## **CURRICULUM OBJECTIVES**

|                       | 1  |   |  |
|-----------------------|----|---|--|
| NUMBER<br>RECOGNITION |    |   |  |
| Arabic Numbers        | 1  | understand and use correctly the word "digit"               |  |
| Alabic Tumbers        | 2  | recognize Arabic numbers: 0 1 000                           |  |
|                       | 2  | recognize Roman numerals: L XXXIX (1 30)                    |  |
| <u>Roman</u>          | 5  | $\frac{1}{1-3}$   |  |
| Numerals              |    |   |  |
| NUMBER/WORD           |    |   |  |
| RECOGNITION           |    |   |  |
| Number Words          | 1  | write the number words for 0 -10                            |  |
|                       | 2  | write the number words for $10 - 1,000$                     |  |
| Conventions           | 3  | use of comma to separate thousands, (i.e. 1,000, etc.)      |  |
|                       | 4  | use of hyphen to separate number words (e.g. forty-one)     |  |
| PLACE VALUE           |    |   |  |
| Place Value           | 1  | identify place value in numbers $0 - 1,000$                 |  |
|                       | 2  | demonstrate an understanding of "place value"               |  |
|                       | 3  | place value in whole numbers is found from right to left    |  |
| COUNTING              |    |   |  |
| Counting              | 1  | orally from $0 - 1,000$ , starting any place in between     |  |
|                       | 2  | drill and practice counting by 1's, 2's, 5's, and 10's (0 – |  |
|                       |    | 100)  |  |
|                       | 3  | orally from 1,000 – 100,000, starting any place between     |  |
|                       | 4  | drill and practice counting by 1's, 2's, 5's, 10's (1,000 – |  |
|                       |    | 100,000)  |  |
| Other                 | 5  | recognize "<" and ">" signs                                 |  |
|                       | 6  | compare numbers with , and . signs                          |  |
|                       | 7  | explain even and odd numbers                                |  |
|                       | 8  | order numbers from least to greatest and greatest to least  |  |
| ADDITION              |    |   |  |
| Terms                 | 1  | use the terms "addend" and "sum"                            |  |
|                       | 2  | explain relationship between adding and counting            |  |
|                       | 3  | recognize and use "+" sign and the "=" sign                 |  |
|                       | 4  | explain "whole number"                                      |  |
| Addition              | 5  | demonstrate an understanding of addition                    |  |
|                       | 6  | master addition facts up to and including 18                |  |
|                       | 7  | find sum of four whole numbers up to 3 digits               |  |
|                       | 8  | find sum of four whole numbers up to 4 digits               |  |
|                       | 9  | add numbers in columns                                      |  |
|                       | 10 | add numbers written in equation form                        |  |
|                       | 11 | regroup ones, tens, hundreds, thousands                     |  |
|                       | 12 | insert zero in blank spaces to make addition easier         |  |
|                       | 13 | the order in which numbers are added doesn't change the     |  |
|                       |    | sum   |  |

| SUBTRACTION    |    |  |   |
|----------------|----|--|---|
| Terms          | 1  | use "find the difference between" to signify subtraction |   |
|                | 2  | know the meaning of the subtraction sign "-"             |   |
| Subtraction    | 3  | demonstrate an understanding of subtraction              |   |
|                | 4  | master subtraction facts up to and including 18          |   |
|                | 5  | find the difference in 2 whole numbers up to 3 digits    |   |
|                | 6  | find the difference in 2 whole numbers up to 4 digits    |   |
|                | 7  | subtract numbers written in columns                      |   |
|                | 8  | borrow numbers   |   |
|                | 9  | regroup ones, tens, hundreds, thousands                  |   |
|                | 10 | subtract numbers written in equation format              |   |
|                | 11 | insert zeros in blank spaces to make subtraction easier  |   |
|                | 12 | explain the relation between addition and subtraction    |   |
| MULTIPLICATION |    |  |   |
| Terms          | 1  | understand and use the term "factor"                     |   |
|                | 2  | understand and use the term "product"                    |   |
|                | 3  | recognize and use the multiplication sign "x"            |   |
| Multiplication | 4  | demonstrate an understanding of multiplication           |   |
|                | 5  | relation between addition and multiplication             |   |
|                | 6  | memorize times table to 12 x 12; use a chart showing     |   |
|                |    | relation between numbers                                 |   |
|                | 7  | multiply by zero   |   |
|                | 8  | multiply numbers in columns                              |   |
|                | 9  | multiply numbers written in equation format              |   |
|                | 10 | importance of accuracy                                   |   |
|                | 11 | double checking for computational errors                 |   |
|                | 12 | printing legibly   |   |
|                | 13 | order in which numbers are multiplied doesn't affect the |   |
|                |    | answer   |   |
| DIVISION       |    |  |   |
| Terms          | 1  | understand and use the term dividend                     |   |
|                | 2  | understand and use the term divisor                      | _ |
|                | 3  | understand and use the term quotient                     | _ |
|                | 4  | understand and use the term remainder                    |   |
|                | 5  | use the division sign "÷"                                |   |
|                | 6  | divide using horizontal format "/ "                      |   |
| Division       | 7  | demonstrate an understanding of division                 |   |
|                | 8  | dividing numbers in horizontal format                    | _ |
|                | 9  | dividing numbers in equation format                      |   |
|                | 10 | dividing with zero                                       |   |
|                | 11 | explain relation between multiplication and division     |   |
| WORD           |    |  |   |
| PROBLEMS WITH  |    |  |   |
| WHOLE          |    |  |   |
| NUMBERS        |    |  |   |

| Problems             | 1  | demonstrate ability to solve word problems with whole          |  |
|----------------------|----|--|--|
|                      |    | numbers  |  |
| Strategies           | 2  | develop good work habits                                       |  |
|                      | 3  | read all parts of question carefully                           |  |
|                      | 4  | determine what is asked for or required                        |  |
|                      | 5  | separate information given from question being asked           |  |
|                      | 6  | record information given and solution required separately      |  |
|                      | 7  | decide what arithmetic process will solve the problem          |  |
|                      | 8  | work neatly and arrange work in rows where possible            |  |
|                      | 9  | label the answer in terms of values given in question          |  |
|                      | 10 | estimate an answer   |  |
|                      | 11 | check every step   |  |
|                      | 12 | compare estimated answer with answer found                     |  |
|                      | 13 | use clue words to solve word problems (e.g. total, sum, how    |  |
|                      |    | much, how many, increased, altogether, less, fewer, more,      |  |
|                      |    | difference, left, remains, times, at)                          |  |
| UNDERSTANDING        |    |  |  |
| AND COMPARING        |    |  |  |
| FRACTIONS            |    |  |  |
| Terms                | 1  | explain fraction   |  |
|                      | 2  | explain numerator and denominator                              |  |
| Fractions            | 3  | visualize fractions: divide circle or line into correct number |  |
|                      |    | of segments to represent a given fraction                      |  |
| TIME                 |    |  |  |
| Using Time Divisions | 1  | 60 seconds in a minute   |  |
|                      | 2  | 60 minutes in an hour  |  |
|                      | 3  | 24 hours in a day  |  |
|                      | 4  | 7 days in a week   |  |
|                      | 5  | approximately four weeks in a month                            |  |
|                      | 6  | name the days of the week                                      |  |
|                      | 7  | name months of the year  |  |
|                      | 8  | correctly use a.m. and p.m.                                    |  |
|                      | 9  | state the number of days in a given month                      |  |
|                      | 10 | express time in words  |  |
| Clocks               | 11 | tell time with an analog clock to the nearest minute           |  |
|                      | 12 | recognize times (e.g. quarter past four, ten to six)           |  |
|                      | 13 | tell time with a digital clock (e.g. 1:50 is ten to one)       |  |
|                      | 14 | use of the colon in writing time (e.g. 2:53)                   |  |
| MONEY                |    |  |  |
| Coin Values          | 1  | identify value of coins: penny (cent), nickel, dime, quarter,  |  |
|                      |    | loonie, and toonie   |  |
|                      | 2  | use of the "\$" and "⊄" signs                                  |  |
|                      | 3  | use of decimal point to write dollar/cent amounts              |  |
|                      | 4  | convert cents to dollars and dollars to cents                  |  |
| Calculating with     | 5  | use knowledge of decimals to add and subtract money            |  |

| Money         |    |  |  |
|---------------|----|--|--|
|               | 6  | practice counting money and making change                        |  |
| METRIC        |    |  |  |
| MEASUREMENT   |    |  |  |
| Terms         | 1  | linear, volume, mass measurement                                 |  |
|               | 2  | gram (mass), litre (volume), metre (linear)                      |  |
|               | 3  | prefixes: milli, centi, deci, (metre, gram, litre), deka, hecto, |  |
|               |    | kilo   |  |
|               | 4  | abbreviations linear measure: mm, dm, m, dam, km, cm, hm         |  |
|               | 5  | abbreviations volume measure: ml, dl, L, dal, hl, kl, cl         |  |
|               | 6  | abbreviations mass measure: mg, cg, g, dag, hg, kg,dg            |  |
|               | 7  | faces, edges, vertex, vertices                                   |  |
|               | 8  | square, rectangle, triangle                                      |  |
| Using Metric  | 9  | estimate and measure accurately: linear measurement              |  |
| Measurement   |    |  |  |
|               | 10 | estimate and measure accurately: volume measurement              |  |
|               | 11 | estimate and measure accurately: mass measurement                |  |
|               | 12 | identify geometric figures by counting faces, edges, and         |  |
|               |    | vertices   |  |
| WORD          |    |  |  |
| PROBLEMS WITH |    |  |  |
| MEASUREMENT   |    |  |  |
| Problems      | 1  | demonstrate ability to solve word problems with addition,        |  |
|               |    | subtraction, multiplication, and division of whole numbers,      |  |
|               | _  | time, money, temperature, and metric measurement                 |  |
| Strategies    | 2  | develop good work habits   |  |
|               | 3  | read all parts of question carefully                             |  |
|               | 4  | determine what is asked for or required                          |  |
|               | 5  | separate information given from question being asked             |  |
|               | 6  | record information given and solution required separately        |  |
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|               |    | much, how many, increased, altogether, less, fewer, more,        |  |
|               |    | difference, left, remains, times, at)                            |  |