**MINISTRY OF GENERAL EDUCATION**

**SOUTHERN PROVINCE**

**SCHEMES OF WORK**

**SUBJECT**: MATHEMATICS

**GRADE**: 6 **TERM**: 1  **YEAR**: 2018

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WEEK** | **TOPICS/CONTENT** | **GENERALOUTCOME** | **METHODS** | **L / T RESOURCES** | **REFERANCE** |
| 1 | **INDEX NOTATION**  - Describing the Index Notation  - Changing Index to Expanded Notation  - Evaluating Numbers in the Index Notation | Developing Algebraic, Geometry and Arithmetic skills in Mathematics  - Solve Mathematics challenges In everyday life through problem solving | - Demonstration  - Group Work  - Pair Work  - Discussion | - Grade 6 Primary Pupils Book Mk  - Multiplication Tables Chart | Grade 6 Primary MK Pg 1-4  -Grade 6 Syllabus |
| 2 | **SETS**  - Intersection Set  - Venn Diagram for Intersection sets  - Union Set  - Venn Diagram For Union Set | Developing Algebraic, Geometry and Arithmetic skills in Mathematics  - Solve Mathematics challenges In everyday life through problem solving | - Demonstration  - Group Work  - Pair Work  - Discussion | - Letter Cards  - Number Cards  - Pupils  - Stones  - Sticks  - Pencil | Grade 6 primary MK pg 5-8  -Grade 6 Syllabus |
| 3 | **SETS**   * **LISTING SETS** * Applying the knowledge of subset | Developing Algebraic, Geometry and Arithmetic skills in Mathematics  - Solve Mathematics challenges In everyday life through problem solving | - Demonstration  - Group Work  - Pair Work  - Discussion | Letter Cards  - Number Cards  - Pupils  - Stones  - Sticks  - Pencil | Grade 6 Primary MK Pg 5-8  -Grade 6 Syllabus |
| 4 | **SETS**  - Applying more of the sets  - Assessment | Developing Algebraic, Geometry and Arithmetic skills in Mathematics  - Solve Mathematics challenges In everyday life through problem solving | - Demonstration  - Group Work  - Pair Work  - Discussion | - Letter Cards  - Number Cards  - Pupils  - Stones  - Sticks  - Pencil | Grade 6 primary MK pg 5-8  -Grade 6 Syllabus |
| 5 | **PRIME FACTORS**  - Describing and listing prime number  - Listing prime and composite numbers  - Expressing products of the prime factors | Developing Algebraic, Geometry and Arithmetic skills in Mathematics  - Solve Mathematics challenges In everyday life through problem solving | - Demonstration  - Group Work  - Pair Work  - Discussion | - Letter Cards  -Number Cards  -Pupils  -Stones  -Sticks  -Pencil  10 By 10 Sequence Table | Grade 6 primary MK pg 5-8  -Grade 6 Syllabus |
| 6 | **PRIME FACTORS**  -product  -find the product of the prime factors  **FRACTIONS**  -multiplying whole numbers by the fraction.  -multiplying a fraction by a whole number | Developing algebraic, geometry and arithmetic skills in mathematics  - Solve mathematics challenges in everyday life through problem solving | - Demonstration  -Group Work  -Pair Work  -Discussion | - Letter Cards  -Number Cards  -Pupils  -Stones  -Sticks  -Pencil  -Orange  -Apple | Grade 6 primary MK pg 5-8  -Grade 6 Syllabus |
| 7 | **FRACTIONS**   * Multiplying fractions by whole numbers involving (of) * Working out problems involving of   **Mid -term Assessment** | Developing algebraic, geometry and arithmetic skills in mathematics  -solve mathematics challenges in everyday life through problem solving  **Mid -term Assessment** | - Demonstration  - Group Work  - Pair Work  - Discussion  **Mid -term Assessment** | - Number Cards  - Pupils  - Stones  - Sticks  - Pencil  - Orange  - Apple  **Mid -term Assessment** | Grade 6 primary MK pg 5-8  -Grade 6 Syllabus  **Mid -term Assessment** |
| 8 | **FRACTIONS**   * Multiplying fraction by another fraction * Find the reciprocal of fractions and whole numbers * Dividing fractions by whole numbers | Developing algebraic ,geometry and arithmetic skills in mathematics  Solve mathematics challenges in everyday life through problem solving | - Demonstration  - Group Work  - Pair Work  - Discussion | - Number Cards  - Pupils  - Stones  - Sticks  - Pencil  - Orange  - Apple  Books | Grade 6 primary MK pg 5-8  -Grade 6 Syllabus  -Grade 6 Syllabus |
| 9 | **FRACTIONS**  - Dividing whole number by a  fraction  - Dividing fractions by another  fractions  - Applying fractions to solve  problems in real life | - Developing algebraic ,geometry and arithmetic skills in mathematics  - Solve mathematics challenges in everyday life through problem solving | - Demonstration  - Group work  - Pair work  - Discussion | - Number Cards  - Pupils  - Stones  - Scale  - Pencil  - Orange  - Apple  - Wall Clock | Grade 6 primary pps book  Mk pg 27-30  -Grade 6 Syllabus |
| 10 | **DECIMALS**  - Naming decimals numbers  - Writing decimals names in  figures  - Adding decimals | Developing algebraic ,geometry and arithmetic skills in mathematic  solve mathematics challenges in everyday life through problem solving | - Demonstration  -Group Work  -Pair Work  -Discussion | - Scale  - Pencil  - Orange  - Apple  - Wall Clock | - Grade 6 primary MK pg 31-33  -Grade 6 Syllabus |
| 11 | **DECIMALS**  - Subtracting decimals  - Mixed addition and subtraction of decimal  - Multiplication decimals by 10,110, and 100 | Developing algebraic, geometry and arithmetic skills in mathematic  solve mathematics challenges in everyday life through problem solving | - Demonstration  -Group Work  -Pair Work  -Discussion | - Container  - Water  - Cup With Measurement  - Threads Or String  - Ruler | - Grade 6 primary MK pg 31-33  -Grade 6 Syllabus  Long man pulps book. Grade 6  Pg 30-31 |
| 12 | **DECIMALS**  - Multiplication decimals by  10,110, and 100 | Developing algebraic, geometry and arithmetic skills in mathematic  solve mathematics challenges in everyday life through problem solving | - Group Work  -Pair Work  -Discussion | - Measurement  - Threads Or String  - Ruler | - Grade 6 primary MK pg 31-33  -Grade 6 Syllabus  Long man pulps book. Grade 6  Pg 30-31 |
| 13 | **END OF TERM TESTS, REVISION AND COMPILATION OF RESULTS** | | | | |

**NB: FOR MIDTERM , TESTTWO SUBJECTS PER DAY AND TEACH THE OTHER SUBJECTS THAT APPEAR ON THE TIME TABLE THAT DAY.**

**MINISTRY OF GENERAL EDUCATION**

**SOUTHERN PROVINCE**

**SCHEMES OF WORK**

**SUBJECT**: MATHEMATICS

**GRADE**: 6 **TERM**: 2  **YEAR**: 2018

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WEEK** | **TOPIC/CONTENT** | **GENERAL OUTCOMES** | **METHODS** | **L / T RESOURCES** | **REFERENCE** |
| 1 | **DECIMALS**  - Multiplying decimals by a decimal  - Problems involving multiplication of decimals  - Dividing a whole number by decimals | - Enrich learners understanding mathematical concepts on decimals  - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group work  - Discussion  - pairs work | - Scales  - Number cards | - MK primary Mathematics grade 6 pps book page 37-40   * Grade 6 mathematics syllabus |
| 2 | **DECIMALS**  -Problems on division of whole numbers by decimals  - Dividing decimals by whole numbers  - Dividing a decimal by a decimal  - Assessment | -Enrich learners understanding mathematical concepts on decimals  - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - group work  - Discussion  - Pairs work | - Container of water  - String ,ruler  Mk primary mathematic grade 6 | - MK primary Mathematics grade 6 pps book page 41-43  - grade 6 mathematics syllabus |
| 3 | **APPROXIMATION**  - Problems on division of  whole numbers by decimals  - Dividing decimals by  whole numbers  Rounding off to the nearest unit(whole)  - Rounding off to the nearest ten one decimal place | - Enrich learners  understanding  Mathematical concepts  on decimals  - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group work  - Discussion  - Pairs work | - Number cards  - Number strips  - MK primary  Mathematic grade 6  pps book | Mk primary Mathematics grade 6 pps book page 44-46  -grade 6 Mathematics syllabus |
| 4 | **APPROXIMATION**   * Rounding off to the nearest hundredth(two places of decimals) * Rounding off to the nearest thousands(three places of decimals) * Rounding off in real life.   - Rounding approximation  to measurement | - Enrich learners understanding mathematical concepts on decimals  - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group Work  - Discussion   * Pairs Work | - Sheets Of Papers  with Decimals  - Clock   * Learners   Scale | MK primary Mathematics grade 6 pps book page 47-50   * Grade 6 Mathematics syllabus |
| 5 | **RATIO AND PROPORTION**   * Describing ratio   - Describing direct  proportion  - Relating ratio to direct  proportion  - Relating ratio and  proportion to patterns,  relation and mapping | - Enrich learners understanding mathematical concepts on decimals  - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group Work  - Discussion  - Pairs Work | - MK Primary Grade 6 Pps Book  - Exercise Book Pens, Pencils Learners.  - Number Cards | Mk Primary Mathematics Grade 6 Pps Book Page 51-54   * Grade 6 Mathematics Syllabus |
| 6 | **RATIO AND PROPORTION**  - Reducing ratio to the  lowest terms  - Using unitary and  proportion methods  - Real life problems involving a direct proportion  - Using involving buying | - Enrich learners understanding mathematical concepts on decimals  - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group Work  - Discussion  - Pairs Work | - Copies of newspapers with foreign exchange rates ,  - Counters  tins | - MK primary Mathematics grade 6 pps book page 55-58  - Grade 6 mathematics syllabus |
| 7 | **RATIO AND PROPORTION**   * Using exchange rate involving selling   **- SOCIAL AND COMMERCIAL ARITHMETIC**  - Describing cost price  - Calculating profits  - **mid- term assessment** | - Enrich learners understanding mathematical concepts on decimals  - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group Work  - Discussion  - Pairs Work | - Newspapers with foreign exchange rates ,  -counters  tins | - MK primary mathematics grade 6 pps book page 59-63  - Grade 6 mathematics syllabus |
| 8 | **SOCIAL AND COMMERCIAL ARITHMETIC**  - Calculating loss  - Calculating selling price when loss or profit is given  - Calculating buying  (cost price)when profit is given | - Enrich learners understanding mathematical concepts on decimals  - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group Work  - Discussion  - Pairs work | * Money   A chart showing exchange rates   * Mk primary Mathematics grade 6 pps book | MK Primary Mathematics grade 6 pps book page 64-67   * Grade 6 mathematics syllabus |
| 9 | **SOCIAL AND COMMERCIAL ARITHMETIC**  - Find simple interest  - Calculating amount  - Calculating percentage  Profit  - Find percentage loss  - Calculating discount | - Enrich learners understanding Mathematical concepts on decimals  - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group work  - Discussion  - Pairs work | - Foreign exchange rates ,  - Counters  - A chart showing an  illustration on  simple interest | - MK Primary Mathematics grade 6 pps book page 68-73  - Grade 6 Mathematics syllabus |
| 10 | **SOCIAL AND COMMERCIAL ARITHMETIC**  - Calculating average and  fares  - Interpreting tables  involving distances and  time –interpreting distance  on charts  - **STATISTICS**  - Finding simple average assessment (*SOCIAL AND COMMON ARITHMETIC)* | * Enrich learners understanding mathematical concepts on decimals * Solving mathematical   challenges in everyday  life through problem  solving | - Demonstration  - Group Work  - Discussion  - Pairs Work  - Quiz | - MK primary Mathematics grade 6 pps book  - A chart showing the bus fares | MK primary mathematics grade 6 pps book page 74-78   * Grade 6 Mathematics syllabus |
| 11 | **STATISTICS**  - Working out problems involving averages  - Calculating median , range  and means  - Finding model, frequency,  and mean. | - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group Work  - Discussion  - Pairs Work | - MK primary Mathematics grade 6 pps book  -Mark schedule | - MK Primary Mathematics grade 6 pps book page 79-82   * Grade 6 Mathematics syllabus |
| 12 | **STATISTICS**  - Finding model, frequency,  and mean. | - Solving mathematical challenges in everyday life through problem solving | - Demonstration  - Group Work  - Discussion  - Pairs Work | - MK primary Mathematics grade 6 pps book | - MK Primary Mathematics grade 6 pps book page 79-82   * Grade 6 Mathematics syllabus |
| 13 | **END OF TERM TESTS, REVISION AND COMPILATION OF RESULTS** | | | | |

**NB: FOR MIDTERM , TESTTWO SUBJECTS PER DAY AND TEACH THE OTHER SUBJECTS THAT APPEAR ON THE TIME TABLE THAT DAY.**

**MINISTRY OF GENERAL EDUCATION**

**SOUTHERN PROVINCE**

**SCHEMES OF WORK**

**SUBJECT**: MATHEMATICS

**GRADE**: 6 **TERM**: 3 **YEAR**: 2018

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WEEK** | **TOPIC/CONTENT** | **GENERAL OUTCOMES** | **METHODS** | **T / L RESOURCES** | **REFERENCE** |
| 1 | -**INEAR EQUATION IN ONE VARIABLE**  - Writing open sentence  - solving equations by  subtracting  - Forming and solving  equations by subtracting | - Developing algebraic,  geometry and arithmetic  skills in mathematics  - Solve mathematics challenges in everyday life through problem solving | - Discussion  - Demonstration   * Group work | - MK mathematics pps book 6  -Tins  -Pen  -Sticks  - Wall Chart | - Grade six syllabus  - MK Mathematics grade 6 pps book pg-83-85 |
| 2 | **LINEAR EQUATION IN one variable**   * Forming and solving equation by subtracting   -Solving equation | - Developing algebraic ,geometry and arithmetic skills in mathematics   * Solve mathematics challenges in everyday life through problem solving | * Discussion   - Demonstration  - Group work | - MK Mathematics pps book 6  -Tins  -Pen  -Sticks  - Wall Chart | - Grade six syllabus  - MK Mathematics grade 6 pps book pg-86-88 |
| 3 | **LINEAR EQUATION IN ONE VARIABLE**  - Finding unknown sides of a  square  - Solving equations involving  fractions  - Finding the unknown sides  when given perimeter | * Developing algebraic, geometry and arithmetic skills in mathematics   - Solve mathematics,  challenges in everyday life  through problem solving | - Discussion  - Demonstration  - Group work | - MK Mathematics pps book 6  - Template of squares  - Wall chart with a square divided into small square | -grade six syllabus  - MK Mathematics grade 6 pps book pg-89-91 |
| 4 | **LINEAR EQUATION IN ONE VARIABLE**  - Finding the unknown side of a rectangle when area is given  - Finding the missing side when given volume of the cuboid  - Assessment | - Developing algebraic, geometry and arithmetic skills in mathematics   * Solve mathematics challenges in everyday life through problem solving | * Discussion   - Demonstration  - Group work | - MK mathematics pps book 6  - Template of rectangle  - Sticks  - Wall chart | -grade six syllabus  - MK Mathematics grade 6 pps book pg-92-94 |
| 5 | **PLANE SHAPE**  Identifying regular polygons up to six sides  - Describe regular polygons | - Developing algebraic, geometry and arithmetic skills in mathematics   * Solve mathematics challenges in everyday life through problem solving | - Discussion  - Demonstration  - Group work | - MK Mathematics pps book 6  - Square and rectangle cut out  - A chart  - Cartoon boxes | - Grade six syllabus  - MK Mathematics grade 6 pps book pg-95-96 |
| 6 | **PLANE SHAPE**  - Constructing a regular  polygon of a given side  - Constructing a regular  pentagon of a given radius | * Developing algebraic, geometry and arithmetic skills in mathematics * Solve mathematics challenges in everyday life through problem solving | * Discussion   - Demonstration  - Group work | - MK Mathematics pps book 6  - Ruler , Pair compass  - Protractor  - A pencil | - Grade six syllabus  - MK Mathematics grade 6 pps book pg-97-98 |
| 7 | **PLANE SHAPE**  - Constructing a regular hexagon of a given side  - Constructing a regular hexagon of a given radius  Mid-term assessment | * Developing, algebra, geometry and arithmetic skills in mathematics   -solve mathematics challenges in everyday life through problem solving | - Discussion  - Demonstration  - Group work | - MK Mathematics pps book 6  - Ruler , pair compass  - Protractor  - A pencil  - Strings | - Grade six syllabus  - MK Mathematics grade 6 pps book pg-99-101 |
| 8 | **MEASUREMENT**  - Face, vertices ,edges of a  solids  - Finding the total length  of the edge of cube and  cuboid | * Developing algebraic, geometry and arithmetic skills in mathematics * Solve mathematics challenges in everyday life through problem solving | - Discussion  - Demonstration  - Group work | - MK Mathematics pps book 6  - Ruler , pair compass  - Protractor  - A pencil  - Strings | -grade six syllabus  -mk mathematics grade 6 pps book pg-102-104 |
| 9 | **MEASUREMENT**   * Finding the total   Surface area of cubes  and cuboid.  - Explain the meaning of  speed  - Finding speech | - Developing algebraic,  geometry and arithmetic  skills in mathematics  - Solve mathematics  challenges in everyday life  through problem solving | - Discussion  - Demonstration  - Group work | - MK Mathematics pps book 6  - Ruler , pair compass  - Protractor  - A pencil  - Strings | - Grade six syllabus  - MK Mathematics grade 6 pps book pg-105-107 |
| 10 | **MEASUREMEN**T  - Finding distance  - Solving problems relating to distance  - Finding time | - Developing algebraic, geometry and arithmetic skills in mathematics  - Solve mathematics challenges in everyday life through problem solving | - Discussion  - Demonstration  - Group work | - MK Mathematics pps book 6  - Ruler , pair compass  - Protractor  - A pencil  - Strings | - Grade six syllabus  - MK Mathematics grade 6 pps book pg- |
| 11 | **MEASUREMEN**T  - Solving problems relating to distance  - Finding time | - Developing algebraic, geometry and arithmetic skills in mathematics  - Solve mathematics challenges in everyday life through problem solving | - Discussion  - Demonstration  - Group work | - MK Mathematics pps book 6  - Ruler , pair compass  - Protractor  - A pencil  - Strings | - Grade six syllabus  - MK Mathematics grade 6 pps book pg- |
| 12 | **MEASUREMEN**T  - Finding distance  - Solving problems relating to distance  - Finding time | - Developing algebraic, geometry and arithmetic skills in mathematics  - Solve mathematics challenges in everyday life through problem solving | - Discussion  - Demonstration  - Group work | - MK Mathematics pps book 6  - Ruler , pair compass  - Protractor  - A pencil  - Strings | - Grade six syllabus  - MK Mathematics grade 6 pps book pg- |
| 13 | **END OF TERM TESTS, REVISION AND COMPILATION OF RESULTS** | | | | |

**NB: FOR MIDTERM , TESTTWO SUBJECTS PER DAY AND TEACH THE OTHER SUBJECTS THAT APPEAR ON THE TIME TABLE THAT DAY.**