**BUDGET OF WORK IN MATHEMATICS 2 (K TO 12)**

**1ST TO 4TH QUARTER**

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| **TOPIC** | **OBJECTIVE** | **NO. OF DAYS** |
| **FIRST GRADING** | | |
| **Concept of Whole Numbers** | 1. Visualizes and identifies numbers from 101 through 500. | 1 |
|  | 1. Visualizes and identifies numbers from 501 through 1000. | 1 |
|  | 1. Associates numbers with sets having 101 up to 500 objects and gives the number of objects. | 1 |
|  | 1. Associates numbers with sets having 501 up to 1000 objects and gives the number of objects. | 1 |
|  | 1. Counts and groups objects in ones, tens, and hundreds | 1 |
|  | 1. Reads and writes numbers from 101 through 1000 in symbols and in words | 1 |
|  | 1. Counts numbers by 10s, 50s, and 100s | 1 |
|  | 1. Reads and writes numbers from through 1000 in symbols and in words | 1 |
|  | 1. Give the place value of each digit in a 3- digit numbers | 1 |
|  | 1. Writing 3 digit numbers in expanded form | 1 |
|  | 1. Compare numbers using >, <, and = | 1 |
|  | 1. Orders numbers up to 1000 from least to greatest and vice versa. | 1 |
| **Reading and Writing Numbers** | 1. Visualizes and identifies the 1st through the 20th object of a given set from a given point of reference. | 1 |
|  | 1. Reads and writes ordinal numbers from 1st through 20th | 1 |
|  | 1. Identifies and uses the pattern of naming ordinal numbers from 1st to the 20th. | 1 |
| **Addition and Problem Solving** | 1. To add 3-digit by 2-digit numbers with sums up to 1000 without regrouping | 1 |
| **Addition** | 1. To add numbers with sums up to 1000 with regrouping | 1 |
| **Addition and Problem Solving** | 1. To add 3- digit by 3- digit numbers with sums up to 1000 without and with regrouping. | 1 |
| **Addition** | 1. To use the zero/identity property of addition in computing for sums up to 1000 | 1 |
| **Addition and Problem Solving** | 1. Use the commutative property of addition in computing the sums up to 1000 | 1 |
|  | 1. Use the associative property of addition in computing the sum of up to 1000 | 1 |
| **Mentally Add 1 to 2 Digit Numbers** | 1. To mentally add 1 to 2 digit numbers with sums up to 50 | 1 |
| **Addition and Problem Solving** | 1. Mentally add 3-digit numbers by ones (up to 9) | 1 |
| **Addition** | 1. To mentally add 3-digit numbers by tens (multiples of 100 up to 900) | 1 |
| **Addition and Problem Solving** | 1. Mentally add 3-digit numbers by hundreds (multiples of 100 to 900) | 1 |
| **Analyze and Solve Word Problems** | 1. Analyzes and solves word problems involving addition of whole numbers including money with sums up to 1000 without and with regrouping. (What is/are given?) | 1 |
| **Addition and Problem Solving** | 1. Analyzes and solves word problems involving addition of whole numbers including money with sums up to 1000 without and with regrouping. (Word clues and Operations to be used). | 1 |
|  | 1. Analyzes and solves word problems involving addition of whole number including money with sums up to 1000 with and without regrouping (Transforming Word Problems into Number Sentences and Stating Complete Answer) | 1 |
| **Subtraction** | 1. Subtracting 2- to 3-digit numbers with minuends up to 999 with regrouping in the hundreds place | 1 |
| **SECOND GRADING** | | |
|  | 1. Subtract 2- to-3 digit numbers with minuends up to 999 without regrouping | 1 |
|  | 1. Mentally subtract 1-digit number from 1 to 2 digit numbers with minuends up to 50 | 1 |
|  | 1. To mentally subtract 3-digit numbers by ones without regrouping | 1 |
|  | 1. Mentally subtracts 3-digit by tens without regrouping | 1 |
|  | 1. Mentally subtract 3-digit by hundreds without regrouping. | 1 |
|  | 1. Analyzes and solves one-step word problems involving Subtraction of whole numbers including money with minuends up to 1000 with and without regrouping. | 1 |
| **Addition, Subtraction and problem solving** | 1. Perform order of operations involving addition and subtraction of small numbers | 1 |
| **Addition** | 1. Solves two-step word problems involving addition and subtraction of 2 to 3 digit numbers including money using appropriate procedures (What is ask/What is/are given) | 1 |
| **Addition, Subtraction and Problem Solving** | 1. Solve two-step word problems involving addition and subtraction of 2 -to 3 digit numbers including money using appropriate procedures (Operation to be used, Number sentence and the Correct Answer) | 1 |
| **Addition** | 1. Solves two-step word problems involving addition and subtraction of 2- to 3- digit numbers including money using appropriate procedures | 1 |
| **Multiplication** | 1. Illustrate multiplication as repeated addition | 1 |
|  | 1. Illustrate multiplication as counting by multiples | 1 |
|  | 1. Illustrate multiplication as equal jumps in a number line | 1 |
|  | 1. Write a related equation for multiplication as repeated addition | 1 |
|  | 1. Write a related equation for multiplication as counting by multiples | 1 |
|  | 1. Write a related equation for multiplication as equal jumps in the number line | 1 |
|  | 1. Illustrate the property of multiplication that any number multiplied by one (1) is the same number | 1 |
|  | 1. Illustrate the property of multiplication that zero multiplied by any number is zero | 1 |
|  | 1. Illustrate commutative property of multiplication | 1 |
|  | 1. Construct and fill up the multiplication table of 2, 3 and 4 | 1 |
|  | 1. Construct and fill up the multiplication tables of 5 and 10 | 1 |
|  | 1. Multiply mentally to fill up the multiplication tables of 2, 3, 4, 5 and 10 | 1 |
|  | 1. Analyze and solve one-step word problems involving multiplication of whole numbers including money | 1 |
|  | 1. Analyze and solve two-step word problems involving multiplication of whole numbers as well as addition and subtraction including money | 1 |
| **Division** | 1. Model and describe division situations in which sets are separated into equal parts | 1 |
|  | 1. Represent division as equal sharing | 1 |
|  | 1. Represent division as repeated subtraction | 1 |
|  | 1. Represent division as equal jumps on a number line | 1 |
|  | 1. Represent division as formation of equal groups of objects | 1 |
| **THIRD GRADING** | | |
|  | 1. Write related equation in equal sharing | 1 |
|  | 1. Write related equation in repeated subtraction | 1 |
|  | 1. Write related equation for equal jumps on a number line | 1 |
|  | 1. Write related equation as formation of equal objects | 1 |
|  | 1. Divide numbers found in the multiplication tables of 2, 3, 4, 5 and 10 | 1 |
|  | 1. Mentally divides numbers found in the multiplication tables of 2, 3, 4, 5 and 10 | 1 |
|  | 1. Analyze one-step word problems involving division of numbers found in the multiplication tables of 2, 3, 4, 5, and 10 | 1 |
|  | 1. Solve one-step word problems involving division of numbers found in the multiplication tables of 2, 3, 4, 5, and 10 | 1 |
| **Fraction** | 1. Visualize and identify unit fractions with denominators 10 and below | 1 |
|  | 1. Read and write unit fractions | 1 |
|  | 1. Compare unit fractions using relation symbols | 1 |
|  | 1. Order unit fractions | 1 |
|  | 1. Visualize and identify other fractions less than one with denominators 10 and below | 1 |
|  | 1. Visualize and identify similar fractions (using group of objects and number line) | 1 |
|  | 1. Read and write similar fractions | 1 |
|  | 1. Compare similar fractions using relation symbols | 1 |
|  | 1. Order similar fractions | 1 |
| **Money** | 1. Read and write money with value through 100 | 1 |
|  | 1. Count and tell the value of a set of coins through 100 in peso | 1 |
|  | 1. Count and tell the value of a set of bills through 100 in peso | 1 |
|  | 1. Count and tell the value of a set of bills and coins in peso | 1 |
|  | 1. Count and tell the value of a set of coins through 100 in centavo | 1 |
|  | 1. Count and tell the value of a set of bills or a set of coins through 100 in combinations of pesos and centavos (Peso and Centavo Coins Only) | 1 |
|  | 1. Count and tell the value of a set of bills or a set of coins through 100 in combinations of pesos and centavos (Bills and Centavo Coins Only) | 1 |
|  | 1. Read and write money in symbol and in words through 100 | 1 |
|  | 1. Compare values of different denominations of coins and paper bills through 100 using relation symbols <, > and = | 1 |
|  | 1. 1. Distinguish between half and quarter circles   2. Classify fractions of circles into half and quarter circles  3. Describe half and quarter circles | 1 |
| **(Half Circles and Quarter Circles)** | 1. Create representations of   1. squares, rectangles and triangles using paper folding/cutting and square grids;  2. circles, half circles and quarter circles using paper folding/cutting and square grids. | 1 |
| **(Mirror Symmetry)** | 1. 1. Draw the line of symmetry in shapes and figures;   2. Identify shapes and figures that show symmetry in a line. | 1 |
| **FOURTH GRADING** | | |
| **(Creating Symmetry in a Line)** | 1. Create figures that show symmetry in a line | 1 |
| **(Tessellations)** | 1. Create representations of   1. recognizes shapes that can tessellate  2. tessellates a surface using triangles and squares | 1 |
| **(Curves)** | 1. 1. Explains the differences between straight lines and curved lines   2. Identifies straight lines and curved lines | 1 |
| **(Surfaces)** | 1. 1. Explains the differences between flat surfaces and curved surfaces   2. Identifies flat and curved surfaces in 3-dimensional objects | 1 |
| **(Patterns and Algebra)** | 1. 1. Identify simple repeating (shapes/numbers/lines) patterns   2. Extend and reproduce simple repeating (shapes/numbers/lines) pattern  3. Explain how simple repeating (shapes/numbers/lines) patterns are formed | 1 |
|  | 1. 1. Determine the next term (size, color and orientation) in a given sequence and give a reason.   2. Find the complete patterns according to the one or two of the following attributes: size, color and orientation. | 1 |
| **Measurement** | 1. Tell and write time in minutes including a.m. and p.m. using analog clock. | 1 |
|  | 1. Tell and write the time in hours and minutes including a.m. and p.m. using digital clock. | 1 |
| **Time** | 1. Finds the duration of time elapsed using analog and digital clocks. | 1 |
|  | 1. Solve simple word problem involving time using clock | 1 |
|  | 1. Find the duration of time elapsed using calendar. | 1 |
|  | 1. Solve simple word problem involving time using calendar. | 1 |
| **Length** | 1. Identify the appropriate unit of length to measure a particular object and their abbreviations (cm and m) | 1 |
|  | 1. Measure objects using appropriate measuring tools in centimeter (cm) or meter (m). | 1 |
|  | 1. Compare lengths in meters (m) or centimeters (cm). | 1 |
|  | 1. Estimate length using meter (m) or centimeter (cm). | 1 |
|  | 1. Solve simple word problems involving length. | 1 |
| **Mass** | 1. Identify and use appropriate unit of mass (in gram or kilogram and their abbreviations g or kg) in measuring a particular object. | 1 |
|  | 1. Compare mass in grams or kilograms | 1 |
|  | 1. Estimate mass using gram or kilogram | 1 |
|  | 1. Solve simple problems involving mass | 1 |
| **Area** | 1. Illustrate area as a measure of how much surface is covered or occupied by plane figure. | 1 |
|  | 1. Show the area of a given figure using square tile units. (i.e. number of square tiles needed). | 1 |
|  | 1. Find the area of a square and a rectangle using square tile units. | 1 |
|  | 1. Estimate the area of a given figure using any shape. | 1 |
| **Capacity** | 1. Identify appropriate unit of measure in finding the capacity | 1 |
| **(Statistics and Probability)** | 1. Collect and organize data using tables and pictures. | 1 |
|  | 1. 1. Read and interpret data in a given pictograph.   2. Form scale representation of objects from the data collected.  3. Make pictographs using scale representation. | 1 |
|  | 1. Make a guess on whether an event is less likely, more likely, equally likely or unlikely to happen based on facts. | 1 |