MATHEMATICS SCHEME OF WORK GRADE 4 TERM ONE


## MATHEMATICS SCHEME OF WORK GRADE 4 TERM ONE

| Week | Lesson | Strand | Sub strand | Specific learning outcomes | Learning experiences | Key inquiry questions | Learning resources | Assessment | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1$ | 1 | NUMBERS | WHOLE NUMBERS | By the end of the sub strand, the learner should be able to: use place value and total value of digits up to tens of thousands in daily life situations, | Learners in pairs/groups to identify place value of up to tens of thousands using place value apparatus | What do you consider when writing numbers in words? | KLB Visionary Mathematics pg 1-2 <br> Place value apparatus, number charts, number cards, multiplication table |  |  |
|  | 2 | NUMBERS | WHOLE NUMBERS | By the end of the sub strand, the learner should be able to: read and write numbers up to 10,000 in symbols in real life situations, | Learners in pairs/groups to identify total values of digits up to ten thousand <br> Learners in pairs/groups/ individually to read numbers up to 10,000 in symbols in real life situations. | What do you consider when writing numbers in words? | KLB Visionary Mathematics pg 1-2 <br> Place value apparatus, number charts, number cards, multiplication table |  |  |
|  | 3 | NUMBERS | WHOLE NUMBERS | By the end of the sub strand, the learner should be able to: read and write numbers | Learners in pairs/groups/ individually to read numbers up to 10,000 in symbols | What do you consider when writing numbers | KLB Visionary Mathematics pg 1-2 |  |  |


|  |  |  |  | up to 10,000 in symbols in real life situations, | in real life situations. | in words? | Place value apparatus, number charts, number cards, multiplication table |  |  |
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|  | 4 | NUMBERS | WHOLE <br> NUMBERS | By the end of the sub strand, the learner should be able to: read and write numbers up to 1,000 in words in day to day activities, | Learners in pairs/groups/ individually to read numbers up to 10,000 in symbols in real life situations. | What do you consider when writing numbers in words? | KLB Visionary Mathematics pg 1-3 <br> Place value apparatus, number charts, number cards, multiplication table |  |  |
|  | 5 | NUMBERS | WHOLE NUMBERS | By the end of the sub strand, the learner should be able to read and write numbers up to 1,000 in words in day to day activities, | Learners in Learners in pairs/groups/ individually to read and write numbers up to 1,000 in words from a number chart. Learners in pairs to arrange numbers up to 1,000 in order from smallest to largest and largest to smallest using number cards and share with other groups. | What do you consider when writing numbers in words? | KLB Visionary Mathematics pg 1-4 <br> Place value apparatus, number charts, number cards, multiplication table |  |  |



|  | 3 | NUMBERS | WHOLE NUMBERS | By the end of the sub strand, the learner should be able to: round off numbers up to 1,000 to the nearest ten in different situations, | Learners in pairs/groups/individu ally round off numbers up to 1,000 to the nearest ten and share with other groups. <br> Learners in pairs/groups/individual ly to identify factors/divisors of numbers up to 50 and share with other groups | How can you find the place value of a digit in a number? | KLB Visionary Mathematics pg 10-11 <br> Place value apparatus, number charts, number cards, multiplication table |  |  |
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|  | 4 | NUMBERS | WHOLE NUMBERS | By the end of the sub strand, the learner should be able to: round off numbers up to 1,000 to the nearest ten in different situations, | Learners in pairs/groups/individ ually round off numbers up to 1,000 to the nearest ten and share with other groups. <br> Learners in pairs/groups/individ ually to identify factors/divisors of numbers up to 50 and share with other groups | How can you find the place value of a digit in a number? | KLB Visionary Mathematics pg 110-11 <br> Place value apparatus, number charts, number cards, multiplication table |  |  |
|  | 5 | NUMBERS | WHOLE NUMBERS | By the end of the sub strand, the learner should be able to: <br> a) identify factors/divisors of numbers up to 50 in different contexts, | Learners in pairs/groups/individu ally round off numbers up to 1,000 to the nearest ten and share with other groups. <br> Learners in | How can you find the place value of a digit in a number? | KLB Visionary Mathematics pg 13 <br> Place value apparatus, number charts, |  |  |


|  |  |  |  |  | pairs/groups/individ ually to identify factors/divisors of numbers up to 50 and share with other groups. |  | number cards, multiplication table |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3$ | 1 | NUMBERS | WHOLE NUMBERS | By the end of the sub strand, the learner should be able to: identify multiples of numbers up to 100 in different situations, | Learners in pairs/groups/individu ally round off numbers up to 1,000 to the nearest ten and share with other groups. <br> Learners in pairs/groups/individual ly to identify factors/divisors of numbers up to 50 and share with other groups | How can you find the place value of a digit in a number? ? | KLB Visionary <br> Mathematics pg 14 <br> Place value apparatus, number charts, number cards, multiplication table |  |  |
|  | 2 | NUMBERS | WHOLE <br> NUMBERS | By the end of the sub strand, the learner should be able to: use even and odd numbers up to 100 in different situations, | Learners in pairs/groups play digital games involving area of rectangles and squares | How can you find the place value of a digit in a number? | KLB Visionary Mathematics pg 15-22 <br> Place value apparatus, number charts, number cards, multiplication table |  |  |
|  | 3 | NUMBERS | $\begin{aligned} & \text { ADDITIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: add up to two 4-digit | Learners in pairs/groups to add up to two 4-digit numbers with single regrouping up to a sum of 10,000 | When do you use addition in real life? | KLB Visionary Mathematics pg 23-26 |  |  |


|  |  |  |  | numbers with single regrouping up to a sum of 10,000 in different situations, | in different situations |  | Place value chart, Abacus |  |  |
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|  | 4 | NUMBERS | $\begin{aligned} & \text { ADDITIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: add up to two 4-digit numbers with single regrouping up to a sum of 10,000 in different situations, | Learners in pairs/groups to add up to two 4-digit numbers with single regrouping up to a sum of 10,000 in different situations | When do you use addition in real life? ? | KLB Visionary <br> Mathematics pg 27 <br> Place value chart, Abacus |  |  |
|  | 5 | NUMBERS | $\begin{aligned} & \text { ADDITIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: add up to two 4-digit numbers with double regrouping up to a sum of 10,000 in real life situations | Learners in pairs/groups to add up to two 4-digit numbers with single regrouping up to a sum of 10,000 | What do you consider when estimating answer in addition? | KLB Visionary Mathematics pg 27 <br> Place value chart, Abacus |  |  |
| $4$ | 1 | NUMBERS | $\begin{aligned} & \text { ADDITIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: estimate sum by rounding off numbers to the nearest ten in different situations, | Learners in pairs/groups add up to two 4-digit numbers with double regrouping up to a sum of 10,000 in real life situations. | What do you consider when estimating answer in addition? ? | KLB Visionary Mathematics pg 28 <br> Place value chart, Abacus |  |  |
|  | 2 | NUMBERS | $\begin{aligned} & \text { ADDITIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: estimate sum by rounding off numbers to the nearest ten in different situations, | Learners in pairs/groups add up to two 4-digit numbers with double regrouping up to a sum of 10,000 in real life situations. | How do you form number patterns in addition? | KLB Visionary Mathematics pg 29 <br> Place value |  |  |


|  |  |  |  |  |  |  | chart, Abacus |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 | NUMBERS | $\begin{aligned} & \text { ADDITIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: create patterns involving addition up to a sum of 10,000 in real life situations, use IT devices for learning and enjoyment | Learners in pairs/groups add up to two 4-digit numbers with double regrouping up to a sum of 10,000 in real life situations. kilograms ( kg ) in real life situations | How do you form number patterns in addition?? | KLB Visionary Mathematics pg 29 <br> Place value chart, Abacus |  |  |
|  | 4 | NUMBERS | $\begin{aligned} & \text { ADDITIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: create patterns involving addition up to a sum of 10,000 in real life situations, use IT devices for learning and enjoyment | Learners in pairs/groups add mass involving kilograms $(\mathrm{kg})$ in real life situations <br> Learners in pairs/groups subtract mass involving kilograms ( kg ) in real life situations | How do you form number patterns in addition? | KLB Visionary Mathematics pg 29 <br> Place value chart, Abacus |  |  |
|  | 5 | NUMBERS | $\begin{aligned} & \text { ADDITIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: create patterns involving addition up to a sum of 10,000 in real life situations, use IT devices for learning and enjoyment | Learners in pairs/groups to estimate sum by rounding off numbers to be added to the nearest ten in different situations | How do you form number patterns in addition? | KLB Visionary Mathematics pg 29 value chart, Abacus |  |  |


| 5 | 1 | NUMBER S | SUBTRA CTION | By the end of the sub strand, the learner should be able to: subtract up to 4-digit numbers without regrouping in real life situations | When do you use subtraction in real life? | Learners in pairs/groups to subtract numbers up to 4-digit numbers without regrouping in real life situations | KLB <br> Visionary Mathematics pg 31 <br> Place value chart, Abacus |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 | NUMBER S | SUBTRA CTION | By the end of the sub strand, the learner should be able to: subtract up to 4-digit numbers without regrouping in real life situations | When do you use subtraction in real life? | Learners in pairs/groups to subtract numbers up to 4-digit numbers without regrouping in real life situations | KLB <br> Visionary Mathematics pg 31 <br> Place value chart, Abacus |  |  |
|  | 3 | NUMBER S | Subtractio n | By the end of the sub strand, the learner should be able to subtract up to 4-digit numbers with regrouping in real life situations, | When do you use subtraction in real life? | Learners in pairs/groups/ individually to subtract up to 4- digit numbers with regrouping in real life situations | KLB <br> Visionary Mathematics pg 32-33 <br> Place value chart, Abacus |  |  |
|  | 4 | NUMBER S | Subtractio n | By the end of the sub strand, the learner should be able to: subtract up to 4-digit numbers with regrouping in real life situations, | How do you estimate the difference of given numbers? | Learners in pairs/groups/ individually to subtract up to 4- digit numbers with regrouping in real life situations | KLB <br> Visionary Mathematics pg 32-35 <br> Place value |  |  |


|  |  |  |  |  |  |  | chart, Abacus |  |  |
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|  | 5 | NUMBER S | Subtractio <br> n | By the end of the sub strand, the learner should be able to: estimate difference by rounding off numbers to the nearest ten in real life situations, | How do you estimate the difference of given numbers? | Learners in pairs/groups to estimate and work out difference by rounding off the numbers to the nearest ten in real life situations. | KLB <br> Visionary Mathematics pg 36 <br> Place value chart, Abacus |  |  |
| $6$ | 1 | NUMBER S | Subtractio n | By the end of the sub strand, the learner should be able to create patterns involving subtraction from up to 10,000 | How do you estimate the difference of given numbers? | Learners in pairs/groups to estimate and work out difference by rounding off the numbers to the nearest ten in real life situations. | KLB <br> Visionary <br> Mathematics <br> pg 37-39 <br> Place value chart, Abacus |  |  |
|  | 2 | NUMBER S | Subtractio n | By the end of the sub strand, the learner should be able to create patterns involving subtraction from up to 10,000, | How do you estimate the difference of given numbers? | Learners in pairs/groups to create patterns involving subtraction of numbers from up to 10,000 | KLB <br> Visionary <br> Mathematics <br> pg 37-39 <br> Place value chart, Abacus |  |  |
|  | 3 | NUMBER S | Subtractio <br> n | By the end of the sub strand, the learner should be able to use IT devices for learning and enjoyment, | How do you estimate the difference of given numbers? | Learners in pairs/groups/ individually to play digital games involving subtraction | KLB <br> Visionary <br> Mathematics <br> pg 37-39 <br> Place value |  |  |


|  |  |  |  | appreciate application of subtraction of numbers in real life situations |  |  | chart, Abacus |  |  |
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|  | 4 | NUMBER S | Subtractio n | By the end of the sub strand, the learner should be able to use IT devices for learning and enjoyment, appreciate application of subtraction of numbers in real life situations | How do you create patterns involving subtraction? | Learners in pairs/groups/ individually to play digital games involving subtraction | KLB <br> Visionary Mathematics pg 37-39 <br> Place value chart, Abacus |  |  |
|  | 5 | NUMBER S | Subtractio n | By the end of the sub strand, the learner should be able to use IT devices for learning and enjoyment, appreciate application of subtraction of numbers in real life situations | How do you create patterns involving subtraction? | Learners $\quad$ in pairs/groups $\quad$ to subtract capacity involving litres in real life situations. Learner in pairs/groups to play digital games involving capacity. | KLB <br> Visionary Mathematics pg 37-39 Place value chart, Abacus |  |  |
| $7$ | 1 | NUMBER S | Multiplica tion | By the end of the sub strand, the learner should be able to: multiply up to a 2 -digit number by multiples of 10 in different situations, | How do you create patterns involving multiplicatio n ? | Learners in pairs/groups to multiply up to a 2-digit number by multiples of 10 in | KLB <br> Visionary <br> Mathematics <br> pg 40-41 <br> Multiplication tables |  |  |
|  | 2 | NUMBER S | Multiplica tion | By the end of the sub strand, the learner should be able to multiply up to a 2digit number by multiples | When do you use multiplicatio n in real | Leaners in pairs/groups to multiply up to a 2 digit numbers by a 2 digit number without and | KLB <br> Visionary <br> Mathematics |  |  |


|  |  |  |  | of 10 in different situations, | life? | with regrouping in real life situations | pg 40-41 <br> Multiplication tables |  |  |
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|  | 3 | NUMBER S | Multiplica tion | By the end of the sub strand, the learner should be able to multiply up to a 2-digit number by a 2 digit number without and with regrouping in real life situations, | When do you use multiplicatio n in real life? | Leaners in pairs/groups to multiply up to a 2 digit numbers by a 2 digit number without and with regrouping in real life situations | KLB <br> Visionary Mathematics pg 41-42 <br> Multiplication tables |  |  |
|  | 4 | NUMBER S | Multiplica tion | By the end of the sub strand, the learner should be able to multiply up to a 2-digit number by a 2digit number without and with regrouping in real life situations, | When do you use multiplicatio n in real life? | Leaners in pairs/groups to multiply up to a 2 digit numbers by a 2 digit number without and with regrouping in real life situations hours to days and days | KLB <br> Visionary <br> Mathematics <br> pg 41-42 <br> Multiplication tables |  |  |
|  | 5 | NUMBER S | Multiplica tion | By the end of the sub strand, the learner should be able to estimate products by rounding off numbers to the nearest ten in real life situations, | How do you create patterns involving multiplicatio n ? | Learners pairs/groups/ individually to estimate and work out answers by rounding off numbers to the nearest ten with product not exceeding 1,000 in real life situations. | KLB <br> Visionary Mathematics pg 41-42 <br> Multiplication tables |  |  |
| $8$ | 1 | NUMBER S | MULTIP <br> LICATIO <br> N | By the end of the sub strand, the learner should be able to record time durations in hours and minutes in real life | How do you create patterns involving | Learners in pairs/groups to Learners pairs/groups/ individually to estimate and work out answers | KLB <br> Visionary <br> Mathematics |  |  |


|  |  |  |  | situations, | multiplicatio n ? | by rounding off numbers to the nearest ten with product not exceeding 1,000 in real life situations. | pg 44-45 <br> Multiplication tables |  |  |
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|  | 2 | NUMBER S | MULTIP <br> LICATIO <br> N | By the end of the sub strand, the learner should be able to Create patterns involving multiplication with product not exceeding 100 in real life situations | How do you create patterns involving multiplicatio n ? | Learners pairs/groups/ individually to estimate and work out answers by rounding off numbers to the nearest ten with product not exceeding 1,000 in real life situations. | KLB <br> Visionary <br> Mathematics <br> pg 45-48 <br> Multiplication tables |  |  |
|  | 3 | NUMBER S | MULTIP <br> LICATIO <br> N | By the end of the sub strand, the learner should be able to use IT devices for learning and enjoyment, appreciate application of multiplication of numbers in real life. | How do you create patterns involving multiplicatio n ? | Learners in pairs/groups to create patterns involving multiplication with product not exceeding 100.Learners pairs/groups/ individually to play digital games on multiplication. | KLB <br> Visionary <br> Mathematics <br> pg 45-48 <br> Multiplication tables |  |  |
|  | 4 | NUMBER S | $\begin{aligned} & \text { DIVISIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: <br> divide up to a 2-digit number by a 1-digit number without remainder in different situations, | When do you use division in real life | Learners in pairs/ groups to divide up to a 2-digit number by 1 -digit number without remainder using counters | KLB <br> Visionary <br> Mathematics <br> pg 52-54 <br> Multiplication tables |  |  |
|  | 5 | NUMBER S | $\begin{aligned} & \text { DIVISIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to divide up to a | When do you use division in | Learners in pairs/groups to divide a 2-digit number by a | KLB <br> Visionary |  |  |


|  |  |  |  | 2-digit number by a 1-digit number without remainder in different situations, | real life | 1-digit number with remainder using counters. <br> Learners in pairs/groups to divide a 2-digit number by a 1 - digit number | Mathematics pg 52-54 <br> Multiplication tables |  |  |
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| 9 | 1 | NUMBER S | $\begin{aligned} & \text { DIVISIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to divide up to a 2-digit number by a <br> 1-digit number with remainder in real life situations | How can you estimate quotient? | Learners in pairs/groups to divide a 2-digit number by a 1-digit number using own strategies. <br> Learners in pairs/groups to use relationship between multiplication and division in working out problems | KLB <br> Visionary <br> Mathematics <br> pg 52-54 <br> Multiplication tables |  |  |
|  | 2 | NUMBER S | $\begin{aligned} & \text { DIVISIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: use IT devices for learning and leisure, appreciate application of division of numbers in real life situations. | How can you estimate quotient? | Learners in pairs/groups to divide a 2-digit number by a 1-digit number using own strategies. <br> Learners in pairs/groups to use relationship between multiplication and division in working out problems | KLB <br> Visionary <br> Mathematics <br> pg 56 <br> Multiplication <br> tables |  |  |
|  | 3 | NUMBER S | $\begin{aligned} & \text { DIVISIO } \\ & \mathbf{N} \end{aligned}$ | By the end of the sub strand, the learner should be able to: use IT devices for learning and leisure, appreciate application of division of numbers in real life situations. | How can you estimate quotient? | Learners in pairs/groups to divide a 2-digit number by a 1-digit number using own strategies. <br> Learners in pairs/groups to use relationship between multiplication and division in working out | KLB <br> Visionary <br> Mathematics <br> pg 56 <br> Multiplication tables |  |  |


|  |  |  |  |  |  | problems . |  |  |  |
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|  | 4 | NUMBER S | FRACTI ONS | By the end of the sub strand, the learner should be able to: <br> represent a fraction with denominators not exceeding 12 as part of a whole and as part of a group in real life situations | When do you use fractions in real life? | Learners in pairs/groups to represent fractions as part of a whole and as part of a group using concrete objects | KLB <br> Visionary <br> Mathematics <br> pg 57-58 <br> Equivalent <br> fraction <br> board, <br> Circular and rectangular cut outs, counters, clock face |  |  |
|  | 5 | NUMBER S | FRACTI ONS | By the end of the sub strand, the learner should be able to represent and write fractions whose denominators do not exceed 12 in real life situations, | How can you represent fractions? | Learners in pairs/groups to discuss the top and bottom numbers in a fraction and share with other groups | KLB <br> Visionary <br> Mathematics <br> pg 60-61 <br> Equivalent <br> fraction <br> board, <br> Circular and rectangular cut outs, counters, clock face |  |  |
| $10$ | 1 | NUMBER S | FRACTI ONS | By the end of the sub strand, the learner should be able to identify different types of fractions in real life, convert improper fractions | When do you use fractions in real life? | Learners in pairs/groups to discuss the top and bottom numbers in a fraction and share with other groups | KLB <br> Visionary <br> Mathematics <br> pg 61-62 |  |  |


|  |  |  |  | to mixed fractions in different situations |  |  | Equivalent <br> fraction board, Circular and rectangular cut outs, counters, clock face |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 | NUMBER S | $\begin{aligned} & \text { FRACTI } \\ & \text { ONS } \end{aligned}$ | By the end of the sub strand, the learner should be able to identify different types of fractions in real life, convert improper fractions to mixed fractions in different situations | How can you represent fractions? | Learners in pairs/groups to represent fractions as part of a whole or part of a group using cut outs, counters or clock face. <br> Learners in pairs/groups/ individually to represent proper, improper and mixed fractions as part of a whole or as part of a group using paper cut outs or counters | KLB <br> Visionary <br> Mathematics <br> pg 63-64 <br> Equivalent <br> fraction <br> board, <br> Circular and <br> rectangular <br> cut outs, <br> counters, <br> clock face |  |  |
|  | 3 | NUMBER S | $\begin{aligned} & \text { FRACTI } \\ & \text { ONS } \end{aligned}$ | By the end of the sub strand, the learner should be able to convert mixed fractions to improper fractions in different contexts use IT devices for learning and enjoyment, appreciate application of fractions in real life | When do you use fractions in real life? | Learners in pairs/groups to convert improper fractions to mixed fractions. Learners in pairs/groups to convert mixed fractions to improper fractions | KLB <br> Visionary Mathematics pg 63-64 <br> Equivalent <br> fraction <br> board, <br> Circular and |  |  |



