledge-ask students to give contexts in which they have read or heard the vocabulary words, using personal examples- IRB 169, 171 Make Predictions- explain the meaning of a prediction (foretell in advance), using personal observations and experiences or scientific evidence-(page 275, IRB 171) Study Cards- create vocabulary cards with definition on the back along with an example and a sentence.- IRB173</p> <p>ADDITIONAL STRATEGIES: 21st Century Skill- Global Awareness- discuss the purpose of surveys taken in public areas and what happens with the data collected. -IRB 172 Critique the Reasoning of Others- ask “Why is it important to question the logic of someone’s actions, thinking and conclusion?”- IRB 173</p> <p>HOME LEARNING: Using the data set from the first “bell ringer” (IRB169), students create at least two graphs (bar, line, circle) to aid in interpreting the data. Use “Additional Text” resources.</p>	<p>BELL RINGER: 9.1- Ask students to generate questions related to student interest, then build data tables and record the survey results. IRB169 9.2- In groups, students collect data among themselves and organize in labeled data tables. IRB 171 9.3- Using a published bar graph, ask students to identify its features, then find measures of central tendency from the data.- IRB 173</p> <p>VOCABULARY: 9.1- data, range, mean, measures of central tendency, median, mode 9.2- bar graph, circle graph, graph, line graph, line plot, horizontal axis, vertical axis, trend 9.3- key, leaf, stem, outlier, stem-and-leaf plot, mislead</p> <p>STUDENT PRODUCT/PROJECT: Review the data collected during the readiness activity, determining the measures of central tendency. IRB 169 Class made circle graph- displaying data (what was eaten for breakfast) based on the percentages of total class – IRB172 Understand persuasive techniques by listing some that fellow students use when they hope to persuade someone of something-IRB173</p> <p>EXTENSION/ENRICHMENT ACTIVITY: ELL Instruction: Analyze results of a simple survey (favorite ice cream flavor), first with a tally table, then data set, determining measures of central tendency- IRB 170; generate questions as a group about the graphs studied with students finding the answers- IRB 172; students collect a variety of items and display them with a stem-and-leaf plot-IRB 174 Extension Activity: Organize, represent, and compare data using the age of US presidents at the time of their inauguration- identify patterns and form conclusions- IRB 170; graph data based on a real-world interest (energy consumption rates)- IRB 172; working in small groups, students research online sports statistics, organize data in a stem-and-leaf plot, identify range and measures of central tendency-IRB 174</p> <p>EXIT SLIP: Think About Math Activities: pages 272, 279, 286</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 3, 4 Statistics & Probability- 1, 2</p>	<p>TABE CORRELATION TO TEXT: Applied Mathematics: Data Analysis Applied Mathematics: Statistics & Probability</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

MATH ABE PACING GUIDES <COMMON CORE BASICS- McGraw-Hill Education>

TEXT AND CCR STANDARDS	UNIT DESCRIPTIONS AND ASSESSMENT STANDARDS	COMPONENTS OF EFFECTIVE INSTRUCTION
<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 4 (pages 290-309)</p> <p>TOPIC: DATA ANALYSIS & PROBABILITY</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:</i>151-153</p> <p><i>Number Power- Analyzing Data:</i>13-15, 56-92</p> <p><i>Number Power-Pre-Algebra:</i> 88-103</p> <p><i>Number Power-Review:</i> 172-179</p> <p><i>Workplace Skills: Applied Mathematics</i>-Lesson 32</p> <p>DIGITAL RESOURCES:</p> <p><i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 13 (Statistics and Probability), Lessons 13.1, 13.3</p> <p><i>Workforce Connects: Applied Mathematics,</i> Lesson 7.6</p>	<p>WEEK 12</p> <p>UNIT TITLE: 4- DATA ANALYSIS & PROBABILITY</p> <p>LESSON(S) TITLE: PROBABILITY (<i>10.1- Counting Methods; 10.2- Introduction To Probability; 10.3- Compound Events</i>)</p> <p>TEXT LESSON OBJECTIVES: 10.1- Count possible outcomes; understand and use tree diagrams 10.2- Find theoretical probability; find experimental probability; make predictions 10.3- Find the probability of mutually exclusive events; find the probability of overlapping vents; find the probability of independent and dependent events</p> <p>BEFORE, DURING & AFTER READING STRATEGIES: Make Connections- draw upon prior knowledge to connect vocabulary as it would be used outside of class- IRB175 Word Bench- Ask students to describe the contexts in which they have seen or heard the vocabulary words before IRB 177 Word Maps- Use a template [square divided into 4 parts with a smaller square in the center] to work with vocabulary- center square is the word, the outside squares are definition, picture, example, sentence- IRB 179</p> <p>ADDITIONAL STRATEGIES: Reason Abstractly- when working with a word problem the words are concrete or real, and is abstract when written using numbers and symbols- page 294, IRB 175-176 21st Century Skill- Ethics and Probability- Ethics are the moral guiding principles that govern a person’s behavior and often overlap with probability of success for an event or action- (page 297, IRB 178) Represent Real-World Problems- Use overlapping circles to organize components of the problem before writing and solving an equation- (page 303, IRB180)</p> <p>HOME LEARNING: Research the use of the <i>Punnett Square</i> as an application of the probability of inherited traits (reference Science text, pages 186-188). Use “Additional Text” resources.</p>	<p>BELL RINGER: 10.1- Ask students to solve simple multiplication problems that contain three or more factors (2x3x4x5)- IRB 175 10.2- Using a number cube, ask students to identify the total number of possible outcomes, and repeat by adding more number cubes.-IRB177 10.3-Pair up students with a number cube or spinner and ask them to find the probability of an event related to the object. IRB 179</p> <p>VOCABULARY: 10.1- event, outcome, compound event, Counting Principle, sample space, tree diagram 10.2- combination, trials, certain event, experimental probability, impossible event, permutation, probability, theoretical probability, support 10.3- replacement, dependent events, independent events, mutually exclusive events, overlapping events</p> <p>STUDENT PRODUCT/PROJECT: Utilize Counting Techniques- (page 293) students complete a tree diagram. Math Link- Use the information in Example 2 to draw a diagram to help interpret the text (page 298, IRB 178) Independent and Dependent Events- In small groups, students will use real items to work through the examples in the lesson, summarizing the steps to solve the problems (pages 304-305, IRB 180)</p> <p>EXTENSION/ENRICHMENT ACTIVITY: ELL Instruction: Students build a menu for a sandwich shop including choices of items, then use a tree diagram to calculate all the possible combinations or outcomes- IRB 176; In small groups students will explain how to find both the theoretical and experimental probability of getting two heads in a coin toss, then run through 10 trials to verify –IRB 178; students work in pairs to determine if an event is overlapping, mutually exclusive, independent or dependent- IRB 180 Extension Activity: Students work in groups to determine the combinations of camping gear needed for a trip to various destinations, with outcomes in a tree diagram-IRB 176; Explain phenomena in terms of concepts via designing spinners made of equal parts and a question for the spinner then work as teams to find the answers-IRB178; students design a card game that involves dependent events with an explanation for determining the probability of dependent events in the game-IRB 180</p> <p>EXIT SLIP: Think About Math Activities: pages 294, 299, 304</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 2, 8 Statistics & Probability- 2, 3, 4</p>	<p>TABE CORRELATION TO TEXT: Applied Mathematics: Statistics & Probability Applied Mathematics: Problem Solving & Reasoning</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

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TEXT AND CCR STANDARDS	UNIT DESCRIPTIONS AND ASSESSMENT STANDARDS	COMPONENTS OF EFFECTIVE INSTRUCTION
<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 5 (pages 310-337)</p> <p>TOPIC: MEASUREMENT & GEOMETRY</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:</i>113-121, 129-142</p> <p><i>Number Power- Addition, Subtraction, Multiplication, Division:</i> 120-127</p> <p><i>Number Power-Fractions, Decimals, Percents:</i> 134-137, 142-143, 147-149</p> <p><i>Number Power-Geometry:</i> 10-29, 34-43, 64-87, 164-167</p> <p><i>Number Power-Word Problems:</i> 148-149</p> <p><i>Number Power-Measurement:</i> 10-41, 49-63, 80-88</p> <p><i>Number Power-Pre-Algebra:</i> 106-115, 185</p> <p><i>Number Power-Review:</i> 210-221, 226-227</p> <p><i>Number Power-Financial Literacy:</i> 70-76</p> <p><i>Workplace Skills: Applied Mathematics-Lessons 2, 12, 13, 15, 23, 24, 27</i></p> <p>DIGITAL RESOURCES: <i>Instruction Targeted for TABE Success, Level D, Mathematics :</i> Unit 10 (Measurement), Lessons 10.1, 10.2 Unit 11 (Geometry and Spatial Sense), Lessons 11.1, 11.2, 11.3</p> <p><i>Workforce Connects: Applied Mathematics, Lessons 2.3, 5.1-5.2, 5.4, 6.5-6.6, 7.1</i></p>	<p>WEEK 13</p> <p>UNIT TITLE: 5- MEASUREMENT & GEOMETRY</p> <p>LESSON(S) TITLE: MEASUREMENT / GEOMETRY (<i>11.1- Customary Units; 11.2-Metric Units; 12.1- Geometric Figures; 12.2- Perimeter & Circumference</i>)</p> <p>TEXT LESSON OBJECTIVES: 11.1- Change from one customary unit to another; change from mixed units; change to mixed units 11.2- Change from one metric unit to another; understand the basic metric unit for length; understand the basic metric unit for capacity; understand the basic metric unit for mass 12.1- Identify geometric figures; identify and classify angles; identify and classify triangles and quadrilaterals; identify the parts of circles 12.2- Find the perimeter of polygons; find the circumference of circles</p> <p>BEFORE, DURING & AFTER READING STRATEGIES: Make Connections- Students define words and describe most recent experience related to measurement, what and how measured- IRB 181 Background Knowledge- Students share where they have read, heard or used the words <i>gram, liter</i> and <i>meter</i>, and relate to measurement- IRB183 Study Cards for vocabulary made with definitions, pronunciation, sentence for each word, and drawings to illustrate. They can add to these cards as they go through the lesson.- IRB 185 Study Cards- <i>circumference</i> and <i>perimeter</i> are written on separate cards, with details known about these measurements including formulas-IRB187</p> <p>ADDITIONAL STRATEGIES: Math Link- Write <i>United States</i> on the board and ask students how they would abbreviate the words. Follow the directions in Math Link (page 312) and list and share examples of abbreviations- IRB 181 Use Prefixes- Review the table on page 317, asking for examples of words that include the listed prefixes- IRB184 Analyze Events and Ideas-Research what Archimedes did to find better approximations of pi, find an interactive representation -page 327, IRB185</p>	<p>BELL RINGER: 11.1- Ask students to solve simple multiplication and division problems- IRB 181 11.2- Ask students to solve simple standard unit conversion problems, such as <i>24 inches= ___feet</i>- IRB 183 12.1- Draw triangles, circles, squares and rectangles on the board, and ask students to identify real-world examples of items in these shapes-IRB 185 12.2-Draw a square and a rectangle on the board and ask students to label the sides with tick marks to show congruency- IRB 187</p> <p>VOCABULARY: 11.1- capacity, length, time, weight, unit, abbreviation 11.2- gram, liter, meter, power of 10, prefix 12.1- circle, rectangle, segment, square, angle, parallel lines, perpendicular lines, quadrilateral, classify 12.2- perimeter, circumference, diameter, pi, radius</p> <p>STUDENT PRODUCT/PROJECT: Represent Real-World Problems- In pairs, students solve the <i>Core Skill</i> (page 314), using a diagram and working through the conversions, then share with the class-IRB 182; Use Ratio Reasoning- Ask students set up the problem in the Core Skill on page 318, setting up the ratio so that all units are cancelled except for the one that they are being asked to find- IRB 184; Math Link- Ask students to draw the shapes from the lesson using the tick marks for congruent sides and square for right angles (page 329); Model with Mathematics- students work in pairs to determine steps to answer problem (page 333, IRB 188)</p> <p>EXTENSION/ENRICHMENT ACTIVITY: ELL Instruction: Write Cloze passage on the board, asking students to complete with items that would be measured in listed units- IRB 182; Pronounce metric words while giving examples of when each is used and the abbreviations for each- IRB 184; have students recall facts about the shapes studied-IRB 186; ask students to rephrase the relationship between the radius and the diameter of a circle- IRB 188 Extension Activity: Solve a measurement problem- tell students that 1 pint of water weighs about 1 pound and ask them to determine the weight in other measurements-IRB 182; use the metric conversion chart on page 318 to develop their own method of metric conversion- IRB 184; place and label four points on a plane (no 3 in a single line) and ask students how many lines can be formed - IRB 186; ask students to revise the formula for circumference using radius instead of diameter- IRB 188</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 4, 8 Number System- 4 Geometry- 1, 2, 3</p>	<p>HOME LEARNING: Students record the measurements of rooms and items in their homes. Use "Additional Text" resources.</p> <p>TABE CORRELATION TO TEXT: Applied Mathematics: Estimation Applied Mathematics: Measurement Applied Mathematics: Geometry & Spatial Sense Applied Mathematics: Problem Solving & Reasoning</p>	<p>EXIT SLIP: Think About Math Activities: pages 314, 318, 319, 327, 328, 334, 336</p> <p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

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<p>TEXT(S): COMMON CORE BASICS- MATHEMATICS</p> <p>TEXT UNIT: UNIT 5 (pages 338-374)</p> <p>TOPIC: MEASUREMENT & GEOMETRY</p> <p>SUGGESTED INTEGRATION OF ADDITIONAL TEXT: <i>Achieving TABE Success in Mathematics, Level D:</i>122-123, 143-148</p> <p><i>Number Power- Addition, Subtraction, Multiplication, Division:</i> 128-132</p> <p><i>Number Power-Fractions, Decimals, Percents:</i> 138-141, 144-145</p> <p><i>Number Power-Algebra:</i> 188-189</p> <p><i>Number Power- Geometry:</i>54-59, 90-127, 148-149, 162-163</p> <p><i>Number Power- Graphs, Charts, Schedules, Maps:</i> 114-129</p> <p><i>Number Power-Word Problems:</i> 166-167</p> <p><i>Number Power-Problem-Solving/ Test-Taking Strategies:</i> 162-168, 192-193</p> <p><i>Number Power- Measurement:</i>94-101, 138-141</p> <p><i>Number Power-Pre-Algebra:</i> 116-121, 124-126, 182-184, 188-191</p> <p><i>Number Power-Review:</i> 224-225, 228-237</p> <p><i>Number Power-Financial Literacy:</i> 70-76</p> <p><i>Workplace Skills: Applied Mathematics-Lessons</i> 13, 21, 26, 30</p> <p>DIGITAL RESOURCES: <i>Instruction Targeted for TABE Success, Level D, Mathematics</i> Unit 10 (Measurement), Lesson 10.3 Unit 11 (Geometry and Spatial Sense), Lesson 11.4</p> <p><i>Workforce Connects: Applied Mathematics, Lessons</i> 5.2, 6.3, 6.8, 7.4</p>	<p>WEEK 14</p> <p>UNIT TITLE: 5- MEASUREMENT & GEOMETRY</p> <p>LESSON(S) TITLE: GEOMETRY (<i>12.3- Scale Drawings & Measurement; 12.4- Area; 12.5- Pythagorean Theorem; 12.6- Geometric Solids & Volume; 12.7- Volume Of Cones, Cylinders, & Spheres</i>)</p> <p>TEXT LESSON OBJECTIVES: 12.3- Compute actual lengths from a scale drawing; draw geometric shapes with given conditions; reproduce a scale drawing at a different scale 12.4- Find the area of squares, rectangles, and triangles; find the area of circles; find the area of complex shapes 12.5- Explain the Pythagorean theorem; apply the Pythagorean theorem to solve problems 12.6- Identify three-dimensional figures; identify rectangular solids and cubes; find the volume of rectangular solids and cubes 12.7- Calculate the volume of cones, cylinders and spheres; calculate the volumes of complex 3-D objects</p> <p>BEFORE, DURING & AFTER READING STRATEGIES: Study Cards-students complete cards with definition, pronunciation, sentence and illustration for each- IRB 189, IRB 197 Word Web- students develop a web based on the term <i>area</i>- IRB 191 Respond to Questions- In groups students use study cards to test each other-IRB193 Connect to Life Experience- use words in sentences about themselves- IRB 195</p> <p>ADDITIONAL STRATEGIES: Use Appropriate Math Tools- Internet search for different tools to measure length- categorize by size of measurements that need to be made- (page 341, IRB 190) Make Use of Structure- Compare the formulas for area and circumference of a circle, identifying the common factor, repeat for other shapes- IRB 197</p> <p>HOME LEARNING: Using the measurements of a room, determine the cubic feet for the purpose of buying the correct size air conditioner (cooling capacity). Using the measurements of various rooms, calculate the cost of installing a new floor based on a local home improvement store’s flooring prices. Use “Additional Text” resources.</p>	<p>BELL RINGER: 12.3- Sketch on board one dog and two cats, then ask students to write the ratios of dog to cat, cat to dog, cat to animal, dog to animal-IRB 189 12.4-Ask students to identify the length / width, base / height, and radius /diameter of the shapes on page 346. 12.5- Classify triangles by their angles, practice squares and square roots of numbers- IRB 193 12.6- Ask students to solve multiplication with 3 factors- IRB 195 12.7-Review method for finding area of composite objects- IRB 197</p> <p>VOCABULARY: 12.3- proportion, scale drawing, scale factor 12.4- area, complex shape, height, length, width, base 12.5- congruent, proof, Pythagorean theorem, quadratic equations, theorem, hypotenuse, leg 12.6- cube, edge, face, volume, rectangular prism, rectangular solid, three-dimensional figure, vertex 12.7- apex, base, cone, cylinder, sphere, frustum</p> <p>STUDENT PRODUCT/PROJECT: Draw Geometric Shapes with Given Conditions- students draw the door that will fit the scaled dimensions (pages 340-341) Build Solution Pathways- students work in groups to solve the problem, following their list of steps- (page 348) Calculate Volume-in groups students convert 1 cu yd. to cu ft.-IRB 196 Math Link- work through the subtraction-of-volume concept-IRB 198</p> <p>EXTENSION/ENRICHMENT ACTIVITY: ELL Instruction: Find multiple meanings and usages for the word <i>scale</i> IRB 190; use the Venn diagram handout to record information on area and circumference of circles- IRB 192; compare words “theorem” and “theory” including meanings-IRB194; visualize and list examples of geometric solids-IRB 196; find multiple meanings for “volume”-IRB198 Extension Activity: Compare a drawing of a simple geometric shape to a scaled down drawing to determine if the angles remain the same-IRB 190; investigate the area of parallelograms online to develop a formula- IRB 192; research generalization of Pythagorean Theorem to areas of squares with one boundary coincident to a right triangle-IRB 194; construct prisms with 24 cubes- IRB 196; compare volume formulas using a Venn diagram- IRB 198.</p> <p>EXIT SLIP: Think About Math Activities: pages 340, 349, 355, 356, 363, 367, 368</p>
<p>CCR STANDARDS EMBEDDED IN TEXT (see CCR list): Math Practice 4, 5, 7 Number System- 5 Geometry- 1, 2, 4</p>	<p>TABE CORRELATION TO TEXT: Applied Mathematics: Measurement Applied Mathematics :Geometry & Spatial Sense Applied Mathematics: Problem Solving & Reasoning</p>	<p>EVALUATION/ASSESSMENT: In each lesson: Vocabulary Review, Skill Review, Skill Practice At end of Chapter: Chapter Review</p>

COLLEGE AND CAREER READINESS MATHEMATICS STANDARDS (level D, 6-8)

MATHEMATICAL PRACTICES (all levels):

- MP1:** Make sense of problems and persevere in solving them.
- MP2:** Reason abstractly and quantitatively.
- MP3:** Construct viable arguments and critique the reasoning of others.
- MP4:** Model with mathematics.
- MP5:** Use appropriate tools strategically.
- MP6:** Attend to precision.
- MP7:** Look for and make use of structure.
- MP8:** Look for and express regularity in repeated reasoning.

MATHEMATICS STANDARDS LEVEL D (6–8)

NS (Number System)

- 1-Apply and extend previous understandings of numbers to the system of rational numbers.
- 2-Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
- 3-Know that there are numbers that are not rational, and approximate them by rational numbers.
- 4-Understand ratio concepts and use ratio reasoning to solve problems.
- 5-Analyze proportional relationships and use them to solve real-world and mathematical problems.

EE (Expressions and Equations)

- 1-Use properties of operations to generate equivalent expressions.
- 2-Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
- 3-Work with radicals and integer exponents.
- 4-Understand the connections between proportional relationships, lines, and linear equations.
- 5-Analyze and solve linear equations and pairs of simultaneous linear equations.

F (Functions)

- 1-Define, evaluate, and compare functions.
- 2-Use functions to model relationships between quantities.

G (Geometry)

- 1-Draw, construct, and describe geometrical figures and describe the relationships between them.
- 2-Solve real-life and mathematical problems involving angle, measure, area, surface area, and volume.
- 3-Understand congruence and similarity using physical models, transparencies, or geometry software.
- 4-Understand and apply the Pythagorean Theorem.

SP (Statistics and Probability)

- 1-Summarize and describe distributions.
- 2-Use random sampling to draw inferences about a population.
- 3-Draw informal comparative inferences about two populations.
- 4-Investigate chance processes and develop, use, and evaluate probability models.
- 5-Investigate patterns of association in bivariate data.

TEXT & DIGITAL MATERIALS LIST (with ISBN numbers)

- Achieving TABE Success in Mathematics, Level D (978-0-07-704469-5)
- Common Core Basics: Mathematics Core Subject Module (978-0-07-657519-0)
- Common core Basics: Instructor Resource Binder (978-0-07-657523-7)
- Number Power- Addition, Subtraction, Multiplication, Division (978-0-07-657794-1)
- Number Power-Fractions, Decimals, Percents (978-0-07-659227-2)
- Number Power-Algebra (978-0-07-659228-9)
- Number Power-Word Problems (978-0-07-659231-9)
- Number Power- Measurement (978-0-07-659234-0)
- Number Power-Graphs, Charts, Schedules, Maps (978-0-07-659230-2)
- Number Power-Problem-Solving/ Test-Taking Strategies (978-0-07-659232-6)
- Number Power-Analyzing Data (978-0-07-659233-3)

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- Workplace Skills: Applied Mathematics, Student Workbook (978-0-07-657481-0)
- Workplace Skills: Locating Information, Student Workbook (978-0-07-657482-7)

DIGITAL INSTRUCTION

- Instruction Targeted for TABE Success (*online and LAN available*)
- Workforce Connects (*complete online career navigation system*)