**MATHEMATICS SCHEMES OF WORK**

**FORM TWO 2016**

**TERM I**

**REFERENCES:**

1. Advancing in Mathematics BK 4 By Longhorn Kenya Publishers
2. Secondary Mathematics BK 4 By KLB
3. Macmillan Secondary Maths BK 2

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **L/ACTIVITIES** | **L/T AIDS** | **REFERENCE** | **REMARKS** |
| 1 | 1-6 | **REPOTING AND REVISION** | | | | | |  |
| 2 | 1-2 | Cubes And Cube Roots | Cubes of numbers by multiplication and from tables | By the end of the lesson, the learner should be able to:  Find the cubes of numbers by multiplication  Find the cube roots of numbers from tables | Multiplying numbers  Reading mathematical tables  Discussions  Demonstrations  Exercises  Exercises in given class | Mathematical tables  Real life situation | Discovering secondary mathematics Book 2 Pages 1-3  Secondary mathematics KLB book 2 pages 1 and 2  KLB teachers’ guide book 2 page 1  Golden tips mathematics pages 6 and 63 |  |
|  | 3 | Cubes And Cube Roots | Cube roots of numbers by factor method | By the end of the lesson, the learner should be able to:  Find the cube roots of numbers by factor method | Multiplying numbers  Reading mathematical tables  Discussions  Demonstrations  Exercises  Exercises in given class | Mathematical tables  Real life situation | Discovering secondary mathematics Book 2 Pages 5-6  Secondary mathematics KLB book 2 page 3  KLB teachers’ guide book 2 page 1-2  Golden tips mathematics pages 62 |  |
|  | 4 | Cubes And Cube Roots | Evaluation of cube and cube roots expressions and application of cubes and cube roots in real life situation | By the end of the lesson, the learner should be able to:  Evaluate expressions involving cubes and cube roots  Apply the knowledge of cubes and cube roots in real life situations | Multiplying numbers  Reading mathematical tables  Discussions  Demonstrations  Exercises  Exercises in given class | Mathematical tables  Real life situation | Discovering secondary mathematics Book 2 Pages 5-6  Secondary mathematics KLB book 2 page 3 and 4  KLB teachers’ guide book 2 page 2  Golden tips mathematics pages 63 and 64 |  |
|  | 5-6 | Reciprocals | Reciprocals of numbers by division and from tables | By the end of the lesson, the learner should be able to:  Find reciprocals of numbers by division  Find reciprocals of numbers from tables | Multiplying numbers  Dividing numbers  Reading mathematical tables  Discussions  Demonstrations  Exercises  Exercises in given class | Mathematical tables | Discovering secondary mathematics Book 2 Pages 12-13  Secondary mathematics KLB book 2 page 5  KLB teachers’ guide book 2 page 5  Golden tips mathematics pages 64 |  |
| 3 | 1-2 | Reciprocals | Computation using reciprocals | By the end of the lesson, the learner should be able to:  Use reciprocals of numbers in computation | Multiplying numbers  Dividing numbers  Reading mathematical tables  Discussions  Demonstrations  Exercises  Exercises in given class | Mathematical tables | Discovering secondary mathematics Book 2 Pages 12-13  Secondary mathematics KLB book 2 page 6  KLB teachers’ guide book 2 page 5-6  Golden tips mathematics pages 64 |  |
|  | 3 | Indices And Logarithms | Indices (powers) and base | By the end of the lesson, the learner should be able to:  Define indices  Express numbers in index form  Express indices in number form | Multiplying numbers  Dividing numbers  Factorizing numbers  Reading mathematical tables  Discussions  Exercises in given class | Logarithm tables  Charts illustrations laws of indices | Discovering secondary mathematics Book 2 Page 7  Secondary mathematics KLB book 2 page 7  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 44-46 |  |
|  | 4 | Indices And Logarithms | Laws of Indices | By the end of the lesson, the learner should be able to:  State laws of indices regarding multiplication of indices  State laws of indices regarding zero index  State laws of indices regarding division of indices | Multiplying numbers  Dividing numbers  Factorizing numbers  Reading mathematical tables  Discussions  Exercises in given class | Logarithm tables  Charts illustrations laws of indices | Discovering secondary mathematics Book 2 Page 7-11  Secondary mathematics KLB book 2 page 7-8  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 44-46 |  |
|  | 5-6 | Indices And Logarithms | Laws of Indices | By the end of the lesson, the learner should be able to:  State laws of indices regarding negative indices  State laws of indices fractional indices  Apply the laws of indices in calculation | Multiplying numbers  Dividing numbers  Factorizing numbers  Reading mathematical tables  Discussions  Exercises in given class | Logarithm tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 7-11  Secondary mathematics KLB book 2 page 8-13  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 44-46 |  |
| 4 | 1-2 | Indices And Logarithms | Powers of 10 and common logarithms | By the end of the lesson, the learner should be able to:  Relate the powers of 10 to common logarithms  Identify the parts of the logarithms i.e characteristic mantissa | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 15  Secondary mathematics KLB book 2 page 16-17  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 52 |  |
|  | 3-4 | Indices And Logarithms | Logarithms of positive numbers less than one | By the end of the lesson, the learner should be able to:  Find the logarithm of a number less than 1 from mathematical tables  Apply the logarithms of numbers less than one in computation | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 15  Secondary mathematics KLB book 2 page 18  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 52 |  |
|  | 5 | Indices And Logarithms | Logarithms of numbers less than ten (X<10) | By the end of the lesson, the learner should be able to:  Find the logarithm numbers less than 10 but greater than 1  Apply the logarithms of numbers less than 10 but greater than 1 in computation | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 16  Secondary mathematics KLB book 2 page 18  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 54 |  |
|  | 6 | Indices And Logarithms | Logarithms of numbers greater than ten | By the end of the lesson, the learner should be able to:  Find the logarithm numbers greater than 10  Apply the logarithms of numbers l greater than 10 in computation | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 16  Secondary mathematics KLB book 2 page 18  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 54 |  |
| 5 | 1 | Indices And Logarithms | Antilogarithms | By the end of the lesson, the learner should be able to:  Find antilogarithms of numbers  Apply the antilogarithms of numbers in numericals | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 17  Secondary mathematics KLB book 2 page 19  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 54 |  |
|  | 2 | Indices And Logarithms | Multiplication of numbers | By the end of the lesson, the learner should be able to:  Use logarithms to work out the multiplication of numbers | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 18  Secondary mathematics KLB book 2 page 20  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 55 |  |
|  | 3 | Indices And Logarithms | division of numbers | By the end of the lesson, the learner should be able to:  Use logarithms to work out the division of numbers | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 19  Secondary mathematics KLB book 2 page 20  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 56 |  |
|  | 4 | Indices And Logarithms | Combines multiplication and division of numbers | By the end of the lesson, the learner should be able to:  Combine multiplication and division of numbers to work out logarithm problems | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 19  Secondary mathematics KLB book 2 page 20  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 56 |  |
|  | 5 | Indices And Logarithms | Negative characteristics | By the end of the lesson, the learner should be able to:  Use negative logarithms | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 20  Secondary mathematics KLB book 2 page 18  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 55 |  |
|  | 6 | Indices And Logarithms | Application of logarithms | By the end of the lesson, the learner should be able to:  Apply the knowledge of logarithms and indices in daily computation  Find roots and squares of numbers using logarithms | Multiplying numbers  Dividing numbers  Factorizing numbers  Discussions  Exercises in given class | Mathematical tables  Charts illustrating laws of indices | Discovering secondary mathematics Book 2 Page 21  Secondary mathematics KLB book 2 page 20  KLB teachers’ guide book 2 page 7-8  Golden tips mathematics pages 53 |  |
| 6 | 1 | Gradients And Equations Of Straight Lines | Gradient of a straight line | By the end of the lesson, the learner should be able to:  Define gradient of a straight line *© Education Plus Agencies*  Determine the gradient of a straight line through known points | Drawing linear graphs  Plotting co-ordinates on the Cartesian plane  Reading co-ordinates of points on the Cartesian plane | Square boards  Graph books  Straight edged ruler  Real life situation | Discovering secondary mathematics Book 2 Page 25-23  Secondary mathematics KLB book 2 page 27-34  KLB teachers’ guide book 2 page 14-15  Golden tips mathematics pages 174 |  |
|  | 2 | Gradients And Equations Of Straight Lines | equation of a straight line | By the end of the lesson, the learner should be able to:  Determine the equation f a straight line using gradient and a known point  Determine the equation of a straight line given two points | Drawing linear graphs  Plotting co-ordinates on the Cartesian plane  Reading co-ordinates of points on the Cartesian plane | Square boards  Graph books  Straight edge/ruler  Real life situation | Discovering secondary mathematics Book 2 Page 25-26  Secondary mathematics KLB book 2 page 34-35  KLB teachers’ guide book 2 page 14-15  Golden tips mathematics pages 171 |  |
|  | 3-4 | Gradients And Equations Of Straight Lines | General equation of a straight line | By the end of the lesson, the learner should be able to:  Express the equation of a straight line in the form of y=mx+c  Interpret the equation y=mx+c | Drawing linear graphs  Plotting co-ordinates on the Cartesian plane  Reading co-ordinates of points on the Cartesian plane | Square boards  Graph books  Straight edge/rulers  Real life situation | Discovering secondary mathematics Book 2 Page 27  Secondary mathematics KLB book 2 page 34  KLB teachers’ guide book 2 page 14-15  Golden tips mathematics pages 171 |  |
|  | 5-6 | Gradients And Equations Of Straight Lines | The intercept of a straight line | By the end of the lesson, the learner should be able to:  Find the x and the y intercept of a straight line  Express a double intercept equation of a straight line | Drawing linear graphs  Plotting co-ordinates on the Cartesian plane  Reading co-ordinates of points on the Cartesian plane | Square boards  Graph books  Straight edge/rulers  Real life situation | Discovering secondary mathematics Book 2 Page 28  Secondary mathematics KLB book 2 page 36  KLB teachers’ guide book 2 page 14-15  Golden tips mathematics pages 171 |  |
| 7 | 1-2 | Gradients And Equations Of Straight Lines | The gradient of parallel lines | By the end of the lesson, the learner should be able to:  Find the gradient of parallel lines  Relate parallel lines in terms of their gradients | Drawing linear graphs  Plotting co-ordinates on the Cartesian plane  Reading co-ordinates of points on the Cartesian plane | Square boards  Graph books  Straight edge/ rulers  Real life situation | Discovering secondary mathematics Book 2 Page 29  Secondary mathematics KLB book 2 page 43-44  KLB teachers’ guide book 2 page 14-15  Golden tips mathematics pages 175 |  |
|  | 3-4 | Gradients And Equations Of Straight Lines | The gradient of perpendicular lines | By the end of the lesson, the learner should be able to:  Find the gradient of perpendicular l lines  Relate perpendicular lines in terms of their gradients | Drawing linear graphs  Plotting co-ordinates on the Cartesian plane  Reading co-ordinates of points on the Cartesian plane | Square boards  Graph books  Straight edge/ rulers  Real life situation | Discovering secondary mathematics Book 2 Page 30  Secondary mathematics KLB book 2 page 41-43  KLB teachers’ guide book 2 page 14-15  Golden tips mathematics pages 172 |  |
|  | 5-6 | Reflection And Congruence | Geometric transformation (reflection) | By the end of the lesson, the learner should be able to:  State the properties of reflection  Construct and identify the images and the objects in a reflection using the properties  Make geometrical deductions using reflection | Observing objects in plane mirrors  Identifying the objects and their images in a plan mirror  Drawing  Identifying lines of symmetry  Identifying the mirror line in a plane mirror | Mirrors  Cartesian plane  Various symmetrical objects  Tracing and graph papers  Real life experiences | Discovering secondary mathematics Book 2 Page 32  Secondary mathematics KLB book 2 page  KLB teachers’ guide book 2 page 14-20  Golden tips mathematics pages 230 |  |
| 8 | 1 | Reflection And Congruence | Lines and planes of symmetry | By the end of the lesson, the learner should be able to:  Identify the line of symmetry in a reflection given the image and the object | Observing objects in plane mirrors  Identifying the objects and their images in a plan mirror  Drawing  Identifying lines of symmetry  Identifying the mirror line in a plane mirror | Mirrors  Cartesian plane  Various symmetrical objects  Tracing and graph papers  Real life experiences | Discovering secondary mathematics Book 2 Page 32  Secondary mathematics KLB book 2 page 46-48  KLB teachers’ guide book 2 page 19-20  Golden tips mathematics pages 230 |  |
|  | 2 | Reflection And Congruence | Lines and planes of symmetry | By the end of the lesson, the learner should be able to:  Identify the line of symmetry in a reflection  Relate lines and planes of symmetry | Observing objects in plane mirrors  Identifying the objects and their images in a plan mirror  Drawing  Identifying lines of symmetry  Identifying the mirror line in a plane mirror | Mirrors  Cartesian plane  Various symmetrical objects  Tracing and graph papers  Real life experiences | Discovering secondary mathematics Book 2 Page 32  Secondary mathematics KLB book 2 page 46-48  KLB teachers’ guide book 2 page 19-20  Golden tips mathematics pages 230 |  |
|  | 3-4 | Reflection And Congruence | Reflection in the Cartesian plane | By the end of the lesson, the learner should be able to:  Apply the properties of a rotation in the Cartesian plane | Observing objects in plane mirrors  Identifying the objects and their images in a plan mirror  Drawing  Identifying lines of symmetry  Identifying the mirror line in a plane mirror | Mirrors  Cartesian plane  Various symmetrical objects  Tracing and graph papers  Real life experiences | Discovering secondary mathematics Book 2 Page 37  Secondary mathematics KLB book 2 page 48  KLB teachers’ guide book 2 page 19-20  Golden tips mathematics pages 230 |  |
|  | 5-6 | Reflection And Congruence | Congruent triangles | By the end of the lesson, the learner should be able to:  Identify congruency  Solve problems involving congruency | Observing objects in plane mirrors  Identifying the objects and their images in a plan mirror  Drawing  Identifying lines of symmetry  Identifying the mirror line in a plane mirror | Mirrors  Cartesian plane  Various symmetrical objects  Tracing and graph papers  Real life experiences | Discovering secondary mathematics Book 2 Page 39  Secondary mathematics KLB book 2 page 64-65  KLB teachers’ guide book 2 page 19-20  Golden tips mathematics pages 230 |  |
| 9 | 1-2 | Reflection And Congruence | Congruent triangles | By the end of the lesson, the learner should be able to:  Identify congruency  Solve problems involving congruency | Observing objects in plane mirrors  Identifying the objects and their images in a plan mirror  Drawing  Identifying lines of symmetry  Identifying the mirror line in a plane mirror | Mirrors  Cartesian plane  Various symmetrical objects  Tracing and graph papers  Real life experiences | Discovering secondary mathematics Book 2 Page 39  Secondary mathematics KLB book 2 page 64-65  KLB teachers’ guide book 2 page 19-20  Golden tips mathematics pages 230 |  |
|  | 3 | Reflection And Congruence | Congruent figures | By the end of the lesson, the learner should be able to:  Identify figures which are congruent through reflection | Observing objects in plane mirrors  Identifying the objects and their images in a plan mirror  Drawing  Identifying lines of symmetry  Identifying the mirror line in a plane mirror | Mirrors  Cartesian plane  Various symmetrical objects  Tracing and graph papers  Real life experiences | Discovering secondary mathematics Book 2 Page 40-41  Secondary mathematics KLB book 2 page 66  KLB teachers’ guide book 2 page 19-20  Golden tips mathematics pages 230 |  |
|  | 4-5 | Rotation | The properties s of rotation | By the end of the lesson, the learner should be able to:  Define rotation as a transformation  State the properties of a rotation as a transformation | Rotating objects  Measuring angles/lengths  Drawing objects  Identifying the lines of symmetry | Square boards  Graph papers  Geometrical instruments  Tracing paper and real life situations | Discovering secondary mathematics Book 2 Page 44-45  Secondary mathematics KLB book 2 page 73  KLB teachers’ guide book 2 page 24-25  Golden tips mathematics pages 228 |  |
|  | 6 | Rotation | Center of angle of rotation | By the end of the lesson, the learner should be able to:  Determine the center of rotation  Determine the angle of rotation | Rotating objects  Measuring angles/lengths  Drawing objects  Identifying the lines of symmetry | Square boards  Graph papers  Geometrical instruments  Tracing paper  real life situations | Discovering secondary mathematics Book 2 Page 46  Secondary mathematics KLB book 2 page 73  KLB teachers’ guide book 2 page 24-25  Golden tips mathematics pages 228 |  |
| 10 | 1-2 | Rotation | Center of angle of rotation | By the end of the lesson, the learner should be able to:  Rotate objects through a given angle of rotation and center of rotation  Establish the angle of rotation given an object and its image | Rotating objects  Measuring angles/lengths  Drawing objects  Identifying the lines of symmetry | Square boards  Graph papers  Geometrical instruments  Tracing paper  real life situations | Discovering secondary mathematics Book 2 Page 46  Secondary mathematics KLB book 2 page 74  KLB teachers’ guide book 2 page 24-25  Golden tips mathematics pages 228 |  |
|  | 3-4 | Rotation | Rotation in a Cartesian plane | By the end of the lesson, the learner should be able to:  Apply the properties of rotation in the Cartesian plane | Rotating objects  Measuring angles/lengths  Drawing objects  Identifying the lines of symmetry | Square boards  Graph papers  Geometrical instruments  Tracing paper  real life situations | Discovering secondary mathematics Book 2 Page 47  Secondary mathematics KLB book 2 page 75  KLB teachers’ guide book 2 page 24-25  Golden tips mathematics pages 228 |  |
|  | 5-6 | Rotation | Rotational symmetry | By the end of the lesson, the learner should be able to:  Identify point of rotational symmetry  State the order of rotational symmetry of plane figures  Identify the axis of rotational symmetry | Rotating objects  Measuring angles/lengths  Drawing objects  Identifying the lines of symmetry | Square boards  Graph papers  Geometrical instruments  Tracing paper  real life situations | Discovering secondary mathematics Book 2 Page 49  Secondary mathematics KLB book 2 page 78  KLB teachers’ guide book 2 page 24-25  Golden tips mathematics pages 228 |  |
| 11 | 1-2 | Rotation | Congruence and Rotation | By the end of the lesson, the learner should be able to:  Deduce congruence from rotation | Rotating objects  Measuring angles/lengths  Drawing objects  Identifying the lines of symmetry | Square boards  Graph papers  Geometrical instruments  Tracing paper  real life situations | Discovering secondary mathematics Book 2 Page 48  Secondary mathematics KLB book 2 page 84  KLB teachers’ guide book 2 page 24-25  Golden tips mathematics pages 228 |  |
|  | 3-4 | Rotation | REVISION | By the end of the lesson, the learner should be able to:  Answer all questions involving rotations  Apply rotation in real life situations | Rotating objects  Measuring angles/lengths  Drawing objects  Identifying the lines of symmetry | Square boards  Graph papers  Geometrical instruments  Tracing paper  real life situations | Discovering secondary mathematics Book 2 Page 50  Secondary mathematics KLB book 2 page 84-86  KLB teachers’ guide book 2 page 24-25  Golden tips mathematics pages 228 |  |
|  | 5-6 | Similarity And Enlargement | Similar figures | By the end of the lesson, the learner should be able to:  Identify similar figures  Construct similar figures | Identifying similar figures  Tracing figures  Constructing similar figures  enlarging figures  Drawing figures on the Cartesian plane  measuring lengths/ angles | Geometrical instruments  Model maps  Photographs  Charts illustrating similarity and enlargement | Discovering secondary mathematics Book 2 Page 52  Secondary mathematics KLB book 2 page 87  KLB teachers’ guide book 2 page 27-28  Golden tips mathematics pages 125 |  |
| 12 | 1-2 | Similarity And Enlargement | Properties of enlargement | By the end of the lesson, the learner should be able to:  State the properties of enlargement as a transformation  Apply the properties of enlargement to construct objects and images | Identifying similar figures  Tracing figures  Constructing similar figures  enlarging figures  Drawing figures on the Cartesian plane  measuring lengths/ angles | Geometrical instruments  Model maps  Photographs  Charts illustrating similarity and enlargement | Discovering secondary mathematics Book 2 Page 52  Secondary mathematics KLB book 2 page 97  KLB teachers’ guide book 2 page 27-28  Golden tips mathematics pages 125 |  |
|  | 3-4 | Similarity And Enlargement | Enlargement | By the end of the lesson, the learner should be able to:  State the scale factor  State the center of enlargement | Identifying similar figures  Tracing figures  Constructing similar figures  enlarging figures  Drawing figures on the Cartesian plane  measuring lengths/ angles | Geometrical instruments  Model maps  Photographs  Charts illustrating similarity and enlargement | Discovering secondary mathematics Book 2 Page 57-58  Secondary mathematics KLB book 2 page 97  KLB teachers’ guide book 2 page 27-28  Golden tips mathematics pages 125 |  |
|  | 5-6 | Similarity And Enlargement | Enlargement on the Cartesian plane | By the end of the lesson, the learner should be able to:  Apply enlargement on Cartesian planes | Identifying similar figures  Tracing figures  Constructing similar figures  enlarging figures  Drawing figures on the Cartesian plane  measuring lengths/ angles | Geometrical instruments  Model maps  Photographs  Charts illustrating similarity and enlargement | Discovering secondary mathematics Book 2 Page 61-62  Secondary mathematics KLB book 2 page 97  KLB teachers’ guide book 2 page 27-28  Golden tips mathematics pages 125 |  |
| 13 | 1-2 | Similarity And Enlargement | Linear, area and volume scale factors | By the end of the lesson, the learner should be able to:  Determine linear scale factor  Determine area scale factors  Determine volume scale factors  Relate area scale factor, volume scale factor, and linear scale factor | Identifying similar figures  Tracing figures  Constructing similar figures  enlarging figures  Drawing figures on the Cartesian plane  measuring lengths/ angles | Geometrical instruments  Model maps  Photographs  Charts illustrating similarity and enlargement | Discovering secondary mathematics Book 2 Page 62-65  Secondary mathematics KLB book 2 page 97-110  KLB teachers’ guide book 2 page 27-28  Golden tips mathematics pages 125 |  |
|  | 3-4 | Similarity And Enlargement | Areas of similar figures | By the end of the lesson, the learner should be able to:  Apply volume area and linear scale factors in establishing areas of similar figures | Identifying similar figures  Tracing figures  Constructing similar figures  enlarging figures  Drawing figures on the Cartesian plane  measuring lengths/ angles | Geometrical instruments  Model maps  Photographs  Charts illustrating similarity and enlargement | Discovering secondary mathematics Book 2 Page 62-64  Secondary mathematics KLB book 2 page 106-108  KLB teachers’ guide book 2 page 27-28  Golden tips mathematics pages 125 |  |
|  | 5-6 | Similarity And Enlargement | Volume of similar figures | By the end of the lesson, the learner should be able to:  Apply knowledge of linear scale factor and volume scale factor to determine values of similar figures | Identifying similar figures  Tracing figures  Constructing similar figures  enlarging figures  Drawing figures on the Cartesian plane  measuring lengths/ angles | Geometrical instruments  Model maps  Photographs  Charts illustrating similarity and enlargement | Discovering secondary mathematics Book 2 Page 64-65  Secondary mathematics KLB book 2 page 109-111  KLB teachers’ guide book 2 page 27-28  Golden tips mathematics pages 125 |  |
| 14 | 1-2 | Similarity And Enlargement | Application of scale factors in real life situations | By the end of the lesson, the learner should be able to:  Apply knowledge of linear scale factor and volume scale factor to determine values of similar figures | Identifying similar figures  Tracing figures  Constructing similar figures  enlarging figures  Drawing figures on the Cartesian plane  measuring lengths/ angles | Geometrical instruments  Model maps  Photographs  Charts illustrating similarity and enlargement | Discovering secondary mathematics Book 2 Page 66  Secondary mathematics KLB book 2 page 109-111-112  KLB teachers’ guide book 2 page 27-28  Golden tips mathematics pages 128 |  |
| 15 |  | **END OF TERM EXAMINATIONS AND CLOSING** | | | | | |  |

**MATHEMATICS SCHEMES OF WORK**

**FORM TWO 2016**

**TERM II**

**REFERENCES:**

1. Advancing in Mathematics BK 4 By Longhorn Kenya Publishers
2. Secondary Mathematics BK 4 By KLB
3. Macmillan Secondary Maths BK 2

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| **WK** | **LSN** | **TOPIC/S-TOPIC** | **OBJECTIVES** | **L/ACTIVITIES** | **L/T AIDS** | **REFERENCE** | **REMARKS** |
|  |  | **SCHOOL OPENING** | | | | |  |
| 1 | 1 | Pythagoras Theorem  - Pythagoras Theorem | **By the end of the lesson, the learner**  **should be able to:-**  Derive Pythagoras Theorem | Deriving Pythagoras  Theorem | Chalkboard  Charts  Illustrating derived  theorem | KLB BK2 Pg 120  Macmillan BK 2  Pg 105  Advancing in Math  BK 2 Pg 86-88 |  |
|  | 2 | Solutions of problems  Using Pythagoras  Theorem | **By the end of the lesson, the learner**  **should be able to:-**  Solve problems using Pythagoras  Theorem | Solving problems using  Pythagoras theorem | Charts illustrating  Pythagoras theorem | KLB BK2 Pg 121  Macmillan BK 2  Pg 106  Advancing in Math  BK 2 Pg 89-90 |  |
|  | 3 | Application to real life  Situation | **By the end of the lesson, the learner**  **should be able to:-**  Apply Pythagoras theorem to solve  problems in real life situations | Solving problems using  Pythagoras theorem | Chalkboards  Chart illustrating a  ladder | KLB BK2Pg121-122  Macmillan BK 2  Pg 109  Advancing in Math  BK 2 Pg 89-90 |  |
|  | 4&5 | Trigonometry  Tangent, sine and  cosines | **By the end of the lesson, the learner**  **should be able to:-**  Define tangent, sine and cosine ratios  from a right angles triangle | Defining what a tangent,  Cosine and sine are  using a right angled  triangle | Charts illustrating  tangent, sine and  cosine | KLB BK2  Pg 123,132,133  Macmillan BK 2  Pg 112  Advancing in Math  BK 2 Pg 94-95 |  |
|  | 6 | Trigonometric Table | **By the end of the lesson, the learner**  **should be able to:-**  Use trigonometric tables to find the  sine, cosine and tangent | Reading trigonometric  tables of sines, cosines  and tangent | Mathematical table | KLB BK2  Pg 127, 138, 139  Macmillan BK 2  Pg 115  Advancing in Math  BK 2 Pg 99 |  |
| 2 | 1&2 | Angles and sides of a  right angled triangle | **By the end of the lesson, the learner**  **should be able to:-**   * Use the sine, cosine and tangent in   calculating the length of a right angled  triangle and also finding the angle  given two sides and unknown angle   * The length can be obtained if one   side is given and an angle | Using mathematical  tables  Finding the length using  sine ratio  Finding the length using  Cosine and tangent ratio  Finding the angle using  Sine, cosine and tangent | Mathematical table  Charts  Chalkboard | KLB BK2  Pg 125, 139, 140  Macmillan BK 2  Pg 118  Advancing in Math  BK 2 Pg 100 |  |
|  | 3 | Establishing  Relationship of sine  and cosine of  complimentary angles | **By the end of the lesson, the learner**  **should be able to:-**  Establish the relationship of sine and  cosine of complimentary angles | Using established  relationship to solve  problems | Chalkboards | KLB BK2 Pg 145  Macmillan BK 2  Pg 119-120  Advancing in Math  BK 2 Pg 101 |  |
|  | 4 | Sines and cosines of  Complimentary angles | **By the end of the lesson, the learner**  **should be able to:-**  Use the relationship of sine and cosine  of complimentary angles in solving  problems | Solving problems  involving the sines and  cosines of complimentary  angles | Chalkboard  Charts illustrating the  relationship of sines  and cosines of  complimentary angles | KLB BK2 Pg 145  Macmillan BK 2  Pg 119-120  Advancing in Math  BK 2 Pg 101 |  |
|  | 5 | Relationship between  tangent, sine and  cosine | **By the end of the lesson, the learner**  **should be able to:-**  Relate the three trigonometric ratios,  the sine, cosine and tangent | Relating the three  trigonometric ratios | Charts showing the  three related  trigonometric ratio | KLB BK2 Pg  MacmillanBk2Pg121  Advancing in Math  BK 2 Pg |  |
|  | 6 | Trigonometric ratios  of special angles  30, 45, 60 and 90 | **By the end of the lesson, the learner**  **should be able to:-**  Determine the trigonometric ratios of  special angles without using tables | Determining the  trigonometric ratios of  special angles 30,45,60  and 90 without using  tables | Charts showing  isosceles right angled  triangle  Charts illustrating  Equilateral triangle | KLB BK2  Pg 146-147  Macmillan BK 2  Pg 122  Advancing in Math  BK 2 Pg 102-103 |  |
| 3 | 1 | Application of  Trigonometric ratios  in solving problems | **By the end of the lesson, the learner**  **should be able to:-**  Solve trigonometric problems without  using tables | Solving trigonometric  problems of special  angles | Chalkboard | KLB BK2 Pg 148  Macmillan BK 2  Pg 124  Advancing in Math  BK 2 Pg 102 |  |
|  | 2 | Logarithms of Sines | **By the end of the lesson, the learner**  **should be able to:-**  Read the logarithms of sines | Solving problems by  reading logarithm table  of sines | Chalkboard  Mathematical tables | KLB BK2 Pg 149  Macmillan BK 2  Pg 128  Advancing in Math  BK 2 Pg 105 |  |
|  | 3&4 | Logarithms of cosines  And tangents | **By the end of the lesson, the learner**  **should be able to:-**  Read the logarithm of cosines and  tangents from mathematical tables | Reading logarithms of  cosine and tangent from  mathematical table | Chalkboard  Mathematical table | KLB BK2  Pg 150-152  Macmillan BK 2  Pg 128  Advancing in Math  BK 2 Pg 105 |  |
|  | 5 | Reading tables of  logarithms of sines,  cosines and tangents | **By the end of the lesson, the learner**  **should be able to:-**  Read the logarithms of sines, cosines  and tangents from tables | Solving problems  through reading the table  of logarithm of sines,  cosines and tangents | Chalkboard  Mathematical table | KLB BK2  Pg 149-152  Macmillan BK 2  Pg 128  Advancing in Math  BK 2 Pg 106 |  |
|  | 6 | Application of  trigonometry to real  life situations | **By the end of the lesson, the learner**  **should be able to:-**  Solve problems in real life using  trigonometry | Solving problems using  trigonometry in real life | Mathematical table | KLB BK2  Pg 153-154  Macmillan BK 2  Pg 130  Advancing in Math  BK 2 Pg 106-109 |  |
| 4 | 1 | Area of a triangle  Area of a triangle given  the base and height  (A = ½ bh) | **By the end of the lesson, the learner**  **should be able to:-**  Calculate the are of a triangle given  the base and height | Calculating the area of a  triangle given the base  and height | Chart illustrating  worked problem  Chalkboard | KLB BK2 Pg 155  Macmillan BK 2  Pg 135  Advancing in Math  BK 2 Pg 110 |  |
|  | 2 | Area of a triangle using  the formula  (A = ½ absinӨ) | **By the end of the lesson, the learner**  **should be able to:-**  - Derive the formula ½ absinc  - Using the formula derived in  calculating the area of a triangle given  two sides and an included angle | Deriving the formula  ½ absinc  Using the formula to  calculate the area of a  triangle given two sides  and an included angle | Charts illustrating a  triangle with two sides  and an included angle  Charts showing  derived formula | KLB BK2 Pg 156  Macmillan BK 2  Pg 148  Advancing in Math  BK 2 Pg 110 |  |
|  | 3 | Area of a triangle using  the formula  A = √s(s-a)(s-b)(s-c) | **By the end of the lesson, the learner**  **should be able to:-**  Solve problems on the area of a triangle  Given three sizes using the formula  A = √s(s-a)(s-b)(s-c) | Solving problems on the  area of triangle given  three sides of a triangle | Charts illustrating a  triangle with three sides  Charts illustrating a  worked example i.e.  mathematical table | KLB BK2  Pg 157-158  Macmillan BK 2  Pg 143  Advancing in Math  BK 2 Pg 111-112 |  |
|  | 4 | Application to real life  Situation | **By the end of the lesson, the learner**  **should be able to:-**  Use the formula A = √s(s-a)(s-b)(s-c)  to solve problems in real life | Solving problems in real  life using the formula  A = √s(s-a)(s-b)(s-c) | Mathematical table | KLB BK2 Pg 159  Macmillan BK 2  Pg 143  Advancing in Math  BK 2 Pg 115 |  |
|  | 5&6 | Area of Quadrilateral  and Polygons  Area of a square,  rectangle, rhombus,  parallelogram and  trapezium | **By the end of the lesson, the learner**  **should be able to:-**  Calculate the are of a triangle, square,  rectangle, rhombus, parallelogram and  trapezium | Calculating the area of a  triangle, square,  rectangle, rhombus, parallelogram and  trapezium | Charts illustrating  formula used in  calculating the areas of  the quadrilateral | KLB BK2  Pg 161-163  Macmillan BK 2  Pg 143  Advancing in Math  BK 2 Pg 116-118 |  |
| 5 | 1 | Area of a kite | **By the end of the lesson, the learner**  **should be able to:-**  Find the area of a kite | Calculating the area of a  kite | Model of a kite | KLB BK2 Pg 163  Macmillan BK 2  Pg 144  Advancing in Math  BK 2 Pg 119 |  |
|  | 2 | Area of other polygons  (regular polygon) e.g.  Pentagon | **By the end of the lesson, the learner**  **should be able to:-**  Find the area of a regular polygon | Calculating the area of a  regular polygon | Mathematical table  Charts illustrating  Polygons | KLB BK2 Pg 164  Macmillan BK 2 Pg  Advancing in Math  BK 2 Pg |  |
|  | 3 | Area of irregular  Polygon | **By the end of the lesson, the learner**  **should be able to:-**  Find the area of irregular polygons | Finding the area of  irregular polygons | Charts illustrating  various irregular  polygons  Polygonal shapes | KLB BK2  Pg 166  Macmillan BK 2  Pg 146-147  Advancing in Math  BK 2 Pg 120 |  |
|  | 4&5 | Area of part of a circle  Area of a sector  (minor sector and a  major sector) | **By the end of the lesson, the learner**  **should be able to:-**  - Find the area of a sector given the  angle and the radius of a minor sector   * Calculate the area of a major sector   of a circle | Finding the area of a  minor and a major sector  of a circle | Charts illustrating  sectors | KLB BK 2 Pg 167  Macmillan BK 2  Pg 149  Advancing in Math  BK 2 Pg 122 |  |
|  | 6 | Defining a segment of  a circle  Finding the area of a  segment of a circle | **By the end of the lesson, the learner**  **should be able to:-**  - Define what a segment of a circle is  - Find the area of a segment of a circle | Finding the area of a  segment by first finding  the area of a sector less  the area of a smaller  sector given R and r and  angle Ө | Chart illustrating a  Segment | KLB BK2  Pg 169-170  Macmillan BK 2  Pg 151-152  Advancing in Math  BK 2 Pg 123 |  |
| 6 | 1 | Area of a common  region between two  circles given the angles  and the radii | **By the end of the lesson, the learner**  **should be able to:-**  Find the area of common region  between two circles given the angles  *© Education Plus Agencies* | Calculating the area of a  segment | Charts illustrating  common region  between the circles  Use of a mathematical  table during calculation | KLB BK 2 Pg 175  Macmillan BK 2  Pg 153-154  Advancing in Math  BK 2 Pg 124 |  |
|  | 2 | Area of a common  region between two  circles given only the  radii of the two circles  and a common chord | **By the end of the lesson, the learner**  **should be able to:-**  Calculate the area of common region  between two circle given the radii of  the two intersecting circles and the  length of a common chord of the two  circles | Finding the area of a  common region between  two intersecting | Charts illustrating  common region  between two  intersecting circles | KLB BK 2 Pg 176  Macmillan BK 2  Pg 155  Advancing in Math  BK 2 Pg 124 |  |
|  | 3&4 | Surface area of solids  Surface area of prisms   * Cylinder   (ii) Triangular prism  (iii) Hexagonal prism | **By the end of the lesson, the learner**  **should be able to:-**  Define prism and hence be in a position  of calculating the surface area of some  prisms like cylinder, triangular prism  and hexagonal prism | Defining a prism  Calculating the surface  area of the prisms | Models of cylinder,  triangular and  hexagonal prisms | KLB BK 2 Pg 177  Macmillan BK 2  Pg 156  Advancing in Math  BK 2 Pg |  |
|  | 5 | Area of a square based  Pyramid | **By the end of the lesson, the learner**  **should be able to:-**  Find the total surface area of a square  based pyramid | Finding the surface area  of a square based pyramid | Models of a square  based pyramid | KLB BK 2 Pg 178  Macmillan BK 2  Pg 157  Advancing in Math  BK 2 Pg 128 |  |
|  | 6 | Surface area of a  Rectangular based  Pyramid | **By the end of the lesson, the learner**  **should be able to:-**  Find the surface area of a rectangular  based pyramid | Finding the surface area  of a rectangular based  pyramid | Models of a  Rectangular based  pyramid | KLB BK 2  Pg 179-180  Macmillan BK 2  Pg 157 |  |
| 7 | 1 | Surface area of a cone  using the formula  A = πr2 + πrl | **By the end of the lesson, the learner**  **should be able to:-**  Find the total surface area of the cone  by first finding the area of the circular  base and then the area of the curved  surface | Finding the area of the  circular part  Finding the area of the  curved part  Getting the total surface  Area | Models of a cone | KLB BK 2 Pg 181  Macmillan BK 2  Pg 159  Advancing in Math  BK 2 Pg 129 |  |
|  | 2&3 | Surface area of a  frustrum of a cone and  a pyramid | **By the end of the lesson, the learner**  **should be able to:-**  Find the surface area of a frustrum of a  cone and pyramid | Finding the surface area  of a frustrum of a cone  and a pyramid | Models of frustrum of  a cone and a pyramid | KLB BK 2 Pg 182  Macmillan BK 2  Pg 160  Advancing in Math  BK 2 Pg 131 |  |
|  | 4 | Finding the surface  area of a sphere | **By the end of the lesson, the learner**  **should be able to:-**  Find the surface area of a sphere given  the radius of a sphere | Finding the surface area  of a sphere | Models of a sphere  Charts illustrating  formula for finding the  surface area of a sphere | KLB BK 2 Pg 183  Macmillan BK 2  Pg 161-162  Advancing in Math  BK 2 Pg 132 |  |
|  | 5 | Surface area of a  Hemispheres | **By the end of the lesson, the learner**  **should be able to:-**  Find the surface area of a hemisphere | Finding the surface area  of a hemisphere | Models of a hemisphere | KLB BK 2 Pg 184  Macmillan BK 2  Pg 162  Advancing in Math  BK 2 Pg 132 |  |
|  | 6 | Volume of Solids  Volume of prism  (triangular based prism) | **By the end of the lesson, the learner**  **should be able to:-**  Find the volume of a triangular based  prism | Finding the volume of a  triangular based prism | Models of a triangular  based prism | KLB BK 2 Pg 186  Macmillan BK 2  Pg 163  Advancing in Math  BK 2 Pg 138 |  |
| 8 | 1 | Volume of prism  (hexagonal based prism)  given the sides and  angle | **By the end of the lesson, the learner**  **should be able to:-**  Find the volume of a hexagonal based  prism | Calculating the volume  of an hexagonal prism | Models of hexagonal  based prism | KLB BK 2 Pg 187  Macmillan BK 2  Pg 163  Advancing in Math  BK 2 Pg 139 |  |
|  | 2&3 | Volume of a pyramid  (square based and  rectangular based) | **By the end of the lesson, the learner**  **should be able to:-**  Find the volume of a square based  pyramid and rectangular based pyramid | Finding the surface area  of the base  Applying the formula  V=½x base area x height  to get the volume of the  pyramids (square and  rectangular based) | Models of square and  Rectangular based  Pyramids | KLB BK 2  Pg 189-190  Macmillan BK 2  Pg 165-166  Advancing in Math  BK 2 Pg 140 |  |
|  | 4 | Volume of a cone | **By the end of the lesson, the learner**  **should be able to:-**  Find the volume of a cone | Finding the volume of  a cone | Model of a cone | KLB BK 2 Pg 191  Macmillan BK 2  Pg 167-168  Advancing in Math  BK 2 Pg 140 |  |
|  | 5 | Volume of a frustrum  of a cone | **By the end of the lesson, the learner**  **should be able to:-**  Find the volume of a frustrum of a  cone | Finding the volume of a  full cone before its cutoff  Finding the volume of a  cut cone then subtracting | Models of a frustrum  of a cone | KLB BK 2 Pg 192  MacmillanBk2Pg169  Advancing in Math  BK 2 Pg 141 |  |
|  | 6 | Volume of a frustrum  of a pyramid | **By the end of the lesson, the learner**  **should be able to:-**  Find the volume of a frustrum of a  Pyramid | Finding volume of a full  pyramid  Finding volume of cutoff  pyramid  Find volume of the  remaining fig (frustrum)  by subtracting i.e.  Vf = (V – v) | Models of frustrum of  a pyramid | Macmillan BK 2  Pg 169  Advancing in Math  BK 2 Pg 142 |  |
| 9 | 1 | Volume of a sphere  (v = 4/3πr3) | **By the end of the lesson, the learner**  **should be able to:-**  Find the volume of sphere given the  radius of the sphere | Finding the volume of a  sphere | Model of a sphere  Mathematical table | KLB BK 2 Pg 195  Macmillan BK 2  Pg 170-171  Advancing in Math  BK 2 Pg 142 |  |
|  | 2 | Volume of a  Hemisphere  {(v = ½ (4/3πr3)} | **By the end of the lesson, the learner**  **should be able to:-**  Find the volume of a hemisphere | Working out the volume  of a hemisphere | Models of hemisphere | Macmillan BK 2  Pg 173  Advancing in Math  BK 2 Pg 143 |  |
|  | 3 | **ASSESSMENT ON: PYTHAGORAS THEOREM AND TRIGONOMETRIC RATIOS** | | | | |  |
|  | 4&5 | Revision on Pythagoras  Theorem and  Trigonometric Ratios  (Assessment revision) | **By the end of the lesson, the learner**  **should be able to:-**  - Solve problems using Pythagoras  Theorem  - Find the sines, cosines and tangents  - Solving problems without using  mathematical table i.e. use of special  angles in solving trigonometric  problems | Solving problems  involving Pythagoras  theorem and  trigonometric ratios | Mathematical table | KLB BK 2 Pg 120  Macmillan BK 2  Pg 112-130  Advancing in Math  BK 2 Pg 86-106 |  |
|  | 6 | **ASSESSMENT ON: AREA OF A TRIANGLE AND AREA OF QUADRILATERALS** | | | | |  |
| 10 | 1 | Revision of the assessment on areas of a triangle and area of quadrilaterals | **By the end of the lesson, the learner**  **should be able to:-**   * Use the knowledge of the area of a   triangle to solve problems on the area  of triangles   * Use the knowledge of the area of   quadrilaterals to solve problems from  the same area | Solving problems on the  area of triangles  Solve problems on the  area of quadrilaterals | Charts illustrating various triangles and quadrilaterals | KLB BK 2  Pg 155-157  Macmillan BK 2  Pg 140-143  Advancing in Math  BK 2 Pg 110-120 |  |
|  | 2&3 | **ASSESSMENT ON: AREA OF PART OF A CIRCLE, SURFACE AREA OF SOLIDS AND VOLUME OF SOLIDS** | | | | |  |
|  | 4&5 | Revision on assessment  on area of part of a  circle, surface are of  solids and volume of  solids | **By the end of the lesson, the learner**  **should be able to:-**  Solve problems set from the area of  part of a circle, surface are of solids  and volume of solids | Solving problems of area of part of a circle, surface are of  solids and volume of  solids | Models of pyramids,  cones, intersections | KLB BK 2  Pg 167-196  Macmillan BK 2  Pg  Advancing in Math  BK 2 Pg 122-142 |  |
|  | 6 | Revision on Pythagoras  Theorem | **By the end of the lesson, the learner**  **should be able to:-**  Use Pythagoras theorem in solving  problems like finding the length of one  side of a right angled triangle given  the other two sides | Finding the length of the  unknown side of a right  angled triangle given the  other two | Charts  Chalkboard | KLB BK 2  Pg 121  Macmillan BK 2  Pg 106  Advancing in Math  BK 2 Pg 86-91 |  |
| 11 | 1&2 | Revision on  Trigonometric ratios | **By the end of the lesson, the learner**  **should be able to:-**  - Use trigonometric tables to find the  sines, cosines and tangent   * Solving problems using the   knowledge of complimentary angles  of sines, cosines  - Relating the three trigonometric ratios  sines, cosines and tangent   * Reading the logarithm of sines, cosines,   and tangent from mathematical table | Using mathematical table  to find the sine, cosine  and tangent (their  logarithm)  Solving problems on  complimentary angles of  sine, cosine and tangent  Working out the  Relationship of sine,  cosine and tangent | Mathematical table | KLB BK 2  Pg 123-154  Macmillan BK 2  Pg 112-130  Advancing in Math  BK 2 Pg 94-106 |  |
|  | 3&4 | Revision on the area  Of triangles | **By the end of the lesson, the learner**  **should be able to:-**  - Find the area of triangle given the  base and the height  - Find the area of a triangle given two  sides and an included angle   * Find the area of a triangle given the   Three sides | Solving problems on the  areas of a triangle given   * The base and height   ii) Two sides and an  included angle  iii) Three sides | Charts illustrating the  formulae used | KLB BK 2  Pg 155-158  Macmillan BK 2  Pg 135-143  Advancing in Math  BK 2 Pg 110-114 |  |
|  | 5 | Application of area of  triangles to real life | **By the end of the lesson, the learner**  **should be able to:-**  Use the knowledge of the area of  triangles in solving problems in real  life situation | Solving problems in real  life using the knowledge  of the area of triangle | Mathematical table  Chart illustrating  formula used | KLB BK 2 Pg 159  Macmillan BK 2  Pg 143  Advancing in Math  BK 2 Pg 114 |  |
|  | 6 | Revision on the area of  Quadrilaterals  - Area of square  - Area of rectangle  - Area of rhombus  - Area of parallelogram  - Area of trapezium | **By the end of the lesson, the learner**  **should be able to:-**  Find the area of a square, rectangle,  parallelogram, rhombus and  trapezium | Finding the area of the  quadrilateral in questions | Chalkboard  Charts illustrating  formula used | KLB BK 2  Pg 161-163  Macmillan BK 2  Pg 144  Advancing in Math  BK 2 Pg 116-117 |  |
| 12 | 1 | Revision on the area  of a kite | **By the end of the lesson, the learner**  **should be able to:-**  Calculate the area of a kite | Calculate the area of a  Kite | Model of a kite | KLB BK 2  Pg 163  Macmillan BK 2  Pg 144  Advancing in Math  BK 2 Pg |  |
|  | 2&3 | Revision on the area of  other polygons  (regular and irregular  polygons) | **By the end of the lesson, the learner**  **should be able to:-**  - Find the area of a regular pentagon,  hexagon, heptagon  - Find area of irregular polygon | Finding the area of  Regular polygon  Finding the area of  Irregular polygon | Mathematical table | KLB BK 2  Pg 164-166  Macmillan BK 2  Pg 146-147  Advancing in Math  BK 2 Pg 119-120 |  |
|  | 4 | Revision on area of  Part of a circle (area  of a sector) both major  and minor sector | **By the end of the lesson, the learner**  **should be able to:-**  Calculate the area of a sector (major  And minor) | Calculating the area of a  sector (both major and  minor sector) | Chart illustrating  sectors | KLB BK 2 Pg 167  Macmillan BK 2  Pg 149  Advancing in Math  BK 2 Pg 122 |  |
|  | 5 | Revision on the area of  a segment of a circle | **By the end of the lesson, the learner**  **should be able to:-**  Find the area of a segment of a circle | Calculating the area of a  segment of a circle | Charts illustrating a  Segment | KLB BK 2  Pg 169-170  Macmillan BK 2  Pg 151-152  Advancing in Math  BK 2 Pg 123 |  |
|  | 6 | Revision on the area of  a common region  between two  intersecting circles | **By the end of the lesson, the learner**  **should be able to:-**  Find the area of a common region  between two intersecting circles | Calculating the area of a  common region between  the intersecting circles | Charts illustrating  common region  between the  intersecting circles | KLB BK 2 Pg 176  Macmillan BK 2  Pg 155  Advancing in Math  BK 2 Pg |  |
| 13 | 1 | Revision on surface  area of solids (surface  area of prism; cylinder,  triangular prism,  hexagonal prism | **By the end of the lesson, the learner**  **should be able to:-**  Calculate the surface area of a cylinder,  triangular prism, hexagonal prism | Calculating the surface  area of prisms | Models of prisms | KLB BK 2 Pg 177  Macmillan BK 2  Pg 156  Advancing in Math  BK 2 Pg 127 |  |
|  | 2&3 | Revision on surface  area of pyramid, cone  and frustrum | **By the end of the lesson, the learner**  **should be able to:-**  Find the surface area of a pyramid,  Cone and frustrum | Calculating the surface  area of a cone, pyramid  and frustrum | Models of pyramid,  Cone and frustrum | KLB BK 2  Pg 178-182  Macmillan BK 2  Pg 157-160  Advancing in Math  BK 2 Pg 128-131 |  |
|  | 4 | Revision on the  Surface area of a  Sphere and  hemisphere | **By the end of the lesson, the learner**  **should be able to:-**  Find the area of a sphere given the  radius of the sphere  Get the surface area of a hemisphere | Finding the surface area  of a sphere and  hemisphere | Models of a sphere  and hemisphere | KLB BK 2  Pg 183-184  Macmillan BK 2  Pg 161-162  Advancing in Math |  |
|  | 5 | Revision on volume  of and cone | **By the end of the lesson, the learner**  **should be able to:-**  Solve problems on the volume of prism  pyramid and cone | Solving problem on the  volume of prism, cone  and pyramid | Models of a cone,  pyramid and cone | KLBBK2Pg186-191  Macmillan BK 2  Pg 163-168  Advancing in Math  BK 2 Pg 138-140 |  |
|  | 6 | Revision on volume of  Frustrum and a sphere | **By the end of the lesson, the learner**  **should be able to:-**  Solve problems on the volume of a  sphere and frustrum of a cone and a  pyramid | Solving problems on the volume of a sphere and  a frustrum of pyramid  and cone | Models of pyramid and  that of a cone and after  they are cut  Models of a sphere | KLB BK 2  Pg 192-195  Macmillan BK 2  Pg 169-173  Advancing in Math  BK 2 Pg 141-142 |  |
| 14 |  | **END OF TERM EXAMINATIONS** | | | | |  |

**MATHEMATICS SCHEMES OF WORK**

**FORM TWO 2016**

**TERM III**

**REFERENCES:**

1. Advancing in Mathematics BK 4 By Longhorn Kenya Publishers
2. Secondary Mathematics BK 4 By KLB
3. Macmillan Secondary Maths BK 2

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC/S-TOPIC** | **OBJECTIVES** | **L/ACTIVITIES** | **L/T AIDS** | **REFERENCE** | **REMARKS** |
| 1 | 1 | Quadratic expressions  and equations  Expansion of algebraic  expressions | **By the end of the lesson, the learner**  **should be able to:-**  Expand algebraic expressions that form  quadratic equations | Expanding algebraic  Expressions | Charts illustrating expanded algebraic expressions | KLB BK 2 Pg 203  Macmillan BK 2  Pg 174  Advancing in Math  BK 2 Pg 144 |  |
|  | 2&3 | Three quadratic identities | **By the end of the lesson, the learner**  **should be able to:-**  Derive the three quadratic identities | Deriving the quadratic identities  (a + b)2 = a2 + 2ab + b2  (a - b)2 =a2 - 2ab + b2  (a – b) (a + b) = a2 – b2 | Charts illustrating derived quadratic identies | KLB BK 2 Pg 204  Macmillan BK 2  Pg 176  Advancing in Math  BK 2 Pg 145 |  |
|  | 4 | Expanding using the quadratic identities | **By the end of the lesson, the learner**  **should be able to:-**  Use the three quadratic identities in expansion of an algebraic expression.  Give a clear distinction of the three identities. | Expanding an algebraic expression using the quadratic identities | Chart illustrating expanded problem using identities | KLB BK 2  Pg 204-205  Macmillan BK 2  Pg 173  Advancing in Math  BK 2 Pg 148 |  |
|  | 5 | Factorization of quadratic expression (when the coefficient of x2 is 1) | **By the end of the lesson, the learner**  **should be able to:-**  Factorize the quadratic expressions | Factorizing a quadratic expression with the coefficient of x2 being 1 | Charts illustrating a factorized quadratic expressions | KLB BK 2  Pg 205-206  Macmillan BK 2  Pg 180  Advancing in Math  BK 2 Pg 148 |  |
|  | 6 | Factorization of a quadratic expression (when the coefficient of x2 is greater than 1) | **By the end of the lesson, the learner**  **should be able to:-**  Factorize the quadratic expressions with the coefficient of x2 being greater than 1 e.g. 6x2 – 13x + 6 | Factorizing a quadratic expression with the coefficient of x2 being greater than 1 | Charts illustrating a factorized quadratic expression | KLB BK 2  Pg 206-208  Macmillan BK 2  Pg 180  Advancing in Math  BK 2 Pg 150 |  |
| 2 | 1 | Solutions of quadratic equations by factor method | **By the end of the lesson, the learner**  **should be able to:-**  - Solve a quadratic equation by factor  method  - Give the difference between a  quadratic expression and a quadratic  equation  - Write a general quadratic equation | Solving quadratic equations by factor method  Giving the difference between quadratic expression and quadratic equation  Writing a general quadratic equation | Chart illustrating a solved quadratic equation by factor method  Charts illustrating a general quadratic equation | KLB BK 2 Pg 209  Macmillan BK 2  Pg 181  Advancing in Math  BK 2 Pg 151-153 |  |
|  | 2 | Formation of a quadratic equation from given roots | **By the end of the lesson, the learner**  **should be able to:-**  Form a quadratic equation in the form ax2 + bx + c = 0 from given roots | Using the given roots to form a quadratic equation in the form  ax2 + bx + c = 0 | Charts illustrating a formed quadratic equation | KLB BK 2 Pg 210  MacmillanBk2Pg182  Advancing in Math  BK 2 Pg 155-156 |  |
|  | 3&4 | Formation and solutions of quadratic equations | **By the end of the lesson, the learner**  **should be able to:-**  Form and solve quadratic equations | Forming a quadratic equation from given roots  Solving a formed quadratic equation by factor method | Charts illustrating a formed and solved quadratic equation | KLB BK 2 Pg 211  Macmillan BK 2  Pg 184  Advancing in Math  BK 2 Pg |  |
|  | 5 | Application of quadratic equations | **By the end of the lesson, the learner**  **should be able to:-**  Use the knowledge of quadratic in solving problems from quadratic equations | Solving quadratic equations by factor method | Chart illustrating solved quadratic equation | KLB BK 2 Pg 212  Macmillan BK 2  Pg 184  Advancing in Math  BK 2 Pg 157-158 |  |
|  | 6 | Linear Inequalities  Inequality symbols  Giving examples of simple statements using inequality symbols | **By the end of the lesson, the learner**  **should be able to:-**  - Give the difference between the four  inequality symbols used  - Write down examples of simple  statements using inequality symbols | Giving a clear distinction of the four inequality symbols  Writing down examples of simple statements using inequality symbols | Charts illustrating the four inequality symbols | KLB BK 2 Pg 213  Macmillan BK 2  Pg 190  Advancing in Math  BK 2 Pg 160-161 |  |
| 3 | 1 | Inequalities on a number line  (simple statement) | **By the end of the lesson, the learner**  **should be able to:-**  Correctly illustrate inequalities on the number line | Illustrating inequalities on the number line | Charts illustrating inequalities on a number line | KLB BK 2 Pg 213  Macmillan BK 2  Pg 191  Advancing in Math  BK 2 Pg 160 |  |
|  | 2&3 | Writing simple statement as compound statement  Illustrating compound statement formed on the number line | **By the end of the lesson, the learner**  **should be able to:-**  Write down two simple statements as a compound statement  Illustrating a compound statement formed on a number line | Combining two simple statements  Illustrating a compound statement on the number line | Charts illustrating simple statements and s compound statement | KLB BK 2 Pg 214  Macmillan BK 2  Pg 191  Advancing in Math  BK 2 Pg 161 |  |
|  | 4 | Solutions of simple inequality (linear inequality in one unknown) | **By the end of the lesson, the learner**  **should be able to:-**  Solve a linear inequality in one unknown | Solving a linear inequality in one unknown | Chalkboard  Charts showing a solved simple inequality | KLB BK 2 Pg 215  Macmillan BK 2  Pg 191  Advancing in Math  BK 2 Pg 162 |  |
|  | 5 | Multiplication and division by a negative number and a positive number | **By the end of the lesson, the learner**  **should be able to:-**  Note the effect of multiplying and dividing an inequality by a negative number and a positive number | Multiplying and diving an inequality by a negative number and a positive number | Charts illustrating worked example | KLB BK 2 Pg 216  Macmillan BK 2  Pg  Advancing in Math  BK 2 Pg 163 |  |

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| 4 | 1-5 | Representing combined inequalities graphically  Obtaining inequalities from inequality graph | **By the end of the lesson, the learner**  **should be able to:-**  Represent inequalities both in one and two unknowns graphically  Obtain inequalities from inequality graphs | Representing inequalities graphically both in one and two unknowns  Obtaining inequalities from inequality graph | Square board  Graph paper  Chalkboard | KLB BK 2  Pg 224-227  Macmillan BK 2  Pg 194-197  Advancing in Math  BK 2 Pg 167 |  |
|  | 6 | Linear Motion  Displacement, velocity, speed and acceleration | **By the end of the lesson, the learner**  **should be able to define:-**  (i) Displacement  (ii) velocity  (iii) Speed  (iv) Acceleration  - Use displacement, velocity, speed  and acceleration in solving problems | Defining displacement, velocity, speed and acceleration  Working out problems on velocity, acceleration, speed and displacement | Chalkboard | KLB BK 2  Pg 2228-229  Macmillan BK 2  Pg 198  Advancing in Math  BK 2 Pg 168 |  |
| 5 | 1&2 | Determining velocity and acceleration | **By the end of the lesson, the learner**  **should be able to:-**  Determine velocity and acceleration  Determine average velocity and deceleration or retardation  Distinguish between distance and displacement and speed and velocity | Finding velocity and acceleration  Calculating average velocity and retardation  Distinguishing distance and displacement, speed and velocity | Chalkboard | KLB BK 2 Pg 230  Macmillan BK 2  Pg 199  Advancing in Math  BK 2 Pg 170-171 |  |
|  | 3 | Distance - Time graph | **By the end of the lesson, the learner**  **should be able to:-**  Plot and draw a distance time graph  Interpreting distance time graph | Plotting distance time graph  Drawing distance time graph  Using distance time graph to solve problems of linear motion | Square board  Graph paper | KLB BK 2  Pg 231-233  Macmillan BK 2  Pg 201  Advancing in Math  BK 2 Pg 172-173 |  |
|  | 4 | Velocity – Time graph | **By the end of the lesson, the learner**  **should be able to:-**  Plot and draw velocity time graph | Plotting and drawing a velocity time graph | Graph paper  Square board | KLB BK 2 Pg 234  MacmillanBK2Pg202  Advancing in Math  BK 2 Pg 174-175 |  |
|  | 5 | Interpreting Velocity – Time Graph | **By the end of the lesson, the learner**  **should be able to:-**  Interpret velocity – time graph drawn  Using velocity time graph in solving linear problems | Solving linear motion problems from a velocity time graph  Interpreting a velocity time graph | Square board  Graph paper | KLB BK 2 Pg 235  Macmillan BK 2  Pg 207  Advancing in Math  BK 2 Pg 176 |  |
|  | 6 | Determining distance using velocity – time graph | **By the end of the lesson, the learner**  **should be able to:-**  Determine distance from a velocity time graph | Plotting and drawing velocity time graph  Determining distance from velocity time graph | Square board  Graph paper | KLBBK2Pg235-236  MacmillanBK2Pg207  Advancing in Math  BK 2 Pg 176 |  |
| 6 | 1&2 | Relative Speed  Bodies moving to same direction | **By the end of the lesson, the learner**  **should be able to:-**  Define relative speed  Find the relative speed of bodies moving to the same direction  *© Education Plus Agencies* | Defining relative speed  Calculating relative speed of bodies heading same destination  Solving problems involving relative speed | Chalk board | KLB BK 2  Pg 238-239  Macmillan BK 2  Pg 208  Advancing in Math  BK 2 Pg 177 |  |
|  | 3 | Relative Speed  (Bodies moving in different direction)  Approaching bodies | **By the end of the lesson, the learner**  **should be able to:-**  Find the relative speed of approaching bodies | Finding relative speed of approaching bodies | Chalkboard | KLB BK 2  Pg 239-240  Macmillan BK 2  Pg 210 |  |
|  | 4 | Statistics  Defining statistics  Collection and organization of data | **By the end of the lesson, the learner**  **should be able to:-**  Define statistics  Distinguish between a raw and a organized data  Collect and organize a raw data | Defining statistic  Organizing a raw data after collecting | Charts illustrating a raw data | KLB BK 2 Pg 241  Macmillan BK 2  Pg 211-212  Advancing in Math  BK 2 Pg 179 |  |
|  | 5 | Frequency distribution table for ungrouped data | **By the end of the lesson, the learner**  **should be able to:-**  Draw a frequency distribution table for ungrouped data | Drawing frequency distribution table for ungrouped data | Charts illustrating a frequency distribution table | KLB BK 2 Pg 242  Macmillan BK 2  Pg 214  Advancing in Math  BK 2 Pg 180 |  |
|  | 6 | Frequency distribution table for grouped data | **By the end of the lesson, the learner**  **should be able to:-**  Draw a frequency distribution table for the grouped data | Drawing a frequency distribution table for grouped data | Charts illustrating a frequency distribution table for grouped data | KLB BK 2 Pg 249  Macmillan BK 2  Pg 214-216  Advancing in Math  BK 2 Pg 182 |  |
| 7 | 1 | Grouping data | **By the end of the lesson, the learner**  **should be able to:-**  Group data into reasonable units | Grouping a raw data into reasonable units | Charts  Chalkboard | KLB BK 2 Pg 248  Macmillan BK 2  Pg 214  Advancing in Math  BK 2 Pg 180 |  |
|  | 2 | Measures of central tendency  Mean (X) for ungrouped data | **By the end of the lesson, the learner**  **should be able to:-**  Calculate the mean (X) for ungrouped data  Work out the mean by using the formula  X = εx and X = εfx  N εf | Calculating the mean for ungrouped data | Charts showing calculated mean | KLB BK 2 Pg 243  Macmillan BK 2  Pg 218  Advancing in Math  BK 2 Pg 192 |  |
|  | 3&4 | Mean (X) for grouped data | **By the end of the lesson, the learner**  **should be able to:-**  Find the mean of a grouped data  Find the midpoint of a given class | Calculating the mean of a grouped data | Charts illustrating a grouped data on a frequency distribution table | KLB BK 2 Pg 249  MacmillanBK2Pg219  Advancing in Math  BK 2 Pg 192 |  |
|  | 5&6 | Mode | **By the end of the lesson, the learner**  **should be able to:-**  Find mode from ungrouped and grouped data | Finding the mode | Chalkboard | KLB BK 2  Pg 244-249 |  |
| 8 | 1&2 | Median | **By the end of the lesson, the learner**  **should be able to:-**  Find the median of a grouped and ungrouped data  Arrange the ungrouped data in either ascending or descending order  Get accumulative frequency column | Estimating the median of grouped data  Finding the median of ungrouped data | Charts illustrating ascending or descending order data  Charts illustrating formula used | KLB BK 2  Pg 244-245, 248  Macmillan BK 2  Pg 220-222  Advancing in Math  BK 2 Pg 194 |  |
|  | 3 | Representation of data  (i) Line graph | **By the end of the lesson, the learner**  **should be able to:-**  Represent data in form of a line graph  Interpret a line graph  Solve problems using a line graph plotted | Plotting and drawing a line graph  Solving problems using a line graph | Square board  Graph papers | KLB BK 2  Pg 255-256  Macmillan BK 2  Pg 226  Advancing in Math  BK 2 Pg 190 |  |
|  | 4 | Pie chart  Bar graph | **By the end of the lesson, the learner**  **should be able to:-**  Represent data in form of pie chart and bar graph  Give clear distinction of a pie chart and bar graph | Representing data in form of a pie chart and bar graph | Mathematical instrument  Graph paper  Square board | KLB BK 2  Pg 253-255  Macmillan BK 2  Pg 227  Advancing in Math  BK 2 Pg |  |
|  | 5 | Pictogram and histogram (with equal class intervals) | **By the end of the lesson, the learner**  **should be able to:-**  Represent data in form of pictogram and histogram  Interpreting the information from the bars of a histogram and pictogram | Representing data in form of pictogram and histogram  Drawing the bars of a histogram on a square paper | Square board  Graph paper | KLB BK 2  Pg 254-257  Macmillan BK 2  Pg 227  Advancing in Math  BK 2 Pg 184,187-188 |  |
|  | 6 | Histogram (varying class interval) | **By the end of the lesson, the learner**  **should be able to:-**  Represent data in form of a histogram with varying class intervals  Calculate frequency densities | Calculating frequency density  Representing data in form of a histogram | Graph paper  Square board | KLB BK 2 Pg 258  Macmillan BK 2  Pg 228  Advancing in Math  BK 2 Pg 189 |  |
| 9 | 1 | Frequency polygons | **By the end of the lesson, the learner**  **should be able to:-**  Represent data in form of a frequency polygon | Representing data in form of a frequency polygon  Plotting and drawing frequency polygon | Graph paper  Square board | KLB BK 2  Pg 259-260  Macmillan BK 2  Pg 231  Advancing in Math  BK 2 Pg 189 |  |
|  | 2 | Interpretation of data from real life situation | **By the end of the lesson, the learner**  **should be able to:-**  Interpret data from real life situation using the knowledge of line graph, bar graph, pie chart, histogram, pictogram and frequency polygon | Interpreting of data in real life situation by using the previously learnt knowledge | Graph paper  Mathematical instruments | KLB BK 2 Pg 263  Macmillan BK 2  Pg 238  Advancing in Math  BK 2 Pg 198 |  |
|  | 3 | Angle properties of a circle  Arc, chord and segment of a circle | **By the end of the lesson, the learner**  **should be able to:-**  Identify an arc, chord and segment  Define an arc, chord and segment | Defining arc, chord and segment  Identifying arc, chord and segment | Mathematical instruments  Charts illustrating arc, chord and segment | KLB BK 2 Pg 264  Macmillan BK 2  Pg 238  Advancing in Math  BK 2 Pg 199 |  |
|  | 4 | Angle subtended by the same arc at the circumference | **By the end of the lesson, the learner**  **should be able to:-**  Relate and compute angle subtended by an arc at the circumference | Computing angle subtended by an arc at the circumference | Mathematical instruments | KLB BK 2 Pg 265  Macmillan BK 2  Pg 241  Advancing in Math  BK 2 Pg 200-201 |  |
|  | 5&6 | Relationship between angle subtended at the centre and angle subtended on the circumference by the same arc | **By the end of the lesson, the learner**  **should be able to:-**  Relate and compute angle subtended by an arc at the centre and at the circumference | Computing angle subtended by an arc at the centre and at the circumference | Mathematical instruments | KLB BK 2  Pg 267-273  Macmillan BK 2  Pg 241-243  Advancing in Math  BK 2 Pg 202 |  |
| 10 | 1 | Angle in a semi-circle | **By the end of the lesson, the learner**  **should be able to:-**  State the angles in the semi-circle | Stating the angles in a semi-circle | Chalk board | KLB BK 2 Pg 273  Macmillan BK 2  Pg 244-245  Advancing in Math  BK 2 Pg 203 |  |
|  | 2 | Angle properties of a cyclic quadrilateral | **By the end of the lesson, the learner**  **should be able to:-**  State the angle properties of a cyclic quadrilateral | Stating angle properties of a cyclic quadrilateral | Mathematical instruments  Models of a cyclic quadrilateral | KLB BK 2 Pg 278  Macmillan BK 2  Pg 244-246  Advancing in Math  BK 2 Pg 204 |  |
|  | 3 | Finding angles of a cyclic quadrilateral | **By the end of the lesson, the learner**  **should be able to:-**  Find and complete angles of a cyclic quadrilaterals | Computing angles of a cyclic quadrilateral | Charts illustrating angles in a cyclic quadrilateral | KLB BK 2 Pg 279  MacmillanBK2Pg250  Advancing in Math  BK 2 Pg 204 |  |
|  | 4&5 | Vectors  Vector and scalar quantities  Vector notation | **By the end of the lesson, the learner**  **should be able to:-**  Define a vector and scalar quantity and write down examples of a vector and scalar quantities  Use vector notation correctly | Defining a vector and scalar  Writing down examples of a vector and a scalar  Using a vector or notation | Cahlk board | KLB BK 2 Pg 284  Macmillan BK 2  Pg 252  Advancing in Math  BK 2 Pg 206-207 |  |
|  | 6 | Representation of vectors | **By the end of the lesson, the learner**  **should be able to:-**  Represent vectors both singles and combined geometrically | Representing a vector both single and combine geometrically | Square board  Graph paper | KLB BK 2  Pg 284-285  Macmillan BK 2  Pg 253 |  |
| 11 | 1 | Equivalent vectors  Addition of vectors | **By the end of the lesson, the learner**  **should be able to:-**  Identify equivalent vectors  Add vectors | Identifying equivalent vectors  Adding vectors | Square board  Graph paper  Chalkboard | KLB BK 2  Pg 285-288  Macmillan BK 2  Pg 256 |  |
|  | 2 | Multiplication of a vector by a scalar | **By the end of the lesson, the learner**  **should be able to:-**  Multiply vectors by scalar (positive and negative) | Multiplying vectors by a positive and negative scalar | Chalkboard | KLB BK 2 Pg 290  Macmillan BK 2  Pg 258  Advancing in Math  BK 2 Pg 209 |  |
|  | 3 | Column vector and position vector | **By the end of the lesson, the learner**  **should be able to:-**  Define position vector and column vector | Defining column vector and position vector | Square board  Graph paper | KLB BK2Pg 296-300  MacmillanBK2Pg260  Advancing in Math  BK 2 Pg 213 |  |
|  | 4 | Magnitude of a vector | **By the end of the lesson, the learner**  **should be able to:-**  Find the magnitude of a vector | Finding the magnitude of a vector | Mathematical table | KLB BK2Pg 301-302  MacmillanBK2Pg262  Advancing in Math  BK 2 Pg 216 |  |
|  | 5 | Mid-point of a vector | **By the end of the lesson, the learner**  **should be able to:-**  Find the midpoint of a vector | Calculating the midpoint of a vector | Chalkboard | KLB BK2Pg302-303  Macmillan BK 2  Pg 262 |  |
|  | 6 | Translation vector | **By the end of the lesson, the learner**  **should be able to:-**  Define translation as a transformation | Defining translation  Solving problems on translation | Chalkboard  Square board  Graph paper | KLB BK2Pg 304-308  MacmillanBK2Pg263  Advancing in Math  BK 2 Pg 217 |  |
| 12 | 1 | **ASSESSMENT ON QUADRATIC EXPRESSIONS AND EQUATIONS AND LINEAR INEQUALITIES** | | | |  |  |
|  | 2 | Revision on the assessment of quadratic expressions and linear inequalities | **By the end of the lesson, the learner**  **should be able to:-**  Solve quadratic problems correctly and also be able to work out problems on linear inequalities correctly | Solving quadratic problems  Working out problems from linear inequality | Chalkboard | KLB BK 2  Pg 203-221  Macmillan BK 2  Pg 197  Advancing in Math  BK 2 Pg 140-166 |  |
|  | 3 | **ASSESSMENT ON LINEAR MOTION** | | | |  |  |
|  | 4 | Revision on the assessment of linear motion and statistics | **By the end of the lesson, the learner**  **should be able to:-**  Solve problems on linear motion and statistics correctly  Applying the knowledge learnt to solve linear motion problems and statistic questions | Solving problems on linear motion and statistics | Chalkboard | KLB BK 2  Pg 228-252  Macmillan BK 2  Pg 198-238  Advancing in Math  BK 2 Pg 168-199 |  |
|  | 5 | **ASSESSMENT ON ANGLE PROPERTIES OF A CIRCLE AND VECTORS** | | | |  |  |
|  | 6 | Revision on the assessment of angle properties of a circle and vectors | **By the end of the lesson, the learner**  **should be able to:-**  Work out problems of angle properties and vectors by use of previously learnt knowledge | Solve problems of statistics and angle properties | Graph paper  Square board  Chalkboard | KLB BK 2  Pg 264-304  Macmillan BK 2  Pg 238-263  Advancing in Math  BK 2 Pg 199-217 |  |