## EXPEDITIONS TO NUMERACY

## Place Value City

Place Value City consists of two volumes. Volume 1 contains content related to $0-10$ concepts and skills, and Volume 2 covers the 1-19, 0-99, 0-999, and 0-1000+ content.

| Number Set | Explorations | Activities |
| :---: | :---: | :---: |
| 0-10 | 1. One, Two, Three | 1-1: First Time Counting to 3 |
|  |  | 1-2: Number Cards |
|  |  | 1-3: Number Symbols and Blocks |
|  |  | 1-4: Circle the Number |
|  |  | 1-5: How Many Blocks? |
|  | 2. Counting Objects to 10 | 2-1: First Time Counting to 10 |
|  |  | 2-2: Round Robin |
|  |  | 2-3: Counting Pairs |
|  |  | 2-4: Bean Bag Toss |
|  |  | 2-5: Block Letters |
|  |  | 2-6: Copy Cat |
|  |  | 2-7: Counting Pennies |
|  |  | 2-8: Counting Objects with Blocks |
|  |  | 2-9: Counting Pictures |
|  |  | 2-10: Paper Plates |
|  |  | 2-11: Hands On |
|  | 3. Reading and Writing Numerals to 10 | 3-1: Count and Match |
|  |  | 3-2: Reverse Count and Match |
|  |  | 3-3: Read and Say |
|  |  | 3-4: Spinner Game 1 |
|  |  | 3-5: Spinner Game 2 |
|  |  | 3-6: Go Fish! |
|  |  | 3-7: Number Symbols |
|  | 4. Matching Numerals and Sets | 4-1: Match the Number |
|  |  | 4-2: Filling Shapes |
|  |  | 4-3: Bingo Blocks |
|  |  | 4-4: Picture Cards |
|  |  | 4-5: Two Rows Matching |
|  |  | 4-6: Block Collections |
|  |  | 4-7: Counting Other Objects |
|  |  | 4-8: Classroom Scavenger Hunt |
|  |  | 4-9: Count and Check |
|  |  | 4-10: Number Line Predictions |
|  | 5. More, Less, Equal | 5-1: Matching Picture Collections 1 |
|  |  | 5-2: Matching Picture Collections 2 |
|  |  | 5-3: Block Designs |
|  |  | 5-4: Which Has More? |
|  |  | 5-5: More and Less |
|  |  | 5-6: Equal Stacks |
|  |  | 5-7: Comparing Collections |
|  |  | 5-8: Number-Line Measures |
|  |  | 5-9: Take a Peek |
|  |  | 5-10: One-to-One Comparisons |
|  |  | 5-11: Using Numerals to Compare Quantities |


|  | 6. Ten-Frame Formations | 6-1: Ten-Frame Formation 1 |
| :---: | :---: | :---: |
|  |  | 6-2: Ten-Frame Formation 2 |
|  |  | 6-3: Random Numbers on the Ten-Frame |
|  | 7. Ordinal Words and Numbers | 7-1: Pick the Place |
|  |  | 7-2: Ordinal Bingo |
|  |  | 7-3: Line-Up |
|  |  | 7-4: Ordinal Spin |
|  | 8. Ten Ones Equal Ten Ones | 8-1: Packing 10's |
|  |  | 8-2: Large and Small |
|  |  | 8-3: Ten Fingers |
|  |  | 8-4: Using the Ten-Frame |
|  |  | 8-5: Tub o' Blocks |
|  |  | 8-6: Around and Around |
|  |  | 8-7: Making Predictions |
|  |  | 8-8: Sliding Holders/Locking Holders |
|  |  | 8-9: Build and Draw |
|  | 9. Benchmarkds within 0-10 | 9-1: Empty, Full, or Half-Full |
|  |  | 9-2: Color in the Blocks |
|  |  | 9-3: Using the Half-Mark |
|  |  | 9-4: How Many Blocks? Part 1 |
|  |  | 9-5: How Many Blocks? Part 2 |
|  | 10. Counting Backward from 10 | 10-1: Counting Backward on the Number Line |
|  |  | 10-2: Coloring to Count Backward |
|  |  | 10-3: Using Block Models to Count Backward |
|  |  | 10-4: Backward Steps |
|  |  | 10-5: Jumping Jacks |
|  |  | 10-6: Check Yourself |
| 0-19 | 1. Counting Past 10 | 1-1: Counting to 10 on the Two-Place Counter |
|  |  | 1-2: Why Is 10 a Two-Place Number? |
|  |  | 1-3: Pattern of the Count |
|  |  | 1-4: Learning Names for Teen Numbers |
|  |  | 1-5: Recognizing Symbols for Teen Numbers |
|  | 2. Place Value Meaning for Teen | 2-1: What Do These Numbers Mean? |
|  | Numbers | 2-2: Modeling Teen Numbers on the Place Value Mat |
|  |  | 2-3: Matching Number Symbols and Block Models |
|  |  | 2-4: Two Views of the Same Number |
|  |  | 2-5: Packing As Much As Possible |
|  |  | 2-6: Reading Block Models |
|  |  | 2-7: How Many Ones? |
|  |  | 2-8: Concentration |
|  |  | 2-9: Old Witch |
|  |  | 2-10: Go Fish! |
|  | 3. Ordering Numbers 0-19 | 3-1: Putting Numbers 0-19 in Order |
|  |  | 3-2: Which Number is Larger? |
|  |  | 3-3: Counting from 1 to 19 and Back |
| 0-99 | 1. Counting by Tens | 1-1: Counting by Tens on the Two- Place Counter |
|  |  | 1-2: Using Two-Place Drawings to Count by Tens |
|  |  | 1-3: Block Models and Numeral Cards |
|  |  | 1-4: Counting by Tens from 10 to 90. |
|  |  | 1-5: Sad Sam |
|  | 2. Place Value Meaning for Two- | 2-1: Pattern of the Count |
|  | Digit Numbers | 2-2: Counting 1-Blocks by Tens and Ones |
|  |  | 2-3: Race to 99! |


|  |  | 2-4: Modeling to 99 on the Place Value Mat |
| :---: | :---: | :---: |
|  |  | 2-5: Two-Digit Bingo |
|  |  | 2-6: Blocks-at-a-Glance |
|  |  | 2-7: Count by Tens by Adding Tens |
|  | 3. Comparing and Ordering Numbers 0-99 | 3-1: The Powerful Tens' Place |
|  |  | 3-2: Comparing Block Drawings |
|  |  | 3-3: Switching Digits |
|  |  | 3-4: War! |
|  |  | 3-5: Two-Digit Spin |
|  |  | 3-6: 0-99 Race |
|  |  | 3-7: More and Less |
|  | 4. Equivalent Block Representations | 4-1: Grouping 1-Blocks |
|  |  | 4-2: Building Equivalent Block Models |
|  |  | 4-3: Matching Equivalent Representations |
| 0-999 | 1. Place Value Meaning for ThreeDigit Numbers | 1-1: The Meaning of 100 |
|  |  | 1-2: Counting to 1000 |
|  |  | 1-3: Modeling and Naming Three- Digit Numbers |
|  |  | 1-4: Three-Digit Bingo |
|  |  | 1-5: Blocks-at-a-Glance |
|  |  | 1-6: How Many 1-Blocks? |
|  | 2. Ordering and Comparing Numbers 0-999 | 2-1: Comparing Three-Digit Numbers |
|  |  | 2-2: War! |
|  |  | 2-3: Three-Digit Spin |
|  |  | 2-4: Four or Eight in a Row |
|  | 3. Equivalent Representations | 3-1: Same Number-Different Models: Part 1 |
|  |  | 3-2: Same Number-Different Models: Part 2 |
|  |  | 3-3: What Number Am I? |
| 0-1000+ | 1. Place Value Meaning for Large Numbers | 1-1: The Meaning of 1000 |
|  |  | 1-2: Numbers to Four Digits |
|  |  | 1-3: Numbers to Six Digits |
|  |  | 1-4: Writing Numbers in Expanded Notation |
|  |  | 1-5: Digit Values |
|  |  | 1-6: Ten Digits in One Billion |
|  | 2. Ordering and Comparing Numbers 0-1000+ | 2-1: Winner by Spinner |
|  |  | 2-2: Twelve in a Row |

## Add'n'Subtract Town

In Add'n'Subtract Town, student-explorers use place value concepts to add and subtract numbers up to many digits with and without regrouping.

| Number Set | Explorations | Activities |
| :---: | :---: | :---: |
| 0-10 | 1. Adding on theTen-Frame | 1-1: Adding on the Number Line |
|  |  | 1-2: Adding on the Top Row of the Ten-Frame |
|  |  | 1-3: Adding on Both Rows of the Ten-Frame |
|  |  | 1-4: From Adding Blocks to Drawing Addition |
|  |  | 1-5: Visualizing Addition |
|  |  | 1-6: Visualization Flash Cards for Addition |
|  |  | 1-7: Addition Solitaire |
|  |  | 1-8: How Many Do I Add? |
|  |  | 1-9: Addend Partners |
|  |  | 1-10: Go Fish! |
|  |  | 1-11: Practicing Addition within 0-10 |
|  | 2. Subtracting on the Ten-Frame | 2-1: Subtracting on the Number Line |
|  |  | 2-2: Subtracting on the Top Row of the Ten-Frame |
|  |  | 2-3: Subtracting on Both Rows of the Ten-Frame |
|  |  | 2-4: From Subtracting Blocks to Drawing Subtraction |
|  |  | 2-5: Visualizing Subtraction |
|  |  | 2-6: Visualization Flash Cards for Subtraction |
|  |  | 2-7: Subtraction Solitaire |
|  |  | 2-8: How Many Do I Take Away? |
|  |  | 2-9: Ten-Frame Riddles |
|  |  | 2-10: Practicing Subtraction within 0-10 |
|  |  | 2-11: Connecting Addition and Subtraction, Part 1 |
|  |  | 2-12: Connecting Addition and Subtraction, Part 2 |
|  |  | 2-13: Fact Families |
|  | 3. Expressions and Equations | 3-1: Writing Addition Expressions |
|  |  | 3-2: Writing Subtraction Expressions |
|  |  | 3-3: Writing Equations |
|  | 4. Getting Ready to Regroup | 4-1: Adding to Teens on the Ten-Frame |
|  |  | 4-2: Adding to Teens with Drawings |
|  |  | 4-3: Subtracting from Teens on the Ten-Frame |
|  |  | 4-4: Subtracting from Teens with Drawings |
|  |  | 4-5: Practicing the Make-a-10 Strategy |
| 0-19 | 1. Place Value Addition (No Regrouping) | 1-1: Adding on the Two-Place Counter |
|  |  | 1-2: Adding on the Place Value Mat |
|  |  | 1-3: Adding with Drawings |
|  |  | 1-4: Adding with Numerals and Drawings |
|  |  | 1-5: Addition Solitaire |
|  |  | 1-6: Adding with Numerals |
|  |  | 1-7: Adding a Column of Numbers |
|  | 2. Place Value Subtraction (No Regrouping) | 2-1: Subtracting on the Two-Place Counter |
|  |  | 2-2: Subtracting on the Place Value Mat |
|  |  | 2-3: Subtracting with Drawings |
|  |  | 2-4: Subtracting with Numerals and Drawings |
|  |  | 2-5: Subtracting with Numerals |
|  |  | 2-6: Subtraction Solitaire |
|  |  | 2-7: Connecting Addition and Subtraction |
|  |  | 2-8: Practicing Addition and Subtraction |


|  | 3. Expressions and Equations | 3-1: Writing Addition Expressions |
| :---: | :---: | :---: |
|  |  | 3-2: Writing Subtraction Expressions |
|  |  | 3-3: Writing Equations |
|  | 4. Place Value Addition (Regrouping) | 4-1: Adding on the Two-Place Counter |
|  |  | 4-2: Adding on the Place Value Mat |
|  |  | 4-3: Adding with Drawings |
|  |  | 4-4: Adding with Numerals and Drawings |
|  |  | 4-5: Adding with Numerals |
|  |  | 4-6: Addition Solitaire |
|  | 5. Place Value Subtraction | 5-1: Subtracting on the Two-Place Counter |
|  | (Regrouping) | 5-2: Subtracting on the Place Value Mat |
|  |  | 5-3: Subtracting with Drawings |
|  |  | 5-4: Subtracting with Numerals and Drawings |
|  |  | 5-5: Subtracting with Numerals |
|  |  | 5-6: Subtraction Solitaire |
|  |  | 5-7: Connecting Addition and Subtraction |
|  |  | 5-8: Practicing Place Value Addition and Subtraction |
| 0-99 | 1. Place Value Two-Digit Addition | 1-1: Adding Two-Digit Numbers on the Counter and on the Mat (No Regrouping) |
|  |  | 1-2: Adding Two-Digit Numbers on the Counter (Regrouping) |
|  |  | 1-3: Adding Two-Digit Numbers on the Place Value Mat (Regrouping) |
|  |  | 1-4: Adding with Drawings and Numerals |
|  |  | 1-5: Adding with Numerals |
|  |  | 1-6: Regrouping Solitaire |
|  |  | 1-7: Adding a Column of Numbers |
|  | 2. Place ValueTwo-Digit Subtraction | 2-1: Subtracting Two-Digit Numbers on the Counter and on the Mat (No Regrouping) |
|  |  | 2-2: Subtracting Two-Digit Numbers on the Counter (Regrouping) |
|  |  | 2-3: Subtracting Two-Digit Numbers on the Place Value Mat (Regrouping) |
|  |  | 2-4: Subtracting with Drawings and Numerals |
|  |  | 2-5: Subtracting with Numerals |
|  |  | 2-6: Regrouping Solitaire: Subtraction |
|  |  | 2-7: Connecting Two-Digit Addition and Subtraction |
|  |  | 2-8: Practicing Two-Digit Addition and Subtraction |
| 0-999 | 1. Using Models to Add and | 1-1: Adding and Subtracting 1, 10, 100 |
|  | Subtract Three-Digit Numbers | 1-2: Adding on the Counter |
|  |  | 1-3: Subtracting on the Counter |
|  |  | 1-4: Adding on the Place Value Mat |
|  |  | 1-5: Subtracting on the Place Value Mat |
|  | 2. Using Numerals to Add and | 2-1: Adding with Numerals |
|  | Subtract Three-Digit Numbers | 2-2: Subtracting with Numerals |
|  |  | 2-3: Over the Top |
|  |  | 2-4: Down to the Bottom |
|  |  | 2-5: How Far Is It From Here to There? |
|  |  | 2-6: Adding a Column of Numbers |
| 0-1000+ | 1. Adding Large Numbers | 1-1: Adding Large Numbers |
|  |  | 1-2: Over the Top |
|  |  | 1-3: Adding a Column of Multi-Digit Numbers |
|  | 2. Subtracting Large Numbers | 2-1: Subtracting across Zeros |
|  |  | 2-2: Down to the Bottom |

## Multiply'n'Divide Village

In Multiply'n'Divide Village, student-explorers use place value concepts to multiply three-digit numbers and to divide multii-digit numbers by one-digit divisors.

| Number Set | Explorations | Activities |
| :---: | :---: | :---: |
| 0-19 | 1. Place Value Multiplication | 1-1: Defining Multiplication |
|  |  | 1-2: Developing Multiplication Facts |
|  |  | 1-3: Visualizing Multiplication of Zero |
|  |  | 1-4: Factor Pairs and the Commutative Property |
|  |  | 1-5: Drawing Place Value Multiplication |
|  |  | 1-6: Multiplying with Numerals |
|  |  | 1-7: Matching Problems and Products |
|  | 2. Place Value Division | 2-1: Defining Division |
|  |  | 2-2: Developing Division Facts |
|  |  | 2-3: Divisor-Quotient Pairs |
|  |  | 2-4: Dividing with Blocks from the Place Value Mat |
|  |  | 2-5: Drawing Place Value Division |
|  |  | 2-6: Connecting Drawings to Numeral Division |
|  |  | 2-7: Matching Problems and Quotients |
|  |  | 2-8: Connecting Multiplication and Division |
|  |  | 2-9: Fact Families |
|  |  | 2-10: Fair Share Division |
| 0-99 | 1. Place Value Multiplication by One-Digit Multipliers | 1-1: Developing More Multiplication Facts 1-9 |
|  |  | 1-2: Learning to Use the Multiplication Table |
|  |  | 1-3: Practicing Basic Multiplication Facts |
|  |  | 1-4: Multiplying with Blocks |
|  |  | 1-5: Multiplying with Numerals |
|  |  | 1-6: Step-by-Step |
|  |  | 1-7: Practice, Practice, Practice! |
|  | 2. Place Value Division by One-Digit Divisors | 2-1: Developing More Division Facts 1-9 |
|  |  | 2-2: Learning to Use the Division Table |
|  |  | 2-3: Division Facts Bingo |
|  |  | 2-4: Dividing with Blocks |
| 0-999 | 1. Using Digit Shifts to Multiply by Two-Digit Numbers | 1-1: Using Blocks to Multiply One and Ten |
|  |  | 1-2: Multiplying Tens and by Tens |
|  |  | 1-3: Ones and Tens Bingo |
|  |  | 1-4: Using the Digit Shift to MultiplyTwo-Digit Numbers by OneDigit Numbers |
|  |  | 1-5: Using Digit Shifts to Multiply Two-Digit Numbers by TwoDigit Numbers |
|  |  | 1-6: Pencil-less Product Predictions |
|  | 2. Dividing Three-Digit Numbers | 2-1: Three-Problem Review |
|  |  | 2-2: Dividing 372 |
|  |  | 2-3: Divide and Check |
| 0-1000+ | 1. Multi-Digit Multiplication | 1-1: Reviewing the Digit-Shift Procedure |
|  |  | 1-2: Finding Partial Products |
|  |  | 1-3: Practicing Multi-Digit Multiplication |
|  | 2. Division with Multi-Digit Dividends | 2-1: The Great Division Challenge |

## Money Island

Two kinds of money are used in Money Island --- block money and real money. Student-explorers use block money to learn the system of money used in the "real world." Money Island is a stand-alone unit; while students working in the other regions keep returning to Place Value City to build foundational concepts and skills, explorers to Money Island find everything they need right there on the island.

| Number Set | Explorations | Activities |
| :---: | :---: | :---: |
| 0-10 | 1. Bills to \$10 | 1-1: Block Money |
|  |  | 1-2: Matching Blocks and Bills |
|  |  | 1-3: Collecting "Tens" |
|  |  | 1-4: The \$10 Goody Store |
|  |  | 1-5: Empty, Full, or Half-Full |
|  |  | 1-6: Halves of \$10 |
|  |  | 1-7: Exchanging Blocks for Bills |
|  |  | 1-8: First to Five! |
| 0-19 | 2. Bills to $\$ 19$ | 2-1: Modeling 11-19 on the Place Value Mat |
|  |  | 2-2: Packing As Much As Possible |
|  |  | 2-3: Old Witch |
|  |  | 2-4: Block Models with 1's, 5's, and 10's |
|  |  | 2-5: Restricted Block Models with 1's, 5's and 10's |
|  |  | 2-6: From Blocks to Bills |
|  |  | 2-7: Bills Only |
|  |  | 2-8: Money Matches |
|  |  | 2-9: Food Fun |
| 0-99 | 3. Bills to \$99 | 3-1: Counting 1-Blocks by Tens and Ones |
|  |  | 3-2: Modeling up to 100 on the Place Value Mat |
|  |  | 3-3: The Powerful Tens' Place |
|  |  | 3-4: Skip Counting by 5's, 10's, and 20's |
|  |  | 3-5: Value-Counting with Blocks |
|  |  | 3-6: Block Models with Restrictions |
|  |  | 3-7: From Blocks to Bills |
|  |  | 3-8: Bill Models with Restrictions |
| Decimals | 4. Bills, Dimes, and Pennies | 4-1: Unpacking Blocks |
|  |  | 4-2: Modeling Decimals |
|  |  | 4-3: Money Names for Decimals under 100 |
|  |  | 4-4: Modeling Money with Blocks |
|  |  | 4-5: Dollars-and-Cents Bingo |
|  |  | 4-6: Block Money at-a-Glance |
|  |  | 4-7: Connecting Blocks with Dollars, Dimes, and Pennies |
|  |  | 4-8: Modeling with Play Money |
|  |  | 4-9: "Packing" Coins and Bills |
|  |  | 4-10: Who Has More Money? |
|  |  | 4-11: War! |
|  |  | 4-12: Eight in a Row |
|  |  | 4-13: Number Line Locations |
|  |  | 4-14: Prices, Prices, Prices! |
|  | 5. Beyond Dimes and Pennies | 5-1: Dollar Puzzles |
|  |  | 5-2: Coin Puzzles |
|  |  | 5-3: Value-Counting Coins to \$1 |
|  |  | 5-4: Value-Counting Coins to \$1, with Restrictions |
|  |  | 5-5: Coin Equivalence |
|  |  | 5-6: Race to One Dollar |
|  |  | 5-7: Counting Money to \$50 |
|  |  | 5-8: Starburst Game |

## Proficiency Park

Proficiency Park is CountOn County's playground. Here, student-explorers practice and reinforce their skills through close to 150 games, activities, and exercises and apply their learning to common contexts through carefully organized word problem situations. Learn more about guiding your students through Proficiency Park in the Instruction section of this Leader's Guide.

| Category | Topics / Activities |
| :---: | :---: |
| Place Value | Subitizing (5) |
|  | Numeral Writing (9) |
|  | Counting Games (5) |
|  | More-Less-Equal (2) |
|  | Teen Numbers (3) |
|  | Two-Digit Place Value (7) |
|  | Large Number Place Value (8) |
| Addition and Subtraction | Number Combinations (5) |
|  | Addition/Subtraction Concepts (14) |
|  | Hidden Numbers (3) |
|  | Fact Practice (4) |
|  | Connecting Addition and Subtraction (4) |
|  | Regrouping (6) |
|  | Adding Large Numbers (3) |
|  | Subtracting Large Numbers (3) |
| Equality | Equality (7) |
| Multiplication and Division | Grouping Games (2) |
|  | Multiplication/Division Concepts (7) |
|  | Connecting Multiplication and Division (2) |
|  | Multiplication Fact Practice (5) |
|  | Division Fact Practice (2) |
|  | Multiplying Large Numbers (3) |
|  | Dividing Large Numbers (3) |
| Money | Value-Counting Bills (4) |
|  | Identifying Coins and Values (3) |
|  | Value-Counting Coins (5) |
| Strategies for Solving Word Problems | Working with Word Problems (5) |
|  | Sample Word Problems (5) |

