**KLB Visionary MATHEMATICS ACT. GRADE FOUR**

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| **School** | **Teacher’s Name** | **Term** | **Year** |
|  |  | *Three* |  |

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| **Wk** | **Lsn** | **Strand/Theme** | **Sub strand** | **Specific learning outcomes** | **Key inquiry Questions** | **Learning experiences** | **Learning Resources** | **Assessment methods** | **Refl** |
| **1** | **OPENING/PREPARATIONS** |
| **2** | **1** |  | **Comparing angles using a right angle** | By the end of the lesson the learner should be able to1. Compare angles practically
2. use IT devices to compare angles
3. appreciate use of angles and direction in real life situations.
 | How do you compare angles? | • Learners in pairs/groups to identify obtuse angles in the environment.• Learners in pairs/groups to identify reflex angles in the environment.• Learners in pairs/groups to compare angles using a right angle.• Learners in pairs/groups/individually to playdigital games and learn more about angles | Objects in the environment, paper cut-outsKlb visionary mathematics Grd. 4 learners bk pg. 146-147 | Oral questionsWritten exerciseObservation |  |
| **3** | **2** |  | **Shapes in our environment** | By the end of the lesson the learner should be able to1. Identify different shapes in the environment
2. use IT devices to identify shapes in our environment
3. appreciate use of shapes and direction in real life situations.
 | How can you identify 2-D shape? | • Learners in pairs/groups/individually to identify shapes in the environment.• Learners in pairs/groups to identify line of symmetry by folding the shape into two equalparts and identify the fold line as line of symmetry. | Cut-outs of rectangles, squares, triangles and circles of different sizesKlb visionary mathematics Grd. 4 learners bk pg. 148 | Oral questionsWritten exerciseObservation |  |
| **3** |  | **Lines of symmetry for rectangles, squares, triangles and circles** | By the end of the lesson the learner should be able to identify lines of symmetry for1. Rectangles and squares
2. use IT devices to identify lines of symmetry
3. appreciate use of shapes and direction in real life situations.
 | How can you identify line of symmetry? | • Learners in pairs/groups/individually to identify shapes in the environment.• Learners in pairs/groups to identify line of symmetry by folding the shape into two equalparts and identify the fold line as line of symmetry. | Cut-outs of rectangles, squares, triangles and circles of different sizesKlb visionary mathematics Grd. 4 learners bk pg. 149-150 | Oral questionsWritten exerciseObservation |  |
| **4** |  | **Lines of symmetry for rectangles, squares, triangles and circles** | By the end of the lesson the learner should be able to identify lines of symmetry for1. Triangles
2. use IT devices to identify lines of symmetry
3. appreciate use of shapes and direction in real life situations.
 | How can you identify line of symmetry? | • Learners in pairs/groups/individually to identify shapes in the environment.• Learners in pairs/groups to identify line of symmetry by folding the shape into two equalparts and identify the fold line as line of symmetry. | Cut-outs of rectangles, squares, triangles and circles of different sizesKlb visionary mathematics Grd. 4 learners bk pg. 149-150 | Oral questionsWritten exerciseObservation |  |
| **5** |  | **Properties of shapes** | By the end of the lesson the learner should be able to1. identify the properties
2. use IT devices to identify properties of shapes
3. appreciate use of shapes and direction in real life situations.
 | What are the properties of squares, rectangles and triangles? | • Learners in pairs/groups/individually to make patterns using squares, rectangles and triangles.• Learners in pairs/groups to identify properties of a square practically.• Learners in pairs/groups to identify properties of arectangle practically.• Learners in pairs/groups to identify properties of atriangle practically.• Learners in pairs/groups to use IT devices to learnmore about 2-D shapes and make patterns. | Cut-outs of rectangles, squares, triangles and circles of different sizesKlb visionary mathematics Grd. 4 learners bk pg. 149-150 | Oral questionsWritten exerciseObservation |  |
| **1** |  | **Properties of shapes** | By the end of the lesson the learner should be able to1. identify properties of triangles
2. use IT devices to identify properties of shapes
3. appreciate use of shapes and direction in real life situations.
 | What are the properties of squares, rectangles and triangles? | • Learners in pairs/groups/individually to make patterns using squares, rectangles and triangles.• Learners in pairs/groups to identify properties of a square practically.• Learners in pairs/groups to identify properties of arectangle practically.• Learners in pairs/groups to identify properties of atriangle practically.• Learners in pairs/groups to use IT devices to learnmore about 2-D shapes and make patterns. | Cut-outs of rectangles, squares, triangles and circles of different sizesKlb visionary mathematics Grd. 4 learners bk pg. 149-150 | Oral questionsWritten exerciseObservation |  |
|  | **2** |  | **Making pattern using shapes** | By the end of the lesson the learner should be able to1. make patterns using different shapes
2. use IT devices to make patterns using shapes
3. appreciate use of shapes and direction in real life situations.
 | How can you make patterns using shapes? | • Learners in pairs/groups/individually to make patterns using squares, rectangles and triangles.• Learners in pairs/groups to identify properties of a square practically.• Learners in pairs/groups to identify properties of arectangle practically.• Learners in pairs/groups to identify properties of atriangle practically.• Learners in pairs/groups to use IT devices to learnmore about 2-D shapes and make patterns. | Cut-outs of rectangles, squares, triangles and circles of different sizesKlb visionary mathematics Grd. 4 learners bk pg. 154 | Oral questionsWritten exerciseObservation |  |
|  | **3** | **DATA HANDLING** | **Collecting and organizing data** | By the end of the lesson the learner should be able to1. collect data
2. use IT devices to collect and organize data
3. appreciate use of frequency tables in representing data in real life situations.
 | How do you collect and organize data? | • Learners in groups to collect and record data involving real life situations using tally marks.• Learners in pairs/groups/individually to represent datacollected from real life situationsusing frequency tables. | Chart showing collected dataKlb visionary mathematics Grd. 4 learners bk pg. 155 | Oral questionsWritten exerciseObservation |  |
|  | **4** |  | **Collecting and organizing data** | By the end of the lesson the learner should be able to1. organize data
2. use IT devices to collect and organize data
3. appreciate use of frequency tables in representing data in real life situations.
 | How do you collect and organize data? | • Learners in groups to collect and record data involving real life situations using tally marks.• Learners in pairs/groups/individually to represent datacollected from real life situationsusing frequency tables. | Chart showing collected dataKlb visionary mathematics Grd. 4 learners bk pg. 155 | Oral questionsWritten exerciseObservation |  |
|  | **5** |  | **Representing Data using Tally Marks** | By the end of the lesson the learner should be able to1. represent data using tally marks
2. use IT devices to represent data
3. appreciate use of frequency tables in representing data in real life situations.
 | How do you represent data? | • Learners inpairs/groups/individually towork out questions involvingfrequency tables representingreal life situations.• Learners in pairs/ groups todiscuss where frequency tablesare used.• Learners inpairs/groups/individually to useIT devices and learn more ondata collection | Chart showing collected dataKlb visionary mathematics Grd. 4 learners bk pg. 156-157 | Oral questionsWritten exerciseObservation |  |
| **4** | **1** |  | **Representing Data using Tally Marks** | By the end of the lesson the learner should be able to1. represent data using tally marks
2. use IT devices to represent data
3. appreciate use of frequency tables in representing data in real life situations
 | How do you represent data? | • Learners inpairs/groups/individually towork out questions involvingfrequency tables representingreal life situations.• Learners in pairs/ groups todiscuss where frequency tablesare used.• Learners inpairs/groups/individually to useIT devices and learn more ondata collection | Chart showing collected dataKlb visionary mathematics Grd. 4 learners bk pg. 156-157 | Oral questionsWritten exerciseObservation |  |
|  | **2** |  | **Representing data using frequency tables** | By the end of the lesson the learner should be able to1. data involving real life situations using frequency tables
2. use IT devices to represent data
3. appreciate use of frequency tables in representing data in real life situations
 | How do you represent data? | • Learners inpairs/groups/individually towork out questions involvingfrequency tables representingreal life situations.• Learners in pairs/ groups todiscuss where frequency tablesare used.• Learners inpairs/groups/individually to useIT devices and learn more ondata collection | Chart showing collected dataKlb visionary mathematics Grd. 4 learners bk pg. 159-160 | Oral questionsWritten exerciseObservation |  |
|  | **3** |  | **Representing data using frequency tables** | By the end of the lesson the learner should be able to1. data involving real life situations using frequency tables
2. use IT devices to represent data
3. appreciate use of frequency tables in representing data in real life situations
 | How do you represent data? | • Learners inpairs/groups/individually towork out questions involvingfrequency tables representingreal life situations.• Learners in pairs/ groups todiscuss where frequency tablesare used.• Learners inpairs/groups/individually to useIT devices and learn more ondata collection | Chart showing collected dataKlb visionary mathematics Grd. 4 learners bk pg. 159-160 | Oral questionsWritten exerciseObservation |  |
|  | **4** |  | **Interpreting frequency tables** | By the end of the lesson the learner should be able to1. identify where frequency tables are used
2. work out questions involving frequency table in real life situations
3. appreciate use of frequency tables in representing data in real life situations
 | How do you interpret frequency tables?Where can you use frequency tables? | • Learners in pairs/ groups/individually to interpretfrequency tables representingreal life situations. | Chart showing collected dataKlb visionary mathematics Grd. 4 learners bk pg. 161-164 | Oral questionsWritten exerciseObservation |  |
|  | **5** |  | **Interpreting frequency tables** | By the end of the lesson the learner should be able to1. identify where frequency tables are used
2. work out questions involving frequency table in real life situations
3. appreciate use of frequency tables in representing data in real life situations
 | How do you interpret frequency tables?Where can you use frequency tables? | • Learners in pairs/ groups/individually to interpretfrequency tables representingreal life situations. | Chart showing collected dataKlb visionary mathematics Grd. 4 learners bk pg. 161-164 | Oral questionsWritten exerciseObservation |  |
| **5** | **1** | **ALGEBRA** | **Using letters to represent numbers** | By the end of the lesson the learner should be able to1. represent unknown using letters
2. use IT devices for learning and enjoyment,
3. appreciate the use of algebraic expressions
 | How can you represent unknown quantity? | • Learners inpairs/groups/individually torepresent the unknown in reallife situations using letters.• Learners inpairs/groups/individually to formalgebraic expressions torepresent real life situations.• Learners inpairs/groups/individuals tosimplify algebraic expressionsrepresenting real life situations.• Learners inpairs/groups/individually to playdigital games involving algebraic expressions. | Baskets, real items, chartsKlb visionary mathematics Grd. 4 learners bk pg. 165 | Oral questionsWritten exerciseObservation |  |
|  | **2** |  | **Forming algebraic expressions involving addition** | By the end of the lesson the learner should be able to1. form algebraic expressions involving addition in real life situation
2. use IT devices to form algebraic equations
3. appreciate the use of algebraic expressions
 | How can you form algebraic expressions involving addition? | • Learners inpairs/groups/individually torepresent the unknown in reallife situations using letters.• Learners inpairs/groups/individually to formalgebraic expressions torepresent real life situations.• Learners inpairs/groups/individuals tosimplify algebraic expressionsrepresenting real life situations.• Learners inpairs/groups/individually to playdigital games involving algebraic expressions. | Baskets, real items, chartsKlb visionary mathematics Grd. 4 learners bk pg. 165-166 | Oral questionsWritten exerciseObservation |  |
|  | **3** |  | **Forming algebraic expressions involving subtraction** | By the end of the lesson the learner should be able to1. form algebraic expression involving subtraction in real life situation
2. use IT devices to form algebraic equations
3. appreciate the use of algebraic expressions
 | How can you form algebraic expressions involving subtraction? | • Learners inpairs/groups/individually torepresent the unknown in reallife situations using letters.• Learners inpairs/groups/individually to formalgebraic expressions torepresent real life situations.• Learners inpairs/groups/individuals tosimplify algebraic expressionsrepresenting real life situations.• Learners inpairs/groups/individually to playdigital games involving algebraic expressions. | Baskets, real items, chartsKlb visionary mathematics Grd. 4 learners bk pg. 167 | Oral questionsWritten exerciseObservation |  |
|  | **4** |  | **Forming algebraic expressions involving multiplication** | By the end of the lesson the learner should be able to1. form algebraic expression involving subtraction in real life situation
2. use IT devices to form algebraic equations
3. appreciate the use of algebraic expressions
 | How can you form algebraic expressions involving multiplication? | • Learners inpairs/groups/individually torepresent the unknown in reallife situations using letters.• Learners inpairs/groups/individually to formalgebraic expressions torepresent real life situations.• Learners inpairs/groups/individuals tosimplify algebraic expressionsrepresenting real life situations.• Learners inpairs/groups/individually to playdigital games involving algebraic expressions. | Baskets, real items, chartsKlb visionary mathematics Grd. 4 learners bk pg. 167-168 | Oral questionsWritten exerciseObservation |  |
|  | **5** |  | **Forming algebraic expressions involving division** | By the end of the lesson the learner should be able to1. form algebraic expression involving subtraction in real life situation
2. use IT devices to form algebraic equations
3. appreciate the use of algebraic expressions
 | How can you form algebraic expressions involving division? | • Learners inpairs/groups/individually torepresent the unknown in reallife situations using letters.• Learners inpairs/groups/individually to formalgebraic expressions torepresent real life situations.• Learners inpairs/groups/individuals tosimplify algebraic expressionsrepresenting real life situations.• Learners inpairs/groups/individually to playdigital games involving algebraic expressions. | Baskets, real items, chartsKlb visionary mathematics Grd. 4 learners bk pg. 168 | Oral questionsWritten exerciseObservation |  |
| **6** | **1** |  | **Simplifying algebraic expressions** | By the end of the lesson the learner should be able to1. simplify algebraic expressions
2. use IT devices to simplify algebraic expressions
3. appreciate the use of algebraic expressions
 | How can you simplify algebraic expressions? | • Learners inpairs/groups/individually torepresent the unknown in reallife situations using letters.• Learners inpairs/groups/individually to formalgebraic expressions torepresent real life situations.• Learners inpairs/groups/individuals tosimplify algebraic expressionsrepresenting real life situations.• Learners inpairs/groups/individually to playdigital games involving algebraic expressions. | Charts with worked examples, practice cardsKlb visionary mathematics Grd. 4 learners bk pg. 169 | Oral questionsWritten exerciseObservation |  |
| **7-8** |  | **END TERM ASSESMENT/CLOSING** |