**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – June**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1 Hour |

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| 1. **TOPIC: WHOLE NUMBERS:** Addition & subtraction **(Lesson 1)**
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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to** * add whole numbers to at least 5 digits
* use range of techniques to perform and check written and mental calculations of whole numbers including:
* building up and breaking down numbers
* using addition and subtraction as inverse operations
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| 1. R**ESOURCES:**
 |  DBE textbook (TG & LB), DBE workbook 1, any other textbook. |
| 1. **PRIOR KNOWLEDGE:**
 | * addition of whole numbers up to 4 digits
* building up and breaking down numbers
* rounding off to the nearest 10 and 100.
 |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |

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| 1. **INTRODUCTION** (Suggested time: 10 Minutes)

**This activity assesses inverse operation (addition and subtraction) It can be done as a mental activity.**1. Complete the table below:

 1. What do you notice when calculations are done from left to right?
2. What do you notice when calculations are done from right to left?

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| * Strengthen learners’ knowledge of place value concept by using flash cards or number builders.
* Use a chart ranging from units to ten thousands

**e.g**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ten thousands** | **Thousands** | **Hundreds** | **Tens** | **units** |
| 7 | 5 | 4 | 6 | 3 |
|  |  |  |  |  |

**Activity 1**1. Ask learners to use the flash cards to show the breaking down of the number on the table
2. Ask them to paste the flash cards in order of their place value parts on the chart.

 **Responses** **70 000; 5 000; 400; 60; 3**Emphasize the place value of **7** on the chart. Introduce calculation using expanded notation. **Example** 70 000 + 5 000 + 400 + 60 + 3 = **75 463**.**Activity 2**1. Write each of the following as a single number
2. 50 000 + 18 000 + 700 + 60 + 28 =
3. 40 000 + 4 000 + 1 300 + 80 + 7 =
4. Write the following numbers in expanded notation
5. 45 704
6. 17 526

 **Introduce the following methods to learners**Building up and breaking down both numbers to add.**Step 1** Break both numbers down into their place value parts.**Step 2:** Add each kind of place value part separately, add thousands to thousands, hundreds to hundreds, tens to tens and units to units.**Step 3:** Make transfer if it is necessary.**Step 4:** Combine the parts to build up the answer. **Example1:** Calculate: 34 387 + 23 362 **Step 1**: 34 687 = 30 000 + 4 000 + 300 +80 + 7 and 23 365 = 20 000 + 3000 +300 + 60 + 2**Step 2**: 30 000 + 20 000 = 50 000 4 000 + 3 000 = 7 000 300 + 300 = 600 80 + 60 = 140 7 + 2 = 9**Step 3**: 34 387 + 23 365 = 50 000 + 7 000 + 600 + 140 + 9 (transfer 100 from 140 to 600) = 50 000 + 7 000 + 700+ 40 +9**Step 4**: = 57 749**Method 2** Introduce expanded column methodSteps 2 and 3 assists to keep track of the different place value parts: 34 387 = 30 000 + 4 000 + 300 + 80 + 7+23 362 = 20 000 + 3 000 + 300 + 60 + 2 = 50 000 + 7 000 + 600 + 140 + 9(transfer 100 from 140 to 600) = 50 000 + 7 000 + 700 + 40 + 9 = 57 749 **Method 3** Adding on by breaking down the second number to be added.**Example 3**34 387 ­+ 23 362 34 387 ­+ 20 000 54 387+3000 57 387 ­+ 300 57 687 +60  57 747+2 = 57 749  **Activity 3** 1. Calculate 28 638 + 47 287 by using the methods above.
2. Use the inverse of addition to check if the answer is correct.
 | * use the flash cards to show the number on their table.
* paste the flash cards or number builders on the chart.

work on activity 2follow the calculation methods.work on activity 3.confirm the answer by subtracting as inverse of addition. |
| 1. **CLASSWORK** (Suggested time: 15 minutes)
 |
| 1. Calculate the following by using the methods above.
2. 50 130 + 44 016
3. 23 481 + 29 340
4. 98 765 + 12 345
5. Use inverse of addition to check if the answers are correct
 |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| 1. **Emphasise that**:
* calculations can be performed using different methods such as:
* **expanded vertical column**
* **break down both numbers to add.**
* the meaning of mathematical terminology and operations are appropriately used.
* the steps are mathematically correct
* the inverse operations are used to check whether their solutions are correct
1. **Home work**

The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook (LB), DBE workbook 1 and/or any other textbooks for learners’ homework. The selected activities should address different cognitive levels. **Recommended Homework**:

|  |  |  |
| --- | --- | --- |
| DBE textbook LB) | DBE workbook 1 | Any other textbook |
| Page 124 no.15 (c, d, f, g & h)Page 125 no 1(a) and 2 | Page 90 no 2 Page 91 no 3 (a-c) |  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – June**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |
| 1. **TOPIC: WHOLE NUMBERS: addition & subtraction (Lesson 2)**
 |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to** * subtract whole numbers to at least 5 digits
* use range of techniques to perform and check written and mental calculations of whole numbers including:
* building up and breaking down numbers
* rounding off and compensation
* using addition and subtraction as inverse operations
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| 1. **RESOURCES:**
 | DBE text book (LB & TG), DBE workbook 1, any other textbook. |
| 1. **PRIOR KNOWLEDGE:**
 | * Subtract of whole numbers up to 4 digits
* Building up and breaking down numbers
* Rounding off to the rearest 10 , 100 and 1 000
 |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore, it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |

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| 1. **INTRODUCTION** (Suggested time: 10 Minutes)

**This activity assesses the skill of subtracting on from the number given number according to place value parts. It can be done as a mental activity.**1. Complete the table below:

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
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| **Teaching activities** | **Learning activities** (Learners are expected to: |
| Present subtraction by using the following methods:**Method 1** building up and breaking down both numbers to subtract using compensation**Step 1** Break both numbers down into their place value parts.**Step 2:** Subtract each kind of place value part separately, subtract thousands from thousands, hundreds from hundreds, tens from tens  and units to units.**Step 3:** Make transfer if it is necessary.**Step 4:** Combine the parts to build up the answer. **Example1:** Calculate 98 748 ­– 45 684**Step1**: 98 748 = 90 000 + 8 000 + 700 +40 + 8 ­– 40 000 ­– 5000 ­–600 ­– 80 ­– 4**Step 2**: 90 000 + 8 000 +600 + 140 + 8 ­– 40 000 ­–5 000 ­– 600 ­– 80 ­– 4­ **Step 3** (90 000 ­– 40 000) + (8 000 ­–5 000) +(600 ­–600) +(140 ­– 80) + (8­–4)  = 50 000 + 3 000 + 0+ 60 + 4 **Step 4** = 53 064**Method 2** Expanded column method **Example** Steps 2 and 3 assists to keep track of the different place value parts: 98 748 = 90 000 + 8 000 + 700 + 40 + 8 = 90 000 + 8 000 + 600 + 140 + 4 (transfer 100 from 700 to 40) ­– 45 684 = 40 000 + 5 000 + 600 + 80 + 4 = 50 000 + 3 000 + 0 + 60 + 4 =53 064 **Method 3** Subtracting by breaking down the second number to be subtracted.**Example 3**98 748 ­– 40 000 58 748 ­– 5 000 53 748 ­– 600 53 148 ­– 80 53 068 ­– 4  = 53 064 Or (98 748 ­– 40 000) ­– 5 000 ­– 600 ­– 80 ­– 4 = (58 748 ­– 5 000) ­– 600 ­–80 ­– 4 = (53 748 ­–600) ­– 80 ­– 4 = (53 148 ­– 80) ­– 4 = 53 068 ­– 4 = 53 064**Activity 1**1. Calculate **73 856 ­– 21 334** by using the methods above.
2. Use inverse of addition to check if the answer is correct.

**Example** 53 064 + 45 684 = **98 748** | Follow the calculation methods.Follow the method.Work out the answers.Work on activity 1Confirm the answer by subtracting as inverse of addition. |
| 1. **CLASSWORK** (Suggested time: 15 minutes)
* Divide learners into manageable groups
* Allocate the groups different methods
1. Calculate the following by breaking down both numbers to subtract
2. 89 324 ­– 58 732
3. 91 265 ­– 19 562
4. Calculate the following by breaking down the second number to be subtracted.
5. 60 073 ­– 28 028
6. 62 891 ­– 37 108
7. Calculate the following by using the expanded vertical method
8. 30 314 ­– 12 242
9. 59 832 ­– 32 895
10. Use inverse of addition to check if the answers are correct.
 |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| 1. **Emphasise that**
2. calculations can be performed using different methods such as:
* **expanded vertical column**
* **break down both numbers to subtract**
* **breaking the second number to be subtracted.**
1. the meaning of mathematical terminology and operations used.
2. the steps are mathematically correct
3. the inverse operations are used to check whether the solutions are correct
4. **Home work**

The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE text book (LB), workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.**Recommended Homework**:

|  |  |  |
| --- | --- | --- |
| DBE textbook (LB) | DBE workbook 1 | Any other textbook |
| Page 127 no.14 (a, c & e)Page 125 no 1(a) and 2 | Page 95 no 3 (a-c) |  |

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**GRADE 5**

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| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
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| **1.TOPIC: WHOLE NUMBERS:** addition & subtraction **(Lesson 3)** |
| **2. CONCEPTS & SKILLS TO BE ACHIEVED:****By the end of the lesson, learners should know and be able to** * add and subtract whole numbers to at least 5 digits
* use range of techniques to perform and check written and mental calculations of whole numbers including:
* building up and breaking down numbers
* adding and subtracting in columns
* using a number line
* using addition and subtraction as inverse operations
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| **3.RESOURCES:** | DBE textbook (TG & LB), DBE workbook 1, any other textbook |
| **4.PRIOR KNOWLEDGE:** | * subtraction of whole numbers up to 4 digits
* use strategies such as building up and breaking down, rounding off in tens, hundreds and thousands
 |
| **5.REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore, it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |

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| **6.INTRODUCTION** (Suggested time: 10 Minutes)**This activity assesses the skills of addition and subtraction by using a number line. It may be done as a mental activity.**1. The number line below shows two subtraction facts and an addition fact.

Example: 1 500 – 800 =700; 1 500 – 700 = 800 ; 800 + 700 = 1 500 1. Write the addition fact and the two subtraction facts that are shown by each number line diagram.
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| **7.LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| **Activity 1****Introduce expanded column method in both addition and subtraction****Example** adding using expanded vertical column1. 32 746 + 23 226

 32 746 = 30 000 + 2 000 + 700 + 40 + 6 23 226 = 20 000 + 3 000 + 200 + 20 + 6  = 50 000 + 5 000 +900 + 60 + 12 (transfer 10 from 12 to 60) ­ = 50 000 + 5 000 +900 +70 +2  = 55 972Addition is an inverse of subtraction **e.g**. 55 972­ – 32 746 = ­ 23 226  ­23 226 + 32 746 = 55 972**Example** subtracting using expanded vertical column1. 49 678­ – 23 749

49678 = 40 000 + 9 000 + 600 + 70 + 8 40 000 + 9 000 + 600 + 60 + 18 (transfer 10 from 70 to8) 40 000 + 8 000 + 1 600 + 60 + 18 (transfer 1000from 9 000 to 600) ­– 23 749 = 20 000 + 3 000 + 700 + 40 + 9 = 20 000 + 5 000 + 900 + 20 + 9 =25 929**Example** 25 929 + 23 749 = **49 678** 49 678 ­– 23 749 = ­25 929 or 49 678 ­– 25 929 = 23 7491. Calculate the following numbers by using the method above.
2. 23 481 + 29 340
3. 32 869 ­– 30 975
4. Use inverse of addition and subtraction to check if the answers are correct.

**Activity 2****Introduce calculation using brackets.*** + Workout the operations in the brackets first
	+ Calculate from left to right if there are no brackets.
	+ Write the final answer.
1. **Do the calculations in brackets first, then workout the answers?**
2. (54 764 ­– 23 324) + (36 869 ­– 32153)
3. (54 764 + 36 869) ­– (32 153 + 23 324)
4. (54 764 ­– 32 153) + (36 869 ­– 23 324)

 Use **(a)** as an example (54 764 ­– 23 324) + (36 869 ­– 32153)  = 31 440 + 4 716 = 36 1561. Give learners an opportunity to do activity **1(b&c)** and work out the answers on the board
2. **Calculate the following by working out the answer from left to right**
3. 69 346 + 23 458 ­– 45 735 ­– 18 576
4. 69 346 ­– 18 576 + 23 458 ­– 45 735

 Use **(a)** as an example (69 346 + 23 458) ­– 45 735 ­– 18 576 = (92 804 ­– 45 735) ­– 18 576 = 47 069 ­– 18 576 = 28 4931. Give learners an opportunity to do activity **2(b)** and work out the answer on the board.
 | Follow the method.Follow the method.Work out their answers.Confirm the answer by using inverse operations (add & subtract).Follow the calculation stepsWork out their answers.Work out their answers |
| **8.CLASSWORK** (Suggested time: 15 minutes) |
| 1. DBE text book (LB) Page 126 no. 7 (a-c)
2. DBE text book (LB) Page127 no. 10 (a-b) and no. 12 (b)
 |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| 1. **Emphasise that**
2. calculations can be performed using different methods such as:
* **expanded vertical column**
* **break down both numbers to add and subtract**
1. the operation within the brackets should be done first to minimise confusion about the order of operations. (**CAPS page 133 clarification notes)**
2. additions and subtractions that are not in brackets are performed from left to right in the order in which they occur.
3. the meaning of mathematical terminology and operations used.
4. the steps are mathematically correct
5. the inverse operations are used to check whether the solutions are correct
6. **Homework**

The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook (LB), DBE workbook 1 and/or any other textbooks for learners’ homework. The selected activities should address different cognitive levels **Recommended Homework**:

|  |  |  |
| --- | --- | --- |
| DBE textbook (LB) | DBE workbook 1 | Any other textbook |
| Page 127 no 14 (b & d)Page 125 no 3 (a-c) | Page 95 no 3 (d-f)Page 91 no 3 (d-f) |  |

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**MATHEMATICS LESSON PLAN**

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| **PROVINCE:** |  |
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| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hours
 |
| **1.TOPIC: WHOLE NUMBERS: addition & subtraction (Lesson 4)** |
| **2. CONCEPTS & SKILLS TO BE ACHIEVED:****By the end of the lesson learners should know and be able to solve problems in contexts involving whole numbers including the following:*** **financial contexts.**
* **Measurement contexts**
 |
| **3.RESOURCES:** | DBE text book (LB& TG), DBE workbook 1, any other textbook. |
| **4.PRIOR KNOWLEDGE:** | * Word problems on addition and subtraction to at least 4- digit whole numbers
* Use strategies such as building up and breaking down, rounding off in tens, hundreds and thousands and compensating.
 |
| **5.INTRODUCTION** (Suggested time: 10 Minutes)1. How much money will I have if I save the following amounts?
	1. 10c + 20c + 20c + 5c = ……………….
	2. 50c + 20c + 50c + 5c + 10c = ……………….
	3. 5c + R5 + 20c + R1 + R2 + 50c = ………………….
	4. 50c + 20c + 5c + R 5, 50 + 10c + 65c + R10 = ……………….
2. How much money will I have left with if I spend the following amounts?

|  |  |  |
| --- | --- | --- |
| **I have** | **I spent** | **I have left** |
| R20 | R5; R2; R5 |  |
| R15 | 20c; 50c |  |
| R15 | 50c; 5c; 20c; 5c; 10c ; 2c |  |
| R12 | R2; 20c; 50c; 5c ; R1 ; 5c ; 20c |  |
| R20 | R1; 20c ; 5c ; R5 ; 50c ; 70c , R2 |  |

 |
| **6.LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| **Activity 1**1. Owami sold her old furniture for **R 56 775**. She bought herself a new bedroom suit for **R 24 999**.How much money is she **left** with?

Use **(a)** to unpack the steps above together with learners.Ask learners which steps they need to follow in order to come up with a correct solution for a word problem.* + Read the statement with understanding (what picture do

 you see in your mind?)* + Underline the key words
	+ Identify the operation to be used **(─)**
	+ Write a number sentence **R 56 775 ─ R24 999 =**
	+ Solve the problem.

 **= (56 775** **─ 20 000) ─ 4 000 ─ 900 ─ 90 ─ 9****= (36 775 ─ 4 000) ─ 900 ─90 ─ 9****= (32 775 ─ 900) ─90 ─9****= (31 875 ─ 90) ─ 9****= 31 785 ─ 9****=31 776****Therefore, she is left with R 31 776,00**Give learners an opportunity in their groups to read the problems below in **(b & c**) and follow the steps to calculate the solutions1. Mr. Cotton earns R57 912 per year and Mr. Williams earns R10 272 more per year. Work out how much Mr. Williams earns per year?
2. A road athlete has already run 12 754m of a 20 000m.How far does he still have to run?

 Allow them to use any method to solve the problems as stipulated in  the policy documents. | Follow the steps to solve word problems in their groups.Choose any method and calculate the solution.  |
| **8.CLASSWORK** (Suggested time: 15 minutes) |
|  DBE textbook (LB) Page 128 activity 2.3 no. 1(a-b) & 4 |
| **9.CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. **Emphasise that**:
* learners must read the problem with understanding by underlining the key words.
* they derive the plan by writing the accurate number sentence.
* they carry out the plan and use any method to solve the problem.
* they reflect by checking whether their solutions were correct or not (inverse operations can be used)
1. **Homework**

The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE text book (LB), DBE workbook1 and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.**Recommended Homework**:

|  |  |  |
| --- | --- | --- |
|  DBE textbook (LB) | DBE workbook 1 | Any other textbook |
| Page 128 Activity 2.3 No. 3, 5, 6, & 7 | Page 92 No 4(a-b) & 5Page 96 no.4 (a-b) & 5 |  |

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**GRADE 5**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | * + 1. Hour
 |

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| **1.TOPIC: COMMON FRACTIONS:** Describing and ordering fractions **(Lesson 1)** |

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| **2.CONCEPTS & SKILLS TO BE ACHIEVED:****By the end of the lesson, learners should know and be able to:** * describe and order fractions
* count forward and backwards in fractions
* compare and order common fractions to at least twelfths
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| **3.RESOURCES:** | DBE textbook, DBE workbook 1, Textbooks, fraction wall |
| **4.PRIOR KNOWLEDGE:** | In Grade 4 the learners learnt how to:Describing and ordering fractions:• Compare and order common fractions with different denominators (halves; thirds, quarters; fifths; sixths; sevenths; eighths).• Describe and compare common fractions in diagram form. |
| **5.REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore, it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |
| **6.INTRODUCTION** (Suggested time: 5 Minutes) |
| 1. A fraction can be a part of a whole where the whole is a single object.
	1.
2. Sharing equally means everyone get the same.
3. Explain what the numerator and denominator is in simple terms. e.g. top number = numerator. Bottom number = denominator

numerator denominator |
| **7.LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| The teacher must explain the fractions as to how to get them. Give learners concrete object to share amongst them equally.The teachers explain that fractions are between whole numbers.The top number show how many parts are shaded in a fraction.The bottom number represents how many equal pieces the whole has been divided into and that it can be any number but pieces must be equal.Use number line to demonstrate common fractionsLearners share and explain on how and what they are having.C:\Users\13169386\Desktop\Capture P.PNGThis pizza is cut into eight equal parts. Each part is one eighth of a pizza. We can write one eighth in fraction notation as .**Activity 1**1. Use the fraction wall to put the following fractions in order from biggest to smallest: , , , , , **Activity 2**Order these fractions from smallest to biggest , , , , , , 3. Count in fourth, up to 2e.g.1 + + 1 + 21. Count in thirds up to 3
2. Count in sixths, from 3 to
 |  |

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| **8.CLASSWORK** (Suggested time: 10 minutes |
| 1. Order the following fractions from smallest to biggest
2. , , , , , , , ,
3. Order from biggest to smallest
4. , ,
5. Arrange the following fractions. Use fraction wall.

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| **9.CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. **Homework**

The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high-quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the Sasol-Inzalo books, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels. **Recommended Homework**:

|  |  |  |
| --- | --- | --- |
| DBE textbook | DBE workbook | Any other textbook |
|  | Page 105Exercise 2 (a-e), 4(a-d) |  |

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
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| 1. **TOPIC: COMMON FRACTIONS:** calculations with fractions **(Lesson 2)**
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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to:**  addition of common fractions with the same denominator |

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| --- | --- |
| 1. **RESOURCES:**
 | DBE textbook, DBE workbook 1, Textbooks, fraction wall |
| 1. **PRIOR KNOWLEDGE:**
 | Describing and ordering fractionsCount forwards and backwards in fractions |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore, it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |

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| **6.INTRODUCTION** (Suggested time: 5 Minutes) |
| Revise the concepts using Mental Maths type questions include:comparing and order fractions.  |

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| **7.LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 15 minutes) |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| This lesson is about addition of common fractions with the same denominator. Explain to the learners that when we add fractions, they need to only add fractions with the same denominators. Tell them to remember just as 1 tomato + 3 tomatoes = 4 tomatoes, so 1 half + 1 half = 2 halves.Write the following on the board and work through them with the learners.The teacher exp**Activity 1**Explain to the learners that when they complete fraction addition sums, they can imagine a chain like this or even draw a quick one to help them calculate the answers. The teacher gives learners th1s sum to do quickly using the above method. + + The teacher reminds learners what is fraction and how to get fractions from the whole**.** Explain in details how fractions with the same denominator are added. e.g.  **+ =** if denominators are the same add numerator and keep the denominator. They must also know that 1÷5 =  - = if denominators are the same subtract numerator and keep the denominator**Activity 2**Arrange the class into groups and each group having a leader. Each group will be given a problem to solve.6 tenths of a loaf and 3 tenths of a loaf together is \_\_\_\_ tenths of a loaf.We can write + = \_\_\_\_\_\_\_\_\_ If we put and of a loaf together, what part of a whole loaf do we get? | listen and do calculationsdiscuss and work out the sum and report back to the whole class |

|  |
| --- |
| **8.CLASSWORK** (Suggested time: 15 minutes |
| **Work out the fractions**1. +
2. +
3. +
4. +
5. +
6. +
7. +
 |

|  |
| --- |
| **9.CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. **Emphasise that:**
	* Learners calculate correctly when adding and subtracting mixed numbers with the same denominators.
2. **Homework**
	* The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding.
	* Carefully select appropriate activities from the Sasol-Inzalo books, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.

 **Recommended Homework**:

|  |  |  |
| --- | --- | --- |
| DBE textbook | DBE workbook | Textbook |
|  | Page 114Exercise 1(a-d)Exercise 3 a,d,f |  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – June**

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| --- | --- |
| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |
| 1. **TOPIC: COMMON FRACTIONS:** **recognize, describe, and use the equivalence of division and fractions (Lesson 3)**
 |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to:** recognize, describe and use the equivalence of division and fractions |

|  |  |
| --- | --- |
| 1. **RESOURCES:**
 | DBE textbook, DBE workbook, Any other textbook, fraction wall |
| 1. **PRIOR KNOWLEDGE:**
 | Addition and subtraction of common fractions with the same denominator. |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore, it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |

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| --- |
| **6.INTRODUCTION** (Suggested time: 5 Minutes) |
| DBE textbookPage 112Exercise 2 ( a-g) |

|  |  |
| --- | --- |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 | **Learning activities** **(Learners are expected to:** |
| **This lesson is about the equivalence of division and fractions.**The teacher must explain “what is equivalent fraction”Fractions that describe the same length or quantity are called equivalent fractionsWe can find equivalent fraction either by multiply or by dividingThe teacher must explain “what is equivalent fraction”Fractions that describe the same length or quantity are called equivalent fractionsWe can find equivalent fraction either by multiply or by dividinge.g. =  x = or ÷ =  x = or ÷ = The teacher to give other examples to learners to do in groupsThe teacher will cut this fraction strip and give to learners. Learners must answer the following questions1. How long is the red strip?

1 = 1 = 1 = 1 are equal.1. Learners must explain why they are equal

C:\Users\13169386\Desktop\Capture Strip 1.PNG**C:\Users\13169386\Desktop\Capture Strip.PNG** |  discuss diagrams and give answers. discuss in groups and give answers. |
| 1. **CLASSWORK** (Suggested time: 15 minutes)
 |
| Complete the following equivalent fractions by multiplying the missing number | In the space provided state True if the fractions are equivalent and False if they notC:\Users\13169386\Desktop\Capture Equi 2.PNG |

|  |
| --- |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| 1. **Emphasise that:**

 learners correctly use the fraction wall when working with equivalent fractions.1. **Homework**

The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high-quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels. **Recommended Homework**:

|  |  |  |
| --- | --- | --- |
| DBE textbook | DBE workbook | Any other textbook |
| Page 106Exercise 1 (a-e), 2 (a- c) |  |  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – June**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |
| 1. **TOPIC: COMMON FRACTIONS: Solving problems (Lesson 4)**
 |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to:** * solve problems in contexts involving common fractions, including grouping and sharing
 |
| 1. **RESOURCES:**
 | DBE textbook, DBE workbook 1, Any other textbook, fraction wall |
| 1. **PRIOR KNOWLEDGE:**
 | In Grade 4 the learners learnt how to:Solving problemsSolve problems in contexts involving fractions, including grouping and equal sharing |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore, it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |

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| 1. **INTRODUCTION (Suggested time: 5 Minutes)**
 |
| Revise the concepts using Mental Maths type questions include:Addition and subtraction of fractions |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| **This lesson is on problem solving with fractions.****Activity 1**Write the following on the board of 36. Ask the learners to calculate the answer in pairs. Move around and see if there are learners who are working it out correctly; if not, give them some clue, for example:Do you agree this means R36 ÷ 6 = R6?However, this question is not asking for one sixth but three sixths. What can we do?Let them come to the front and explain it to the class. If nobody has it right, write the following:36 ÷ 6 x 3 = R18 (Why x 3? because they want to know what three groupsof sixths value is.)(create a story and fit it in) Revise with the learners that even though these problem-solving stories involve fractions they still need to make sure they answer what the question is asking.**Activity 2**Choose 8 learners to come and stand at the front of the class.Ask the class how many of the learners at the front make a quarter of the group. It is 2.How do we find a quarter? We divide by 4. Get the 8 learners to stand in four pairs of 2.Count, one quarter, two quarters, three quarters, the whole group. |  |
| 1. **CLASSWORK (Suggested time: 20 minutes)**
 |
| Solve the following problems (show all the calculations)The farmer has 54 sheep. of them have been sheared. How many have been sheared?On another farm, there are 72 cows. The ratio of cows with short horns to those with long horns is 3:5. How many cows have short horns and how many cows have long horns? |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| 1. **Emphasise that:**
	1. problem solving questions are read and understood.
	2. problem solving skills are used appropriately.
2. **Homework**

The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook, DBE workbooks and/or any textbook for learners’ homework. The selected activities should address different cognitive levels.**Recommended Homework**:

|  |  |  |
| --- | --- | --- |
| DBE textbook | DBE workbook | Any other textbook |
| Page 141-142Exercise 2,3,4 |  |  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – June**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |
| 1. **TOPIC: COMMON FRACTIONS:** Fractions and Division **(Lesson 5)**
 |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to:*** recognize and use equivalent forms of common fractions with denominators which are multiples of each other.
 |

|  |  |
| --- | --- |
| 1. **RESOURCES:**
 | DBE textbook, DBE workbook, Any other textbooks, fraction wall |
| 1. **PRIOR KNOWLEDGE:**
 | Recognize, describe and use the equivalence of division and fractions |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |

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| --- |
| 1. **INTRODUCTION** (Suggested time: 5 Minutes)
 |
| Thoko puts six cakes in into a box. If she has 36 cakes, how many boxes does she need? 36 cakes can be grouped into 6 groups of 6 each, so Thoko needs 6 boxes.What fraction of 36 cakes fits in one box? A box contains of 36 =36 ÷ 6 = 6 cakes |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| Teaching activities | Learning activities (Learners are expected to |
| **This lesson is about recognizing and using equivalent forms of common fractions with denominators which are multiples of each other.****Activity 1**The teacher asks the class if 3 people buy a loaf of bread and want to share it equally among them, into how many pieces must the loaf of bread be cut? (**Three**). Draw a picture on the board then ask: 1÷ 3 =

|  |  |  |
| --- | --- | --- |
| Fraction strips | Fraction | Division |
|

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 | Thirds | 1 ÷ 3 =  |

**Activity 2**Write the following on the board:24 bananas are divided amongst 4 friends. Ask the learners if they can think of a picture to draw for this story. Learners work in pairs to draw a rough sketch in their books and discuss to solve the problem. Now explain four different facts of information derived from the picture. If we divide 24 bananasamongst 4 friends, each one gets how many bananas **(6)**. Express your answer as a fraction.

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24 bananas ÷ 4 friends = 6 bananasEach friend gets 6 out 24 bananasThis means that each friend gets of the 24 bananas. |  |

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| --- |
| 1. **CLASSWORK** (Suggested time: 15 minutes)
 |
| **Complete the table:**

|  |  |  |
| --- | --- | --- |
| Fraction strips | Fraction | Division |
|

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| 1. **Homework**

The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the Sasol-Inzalo books, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels. **Recommended Homework**:

|  |  |  |
| --- | --- | --- |
| DBE textbook | DBE workbook | Textbook |
|  | Page 110-111Activity 1- 2 |  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – June**

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| --- | --- |
| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |

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| 1. **TOPIC: WHOLE NUMBERS: Ordering and comparing whole numbers (Lesson 1)**
 |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to count, order, compare and represent numbers to at least 6-digit numbers, they should be able to round off to the nearest 5, 10, 100, 1000 and recognise the place value of digits to at least 6-digit numbers. They do this by breaking up numbers into hundred thousands, ten thousands, thousands, hundreds, tens and units using****Number names (number words****Place value or flash cards****Expanded notation** |

|  |  |
| --- | --- |
| 1. **RESOURCES:**
 | DBE Textbook (TG and LB), DBE workbook 1,Place value or flash cards |
| 1. **PRIOR KNOWLEDGE:**
 | * Count, order, compare and represent and place value of numbers to at least 4 – digit numbers
* Represent odd and even numbers to at least 1000
* Round off to the nearest 5, 10, 100 and 1000
 |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |

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| 1. **INTRODUCTION** (Suggested time: 10 Minutes)

Revise the concepts using Mental maths type questions to include:Design a Mental maths on the followingCount, order, compare and represent numbers to at least 4 – digit numbersRepresent odd and even numbers to at least 1000 Round off to the nearest 5, 10, 100, 1000 |

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| --- |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| Activity 1   Activity 2Activity 3Use place value or flash cardsActivity 4Round off 8 343 to the nearest 5Rounding off to the nearest 5,10,100 and 1 000

|  |  |  |
| --- | --- | --- |
| Rounding | Rounding off digits | Round up or down |
| To the nearest 5: we look at the last digit |    | If the units are 0;1 or 2 the tens stay the same and the units change to 0 |
|   | If the units are 8 or 9 the tens increase by 1 and the units change to 0 |
| To the nearest 10: we look at the last digit |   | The units digit is less than 5. Round down |
|   | The units digit is 5 or more than 5. Round up |
| To the nearest 100: we look at last 2 digits |   | The last 2 digits are less than 50. Round down |
|   | The last 2 digits are 50 or more than 50. Round up. |
| To the nearest 1 000: we look at last 3 digits |   | The last 3 digits are less than 500. Round down |
|   | The last 3 digits are 500 or more than 500. Round up. |

 Activity 5Copy and complete the table.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Round off to the nearest** | **5** | **10** | **100** | **1 000** |
| 4 526 |  |  |  |  |
| 5 079 |  |  |  |  |
| 9 352 |  |  |  |  |
| 6 463 |  |  |  |  |
| 7 978 |  |  |  |  |

  | * discuss in pairs and give their answers
* Work in pairs and discuss the answers.
* Work in pairs and discuss the answers.
* Work in pairs and discuss the answers.
 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. **CLASSWORK** (Suggested time: 15 minutes

**You may use your place value or flash cards** 2. Copy and complete the tables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Round off to the nearest** | **5** | **10** | **100** | **1 000** |
| 6 526 |  |  |  |  |
| 5 454 |  |  |  |  |
| 9 567 |  |  |  |  |
| 27 823 |  |  |  |  |
| 45 988 |  |  |  |  |

3. Look at the list of numbers: 74; 39; 0; 21 645; 360; 11; 93; 17; 1; 6 000* 1. Write the numbers in ascending order.
	2. Round off 21 645 to the nearest 1 000

4. Replace the \* with to make the mathematical sentence true.3.1 46 400 \* 64 6003.2 10 959 \* 10 599 |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| 1. Emphasis that:
* In rounding off numbers it should be emphasised that a number is nearer to one number than to another.
* Numbers can be represented in different ways namely, number symbols, place value parts and in expanded notation
* The reading of a number symbol by reading the digits should be discouraged: numbers should be read by saying the full number names.
1. The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding.

Carefully select appropriate activities from the DBE Textbooks, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels. **Recommended Homework**:

|  |  |  |
| --- | --- | --- |
| DBE Textbook | DBE workbook | Textbook |
| Pg 115 No 2 a – b, Pg 117 No 3 a – e, Pg 118 No 4 a – h Pg 119 No, 5 a – f, 6 a – c, Pg 119 No 3 and 4 | Pg 80 No 7 a – j, Pg 81 No 8 a – f, No 9 a - d |  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – May**

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| --- | --- |
| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |

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| --- |
| 1. **TOPIC: WHOLE NUMBERS:** Multiplication **(Lesson 1)**
 |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to do the following:** * multiply at least whole 3-digit by 2-digit numbers
* use calculation techniques using a range of techniques to perform and check written and mental calculations of whole numbers including:
* estimation
* building up and breaking down numbers
 |

|  |  |
| --- | --- |
| 1. **RESOURCES:**
 | DBE textbook (LB and TG) |
| 1. **PRIOR KNOWLEDGE:**
 | In term 1 the learners learnt:* multiples
* expanded notation
 |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |
| 1. **MENTAL MATHEMATICS** (10 minutes)

Learners should answer the following questions as fast and accurate as they can.Random multiples of 8 |

|  |
| --- |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| In this lesson learners are going to learn about multiplying using different techniques.**Activity 1**Write the following on the board and let the learners calculate:The trend will be that most learners will say the first one was very easy, but the sums got trickier as the numbers got bigger. Analyse how they tackled the last two examples, especially the last one. Most will have tried to break down the number to make it more manageable.**Activity 2**Write the following on the board and ask the learners to write them in expanded notation. Explain the concept of expanded notation to them where necessary.**Activity 3**Write the following sum on the board and ask the learners to think of how to use expanded notation to help us multiply. Please encourage learners to estimate the answer before they do the calculationsNow writeThis example is to show the learners that they can pick either number to break down; however, we usually choose to break down the bigger number.Let the learners know how to complete the following sum: | * calculate the answers and then discuss the answers.
* answer verbally
* work together with the educator.
* try the following example in pairs:
 |

|  |
| --- |
| 1. **CLASSWORK** (Suggested time: 15 minutes)
 |
| Learners should complete the following activity.DBE Text book LB page 161 question 1 (c – f)Calculate. |

|  |
| --- |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| **Homework**The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels.**Recommended Homework**:

|  |
| --- |
| DBE Textbook |
| DBE Text book LB page 161 question 1 (g – l)  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – May**

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| --- | --- |
| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |

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| 1. **TOPIC: WHOLE NUMBERS:** Multiplication **(Lesson 2)**
 |

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| --- | --- |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to do the following:**

|  |
| --- |
| * multiplication of at least whole 3-digit by 2-digit numbers
* calculation techniques using a range of techniques to perform and check written and mental calculations of whole numbers including:
* estimation
* rounding off and compensating
 |

 |

|  |  |
| --- | --- |
| 1. **RESOURCES:**
 | DBE textbook (LB and TG)  |
| 1. **PRIOR KNOWLEDGE:**
 | In term 1 the learners learnt:* multiples
* rounding off
 |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore, it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |
| 1. **MENTAL MATHEMATICS** (10 minutes)

Learners should answer the following questions as fast and accurate as they can.Multiples of 9 |

|  |
| --- |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| In this lesson learners are going to learn about multiplying using different techniques.**Activity 1**Revise the rounding off to the nearest 10, 100 and 1 000.Ask the learners what they think the easiest numbers are to multiply with. They should end up saying tens, hundreds or thousands. This is where our next techniques can be introduced, namely rounding off and compensation.**Activity 2**Write the following sum on the board.Demonstrate to the learners how it would be much easier to multiply by a multiple of 10, meaningPoint out to the learners that we are still multiplying by 17 because**Activity 2****Activity 3**Please note that learners need to try all the methods that they are taught. They will be allowed at a stage to choose the method(s) they prefer; however, encourage them to try to understand all methods. | * answer verbally.
* work together with the educator.
* work together as a class.
* work together with the educator.
 |
| 1. **CLASSWORK** (Suggested time: 15 minutes)
 |
| Learners should complete the following activity using the method they were taught in class.DBE Text book LB page 162 question 3 (c – f)Learners should individually calculate. |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| **Homework**The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels.**Recommended Homework**:

|  |
| --- |
| DBE Textbook |
| DBE Text book LB page 162 question 3 (g – l)  |
|  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – May**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |
| 1. **TOPIC: WHOLE NUMBERS** Multiplication **(Lesson 3)**
 |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

 **By the end of the lesson, learners should know and be able to do the following:**

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| * Multiples of 2-digits whole numbers to at least 100 (3- digit numbers)
 |

 |
| 1. **RESOURCES:**
 | DBE textbook (LB and TG), DBE workbook |
| 1. **PRIOR KNOWLEDGE:**
 | In term 1 the learners learnt:Multiples of 1-digit whole numbers to at least 100  |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore, it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |
| 1. **MENTAL MATHEMATICS** (10 minutes)

Learners should answer the following questions as fast and accurate as they can.Questions on multiples of ten, one hundred and one thousand.  |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| **In this lesson learners are going to learn about multiples.** Revise with the learners that multiples are the result when two numbers are multiplied by each other. Example 3 x 5 = 15. This means that 15 is a multiple of 3 and 5. Open and complete as a class. Remember to discuss the importance of times tables. If you don’t know your times tables you will not be able to calculate or identify the multiples correctly. Write the following on the board. What are the multiples of 3 between 72 and 89? Let the learners work in pairs to answer this question and mark as a whole class. **Answer: 75, 78, 81, 84, 87** Do a few more examples  | Work together with the educator.Work together in pairs.. |
| 1. **CLASSWORK** (Suggested time: 15 minutes)
 |
| Learners should complete the following activity using the method they were taught in class.DBE Workbook 1: Worksheet 44a question 1-2 (pages 128)Learners should individually calculate.

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| a. Write down the multiples of 3 from 674 to 683. b. Write down the multiples of 5 between 918 and 933.  |

 |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| **Homework**The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels.**Recommended Homework**:

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| DBE Workbook | DBE Textbook |
| DBE Workbook 1: Worksheet 44a question 3 (a-b) (pages 129) | DBE Text book LB page 162 question 3 (g – l)  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – May**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |
| 1. **TOPIC: WHOLE NUMBERS:** Multiplication **(Lesson 4)**
 |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to do the following:** * properties of whole numbers
* recognize and use the commutative; associative and distributive properties with whole numbers
* 0 in terms of its additive property
* 1 in terms of its multiplicative property
 |
| 1. **RESOURCES:**
 | DBE textbook (LB and TG) ; DBE workbook |
| 1. **PRIOR KNOWLEDGE:**
 | In the previous lesson learners learnt:* multiples of 1-digit whole numbers to at least 100
 |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |
| 1. **MENTAL MATHEMATICS** (10 minutes)

Learners should answer the following questions as fast and accurate as they canMultiples of 7 |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| In this lesson we are going to learn about properties of whole numbers.Remind learners that we need to know the properties of whole numbers, so that when multiplying and adding weknow what we can do to the sums without changing the sum. For example: 2 × 5 = 10 Think about multiplying by 0; what does that mean? It means no matter what we multiply by zero, the answer will always be zero. For example: 0 × 7 = 0 and 0 × 801 = 0Think about multiplying by 1; when we multiply by 1 the number stays the same. For example: 1 × 9 = 9 and 1 × 719 = 719The next important concept for the learners to understand is that when multiplying, the order of the numbers in the number sentence will not affect the answer.For example: write the following on the board:2 × 4 = 8 4 × 2 = 8Therefore 2 × 4 = 4 × 2Let the learners work in pairs to draw the diagram that matches these number sentences.3 x (2 + 4) = (3 x 2) + (3 x 4)Discuss the diagram with the learners. Explain to them that they do not have to draw the diagrams, but diagrams are used to help us.  | Answer verbally.Work together with the educator.  |

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| 1. **CLASSWORK** (Suggested time: 15 minutes)
 |
| 1. Make the number sentence equal.

e.g. 2 × (6 + 3) = (2 × 6) + (2 × 3)a. 7 × (4 + 3)b. 5 × (4 + 5)c. 6 × (3 + 2)d. 3 × (6 + 8)1. Calculate the following

e.g. 4 × (8 + 2) = (4 × 8) + (4 × 2) = 32 + 8 = 401. 2 × (2 + 6)
2. 8 × (5 + 2)
3. 2 × (4 + 2)
4. 7 × (5 + 6)

State whether the statements are TRUE or FALSEa. 7 x 3 + 6 = 3 + 7 x 6b. 3(5 + 6) = (3 x 5) + (3 x 6)DBE Workbook 1 Worksheet 48 (page 138-139) 1a; 2 a; 3a-b |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| **Homework**The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels. **Recommended Homework**:

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| DBE Workbook | DBE Textbook |
| DBE Workbook 1 Worksheet 48 (page 138-139) 1b; 2 b-c; 3c | DBE Text book LB page 162 question 3 (g – l)  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – May**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
 |
| 1. **TOPIC: WHOLE NUMBERS** Multiplication **(Lesson 5)**
 |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to do the following:** * number range for multiples and factors
 |
| 1. **RESOURCES:**
 | DBE textbook (LB and TG). DBE workbook  |
| 1. **PRIOR KNOWLEDGE:**
 | In Grade 4 the learners learnt:* Multiples of 1-digit whole numbers to at least 100
 |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore, it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |
| 1. **MENTAL MATHEMATICS** (5 minutes)

Learners should answer the following questions as fast and accurate as they can.Questions on multiples of 6 and 4. |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| **In this lesson we are going to learn about factors.**Revise with the learners that factors are numbers you can multiply to get another number.*Factor: a number that divides evenly into another number or a whole number that divides equally into another number.*Example 1: 2 and 3 are factors of 6 because 2 x 3 = 6. A number can have more than two factorsExample 2: What are the factors of 15? 3 x 5 = 15, therefore 3 and 5 are factors of 15. **Activity** Find the factors of10.1 x 10 = 10; 2 x 5 = 10Therefore, factors of 10 are 1; 2; 5; 10Ask the learners if they can think of any other examples. | Answer verbally.Work together with the educator. |
| 1. **CLASSWORK** (Suggested time: 20 minutes)
 |
| Learners should complete the following activity using the method they were taught in class.DBE Workbook 1: Worksheet 44a question 1 (pages 128– 129)Learners should individually find the factors of:

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| a. 15 b. 24c. 90 |  |  |  |  |  |

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| **Homework**The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore, Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high- quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels. **Recommended Homework**:

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| DBE Workbook | DBE Textbook |
| DBE Workbook 1: Worksheet 46 (page 134-135) Question 1a-c 2 c-d | DBE Text book LB page 162 question 4  |

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**MATHEMATICS LESSON PLAN**

**GRADE 5**

**TERM 2: April – May**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour
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| 1. **TOPIC: WHOLE NUMBERS** Multiplication **(Lesson 6)**
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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson, learners should know and be able to do the following:** * solve problems involving whole numbers, including

- financial contexts- measurement contexts  |

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| 1. **RESOURCES:**
 | DBE textbook (LB and TG) ; DBE workbook |
| 1. **PRIOR KNOWLEDGE:**
 | In term 1 lesson learners learnt:measurement of distance |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)

Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. |
| 1. **MENTAL MATHEMATICS** (10 minutes)

Learners should answer the following questions as fast and accurate as they can.Questions involving multiplication and division. |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes)
 |
| **Teaching activities** | **Learning activities** (Learners are expected to: |
| In this lesson learners are going to learn about addition and subtraction being inverse operations.Revise with the learners the process of dealing with problem solving. Remember to encourage them to first understand the question. Learners should highlight key words and make sure they understand what the question is asking of them.Go through the first sum as an example with the learners, and show them how to set out their work and what needs to be included. Remind them to estimate the answer and use different methods if they are able to. The more they practise these different methods, the better they will understand them.Example : Noluthando pays R1 245 per month for 36 months for aComputer. How much does Noluthando pay for the computer?1 245 x 36 = ⎕1 000 x 36 = 36 000200 x 36 = 7 20040 x 36 = 1 4405 x 36 = 18036 000 + 7 200 + 1 440 + 180 = 44 820She will pay R44 820 for the computer. | Answer verbally.Work together with the educator  |

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| 1. **CLASSWORK** (Suggested time: 15 minutes)
 |
| Write a number sentence and then calculate the answer.a. Mpho pays R1 500 per month for 36 months for a computer. How much does Mpho pay for the computer?b. Thabo buys 40kg corn at the supermarket. Sizwe buys 29 times more than Thabo. How much corn did Sizwe buy?c. Andre runs 12km. David runs 21 times further than Andre. How far does David run?d. Faith’s ruler is 19cm long. Faith’s friend Lindiwe has a ruler that is ten times longer than hers. How long is Lindiwe’s ruler?e. Mrs Mashile bought world cup tickets for 29 soccer matches for herself and her husband at R160 each. How much did the tickets cost? |

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)**
 |
| **Homework**The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the DBE textbook, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels. **Recommended Homework**:

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| DBE Workbook | DBE Textbook |
| DBE Workbook 1: Worksheet 33 page (102-103). | DBE Text book LB page 162 question 5  |

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