## Contents

| 1. Rules of the Railroad                                    | 1   |
|---|-----|
| • Introduce "good" trains                                   |     |
| 2. Introducing Full Cars (Tens) and Block's Lettover (Ones) | 1   |
| Count by ones to teens                                      |     |
| Introduce place value                                       |     |
| Write the number  |     |
| 3 Make a Matchl (Trains and Numbers)                        | 12  |
| Count by ones to 20   | 12  |
| Match quantities with numbers                               |     |
| Place value   |     |
| 4. Complete the Trains                                      | 15  |
| • Count by ones to 20                                       |     |
| Match numbers with quantities                               |     |
| Place value   |     |
| 5. All Aboard!  | 19  |
| One-to-one correspondence                                   |     |
| Count by ones to teens                                      |     |
| Place value   |     |
| • Write the number  |     |
| 6. How Many?  | 24  |
| One-to-one correspondence                                   |     |
| Count by ones to teens                                      |     |
| Place value   |     |
| • write the number  | 0.0 |
| 7. Keep on Counting: How Many?                              | 28  |
| One-to-one correspondence     Count by tone and anone       |     |
| Count by tens and ones     Place value                      |     |
| • Write the number  |     |
| 8 Rolling Trains  | 20  |
| Make a set from a number                                    | 2)  |
| Count by ones   |     |
| • Count from any number                                     |     |
| • Write the number  |     |
| 9. Keep on Counting: The Number Cube Train                  | 32  |
| • Make a set from a number                                  |     |
| Count from any number                                       |     |
| • Write the number  |     |
| 10. Keep on Counting: Magic Number                          | 33  |
| Count by ones   |     |
| Count from any number                                       |     |
| 11. Cover the Horse   | 36  |
| • Estimate  |     |
| • Fill a shape  |     |
| • Count to numbers in the 30's                              |     |
| • Write the number  |     |
| 12. A Cup of Blocks   | 39  |
| • Count to numbers in the 30's                              |     |

• Write the number

| 13.      | Recognizing Geometric Shapes and Their Perimeter<br>Recognize basic geometric shapes | 41 |
|----------|--|----|
| •        | Introduce perimeter  |    |
| •        | Draw basic geometric shapes  |    |
| •        | Count sets in the teens<br>Write the number for a set                                |    |
| 11       | Cleasify and Count Detterned Shapes  | 10 |
| 14.      | Classify and Count Patterned Shapes  | 40 |
|          | Sort objects within a group by two attributes  |    |
| •        | One-to-one correspondence  |    |
| •        | Count to numbers in the 30's   |    |
| 15.      | Cover the Fish   | 52 |
| •        | Estimate   |    |
| •        | Fill a shape   |    |
| •        | Count to numbers in the 30's   |    |
| •        | Write the number   |    |
| 16.      | Train of Tens (36)   | 55 |
| •        | Count by ones  |    |
| •        | Begin counting by tens to 30   |    |
| 17.      | Keep on Counting: Train of Tens  | 57 |
| •        | Count by tens and ones   |    |
| 18.      | Connect the Dots   | 59 |
| •        | Order written numbers to the 30's  | 60 |
| 19.      | Ways to Make Ten   | 63 |
| •        | Addition facts   |    |
|          | Write addition number sentences  |    |
| 20       | Cover the Cootus   | 67 |
| 20.      | Fetimate   | 07 |
| •        | Fill a shape   |    |
| •        | Count to numbers in the 30's   |    |
| •        | Write the number   |    |
| 21.      | One More Passenger - One Less Passenger: How Many are on the Train?                  | 70 |
| •        | Count to numbers in the 30's   |    |
| •        | Compare sets using one more and one less   |    |
| 22.      | Counting Trains  | 75 |
| •        | Count by tens and ones to the 40's   |    |
| •        | Write the number   |    |
| 23.      | Ten Scoop  | 79 |
| •        | Addition facts   |    |
| •        | Identify number pairs whose sum is 10  | 00 |
| 24.      | Am I Odd or Even?  | 82 |
| •        | Divide sets  |    |
| •        | Count sets   |    |
| 25       | Short and Long Trains  | 86 |
| 4J.<br>• | Recognize numbers to the 50's  | 00 |
| •        | Order numbers from least to greatest   |    |
| •        | Write the number   |    |
| 26.      | Growing Cups - Longer Trains   | 90 |
| •        | Estimate by using a reference  |    |
| •        | Count to numbers in the 50's   |    |
| ٠        | Write the number   |    |

| 27. | Packing Up the Train: Making Blocks-of-10<br>Introduce ten ones as one ten<br>Introduce the vocabulary "block-of-10"  | 93  |
|-----|---|-----|
| •   | Identify the place value of the digits  |     |
| 28. | Introduction to the 2-Place Mat   | 96  |
| •   | Introduce the 2-place mat   |     |
| •   | Identify the place value of the digits  |     |
| 29. | Understanding Two Representations of a Number: Linear and Base Ten<br>Introduce different representations of a number<br>Identify the place value of the digits | 99  |
| 30  | Keep on Counting: First to on the Dioce Volue Mot   | 100 |
| 30. | Count to higher numbers   | 102 |
|     | Pecognize two digit numbers   |     |
|     | Identify the place value of the digita  |     |
| 21  | Oran to Neurobox Line to Depled   | 102 |
| 31. | Cup to Number Line to Packed  | 103 |
| •   | Count by ones to 30   |     |
| •   | Predict the base ten representation of a number   |     |
| •   | Compare multiple representations of a number  | 105 |
| 32. | Combine Two Trains  | 105 |
| •   | Model and solve 2-digit addition problems   |     |
| 33. | Cover the Snowman   | 110 |
| •   | Estimate  |     |
| •   | Fill a shape  |     |
| •   | Count to numbers in the 40's  |     |
| •   | Write the number  |     |
| 34. | Twelve Ways to Get to Eleven  | 113 |
| •   | Multiple addends  |     |
| •   | Different pairs of addends can make the same sum  |     |
| •   | Addition number sentences   |     |
| •   | Addition on the number line   | 110 |
| 35. | What's Underneath the Covers?   | 118 |
| •   | Recognize the base ten representation of a number   |     |
| •   | Reinforce two representations of a number: linear and base ten  |     |
| •   | Identify the place value of the digits  |     |
| 36. | Pattern of the Count  | 123 |
| •   | Reinforce one-to-one correspondence   |     |
| •   | See, hear and write the pattern of the count  |     |
| •   | Recognize the base ten number code of digits 0-9  |     |
| •   | Identify the place value of the digits  | 105 |
| 37. | Stacked 3-D Animals   | 127 |
| •   | Make a set for given numbers  |     |
| •   | Develop spatial (3-D view) skills   |     |
| 38. | Comparing Two Heights   | 136 |
| •   | Measure with non-standard units   |     |
| •   | Count by tens and ones  |     |
| •   | Compare two numbers using words and symbols   |     |
| 39. | Ordering Trains   | 139 |
| •   | Compare and order sets using ordinal numbers  |     |
| •   | Build a train to match a drawing  |     |
| •   | Count by tens and ones to 30  |     |
| 40  | write the number  | 140 |
| 40. | How Many is a Cupiul?   | 143 |
| •   | Count by ones or tens to the number 50  |     |
| •   | Identify the place value of the digits  |     |
| •   | white the number  |     |

| <ul><li>41. What is a Half?</li><li>One-to-one correspondence</li></ul>                                       | 146   |
|---|-------|
| Introduce the concept of half   |       |
| • Divide sets into halves   |       |
| Write equality number sentences   | 150   |
| <ul> <li>42. Measuring with Blocks</li> <li>Measure the length of objects with a non-standard unit</li> </ul> | 150   |
| <ul> <li>Count by tens and ones</li> </ul>  |       |
| Record measurements   |       |
| 43. Two Ways to Look at a Quantity: What Does 16 Look Like?   | 153   |
| Model multiple representations of a number  |       |
| • Reinforce the linear representation and the base ten representation of a number                             | 1.6.1 |
| 44. Comparing Trains with Inequality Signs  | 161   |
| <ul> <li>Make a set ior a given number</li> <li>Compare sets using inequality terms and symbols</li> </ul>    |       |
| <ul> <li>Compare attributes of length</li> </ul>  |       |
| 45. Making Equal Piles  | 166   |
| Divide sets into halves   |       |
| • Count sets  |       |
| • Write the addition number sentence  | 170   |
| • Draw and write numbers in three representations   | 170   |
| <ul> <li>Identify the place value of the digits</li> </ul>  |       |
| 47. Many Ways to Measure with Non-Standard Units  | 175   |
| Estimate the length of an object using different units  |       |
| Measure objects with non-standard units   |       |
| • Record numbers for estimates and measurements   | 170   |
| 48. Counting by Fives   | 178   |
| <ul> <li>Write the multiples of five</li> </ul>   |       |
| 49. Counting by Twos and by Threes  | 184   |
| • Count by twos to 58   |       |
| • Count by threes to 78   |       |
| • Count by fives to 95  | 100   |
| 50. Adding with Trains  | 189   |
| <ul> <li>Model and solve addition problems</li> <li>Model regrouping ten ones to make a ten</li> </ul>        |       |
| Write addition number sentences   |       |
| 51. Subtracting with Trains: Getting Off the Train  | 193   |
| Model and solve subtraction problems  |       |
| Model regrouping a ten to make ten ones   |       |
| Write subtraction number sentences  | 100   |
| 52. Equivalent numbers on a Balance   | 199   |
| <ul> <li>Reinforce equivalent numbers</li> </ul>  |       |
| 53. How Many Blocks Does It Weigh?  | 203   |
| • Explore the use of balance scales   |       |
| Reinforce equalities  |       |
| 54. Pizza Prep  | 207   |
| • Sort objects by single attribute  | 010   |
| 55. The Kindergarten House of Pizza   | 210   |
| <ul> <li>Identify half of a whole object</li> </ul>   |       |
| Sort items by a single attribute  |       |
| Count by tens and ones  |       |

| 56. Digits to Blocks!  | 213 |
|--|-----|
| • Identify the place value of the digits                                       |     |
| 57. How Many Packed Blocks?  | 217 |
| • Write the number for a set of tens and ones                                  |     |
| Identify the place value of the digits   |     |
| 58. How Many Boots?  | 223 |
| • Count to 100   |     |
| Recognize three representations of number 100                                  |     |
| • Introduce the vocabulary "block-of-100"                                      |     |
| Identify the place value of the digits   |     |
| 59. Let's Get Organized! The 3-Place Mat                                       | 228 |
| • Sort by size   |     |
| • Identify the place value of the digits                                       |     |
| Read three-digit numbers   |     |
| 60. A Very Long Train: Counting by Tens to Numbers Greater than 100!           | 232 |
| • Count by tens to numbers greater than one-hundred                            |     |
| • Compare the linear representation of a number to the base ten representation |     |
| 61 Cover Digi  | 237 |
| Estimate   | 201 |
| • Fill a shape   |     |
| Count past 100   |     |
| • Write three-digit numbers  |     |
| 62 Unscramble these Blocks! Organizing on the Place Value Mat                  | 241 |
| Organize a collection by size  | 411 |
| Recognize when regrouping is necessary   |     |
| • Identify the place value of the digits                                       |     |
| 63 Where Am I2   | 246 |
| Relational words   | 270 |
| Shape and number recognition   |     |
| Annondiz   | 056 |
| Uhbenary   | 230 |