## MATHEMATICS IV

GRADE LEVEL 4

| \# | Lesson | Lesson Content |
| :---: | :---: | :---: |
| 1 | Story Problems 1 | The five-step process for problem solving |
| 2 | Number Sense 1 | Order of addends in relation to the sum. Adding zero. Students rewrite addition facts in inverse order. Grouping addends. |
| 3 | Number Sense 2 | Rounding numbers and money amounts to nearest 10, 100, and 1000. |
| 4 | Addition \& Subtraction 1 | Given an addition fact, students write a related subtraction fact. Given subtraction fact, students write a related addition fact. |
| 5 | Addition \& Subtraction 2 | Addition and subtraction fact families. Students complete fact families using missing elements. Students read story problems and choose the correct operation to solve the problem. |
| 6 | Patterns | Odd and even numbers. Students recognize the relationships between numbers to determine patterns. |
| 7 | Ordinal Numbers | Cardinal and ordinal numbers. |
| 8 | Money 1 | Review counting bills and coins. Addition and subtraction problems using money. Students make change for dollar amounts up to $\$ 20$ and coin change. Students are given dollar amounts to spend and choose which items they could purchase. |
| 9 | Money 2 | Multiplication and vision problems using money. Locating the dollar sign and decimal points when multiplying and dividing money. |
| 10 | Measurement 1 | Estimating, determining, and measuring time to the nearest minute. Finding elapsed time. Using the appropriate time units to measure time. Writing time using AM or PM. Adding and subtracting time. |
| 11 | Measurement 2 | Using a calendar. Looking for patterns on a calendar. Learning the number of days in each month. |
| 12 | Measurement 3 | Estimating the measuring capacity, mass, temperature, and distance. Using customary units of measurement. Standard and metric measurements. |
| 13 | Fractions 1 | Review of fractions. Reading, writing, and renaming mixed numbers. Comparing and ordering fractions and mixed numbers. |
| 14 | Fractions 2 | Addition and subtraction of fractions and mixed numbers. Equivalent fractions. Students read story problems, choose strategies, and solve problems. |
| 15 | Decimals 1 | Students read and write decimals to tenths and hundredths positions. Relating decimals and fractions. Relating decimals and money. Writing mixed numbers as decimals. |
| 16 | Decimals 2 | Adding and subtracting decimals of the same place value. The use of zero in decimals. Writing decimals as fractions. |
| 17 | Geometry 1 | Identifying faces, edges, and corners of solid and plane figures. Comparing solid figures. Comparing plane figures. Differences in solid and plane figures. |
| 18 | Geometry 2 | Line segments and angles. Identifying right angles. Using greater than and less than with right angles. Definition and examples of intersecting lines, parallel lines, and perpendicular lines. |
| 19 | Geometry 3 | Definition and examples of congruence and symmetry. Open and closed figures. Identifying parts of angles. Identifying and continuing patterns using geometrical shapes. |
| 20 | Geometry 4 | Measuring perimeter and area of polygons. Finding the volume of solid figures. Difference in area and volume. |
| 21 | Graphs 1 | Students locate and name ordered pairs on a coordinate grid. Comparing maps and grids. Students locate points by writing ordered pairs. |
| 22 | Graphs 2 | Students gather data from visual aid and complete bar graph. Students |


|  |  | make predictions from bar graphs information. Students complete line <br> graph. |
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| 23 | Graphs 3 | Using tables and pictographs. Gathering information with a pictograph. <br> Using pictograph information to create line and bar graphs. Comparing <br> graph types. Students decide what type of graph to use. |
| 24 | Probability | Definition and examples of probability. Identifying possible outcomes. <br> The probability equation. Students predict if outcome of given situation <br> is probable, certain, or impossible. Using graphs to chart probability and <br> predict outcomes. |
| 25 | Using Mental Math | Examples of different methods of computation using mental math. |
| 26 | Choosing the Operation | Students decide which operation to use and solve problems. |
| 27 | Extra Information | Students read problems, identify unneeded information, and solve <br> problems. |
| 28 | Story Problems 2 | Students are given information to formulate into problem. Students <br> check for reasonableness of answers. |
| 29 | Finding Needed Facts | Students read information and identify missing information. |
| 30 | Story Problems 3 | Students read information, form plan, choose the correct operation, and <br> solve problems having more than two steps |
| 31 | Logical Reasoning | Students use logic to solve problems. Students check for reasonability of <br> answers. |
| 32 | Test 1 | Review test of number operations. |
| 33 | Test 2 | Review test over fractions. |
| 34 | Test 3 | Review test over measurement. |
| 35 | Test 4 | Review test over geometry. |
| 36 | Test 5 | Review test over probability. |
| 37 | Test 6 (Comprehensive) | Comprehensive test covering unit. |

