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**MATHEMATICS LESSON PLAN**

**GRADE 4**

**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 and 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 of whole numbers to at least 4 digits  use range of techniques to perform and check written and mental calculations of whole numbers including:   * estimation * building up and breaking down numbers * using addition and subtraction as inverse operations |

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| 1. **RESOURCES:** | DBE text books TG & LB), DBE workbook 1, any other textbooks, flash cards and abacus | |
| 1. **PRIOR KNOWLEDGE:** | * Addition of whole numbers up to 3 digits * Use strategies such as building up and breaking down, number lines, rounding off in tens and hundreds. | |
| 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. **INTRODUCTION** (Suggested time: 10 Minutes)   **Learners can work in pairs to save time.**  This activity assesses the inverse operation in (addition and subtraction)   1. Fill in the missing number:    1. 90 + …….. = 100    2. 85 + …….. = 100    3. 78 +……… = 100    4. 325 +…….. = 350    5. 312 + …….. = 400    6. 350 + ……… = 525    7. 238 +………. = 400    8. 564 + ……….. = 800 2. Ask learners to explain how they got their answers. | | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | |
| **Teaching activities** | | **Learning activities**  (Learners are expected to: | |
| **Activity 1**  Strengthen learners place value concepts use flash card, number builders and abacus  Introduce place value headings for any number  e.g.  **3 847** in a table with place value headings.   |  |  |  |  | | --- | --- | --- | --- | | **Thousands**  **TH** | **Hundreds**  **(H)** | **Tens**  **(T)** | **Units**  **(U)** | | 3 | 8 | 4 | 7 |  1. Ask learners to use the flash cards and abacus to show the breaking down of the number on the table 2. Put the flash cards in order of their place value.   **Possible responses:**  3 000; 800; 40; 7   1. Explain addition using expanded notation     : 3 000+ 800 + 40 + 7 = 3 847   1. Write each of the following as a single number: 2. 2 000 + 100 + 30 + 7 = 3. 7000 + .400 + 10 + 9 = | | Use flash cards, number builders and abacus to show place value parts.  Write answers | |
| **Activity 2**  **I**ntroduceestimation by rounding off the numbers to the nearest 1000 to get an approximate answer   1. Estimate the answer of the following numbers by rounding off to the nearest 1000 to add.   **Example1.**   1. 4 432 + 1 526   4 000 + 2 000 = 6 000   1. 5 684 +1 315 2. 6 651 + 2 431   **Use (a) as an example**  644 + 120  600 + 100 = 700   1. Give the approximate answers for questions in (1. b and c)   **Activity 2**  Introduce breaking down all numbers according to place value parts to add  Give learners steps to follow when adding:   * Add the two numbers together * Break down both numbers all parts separated by + signs   **e.g.** 4 000 + 400 + 30 +2 + 1000 + 500 + 20 + 6   * Group the thousands, hundreds, tens and units to add * Make transfer if it is necessary * Write the final answer   **Example 1.** 4 432+1 526  = 4 000 + 400 + 30 +2 + 1000 + 500 + 20 + 6  = (4000 + 1000) + (400 + 500) + (30 + 20) + (2 + 6)  = 5 000 + 900 + 50 + 8  = 5 958  **Example 2**  4 000 + 1 000 = 5 000  400 + 500 = 900  30 + 20 = 50  2 + 6 = 8  Therefore 4 432+1 526 ­= 5 000 + 900 + 50 + 8 = 5 958   1. Use the above methods and calculate no **(b)** to get an accurate answer 2. use the inverse of addition to check if the solutions are correct:   **Example** 5 958– 1 526 = 4 432 or 5 958 – 4 432 = 1 526 | | Estimate their answers.  .  Follow the calculation steps  Workout the answer on the board  Confirm the answer using subtraction as inverse operation | |
| 1. **CLASSWORK** (Suggested time: 15 minutes | | |
| 1. Give the approximate answers for the numbers below by rounding off the nearest 1 000 2. 6 503 + 2 741 3. 8 365 + 1 462 4. 4 532 + 3 407 5. 5 139 + 4 840 6. Calculate the accurate answers of the above questions by breaking down all numbers according to place value parts to add 7. Use the inverse of addition to check if the solutions are correct. | | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | | |
| 1. **Emphasise**  * that calculations can be performed using different methods. * that the meaning of mathematical terminology and operations appropriately used. * that the steps are mathematically correct * that inverse operations are used to check whether the solutions are correct  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 books (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 130 Act. 11 (a-h)  Page 133 Act.4 (a-b) | Page 86 worksheet 30a Act.2  Page 87 worksheet 30a Act. 3 (a-f) |  | | | |

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**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | * + 1. Hour |
| 1. **TOPIC: WHOLE NUMBERS: addition and subtraction. (Lesson 2)** | | | |
| 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 4- digit**.**  use range of techniques to perform and check written and mental calculations with whole numbers including:   * building up and breaking down numbers * addition and subtraction as inverse operations | | | | |

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| 1. **RESOURCES:** | DBE text book (TG& LB), DBE workbook 1, any other textbook. | |
| 1. **PRIOR KNOWLEDGE:** | * Addition of whole numbers up to 3 digits * Use strategies such as building up and breaking down, number lines, rounding off in tens and hundreds | |
| 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. **INTRODUCTION** (Suggested time: 10 Minutes)   **Learners may work in pairs to save time.**  1 000 can be formed by adding up three different multiples of 100.  **Example** 1 000 = 300 + 200 + 500 or 1 000 = 600 +100 + 300   1. Describe two other ways in which 1 000 can be formed by adding up different multiples of 100. 2. Describe two other ways in which 1 200 can be formed by adding up different multiples of 100. | | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | |
| **Teaching activities** | | **Learning activities**  (Learners are expected to: | |
| **Activity 1**  **Introduce: Adding on (by breaking down the second number according to place value parts to be added)**  Give learners the following steps to add:   * + - Add the two numbers     - Break down second number, add the parts separately     - Keep on adding     - Write the final answer  1. calculate: 2. 5 362 + 2 486 3. 4 912 + 1 371 4. 6 323 + 3 056   **Example use (a) to demonstrate on the board.**    5 362 + 2000 + 400 +80 + 6  = 5 362 + 2 000 7 362+ 400 7 762 + 80 7 842+6 = 7 848   1. Calculate (b & c) by breaking down the second number according to place value parts to add 2. use the inverse of addition to check if the solutions are correct   **Example** 7 848 ─ 5 362 = 2 486 or 7 848 ─ 2 486 = 5 362  **Activity 2**   1. Find the missing number. You can do it in steps, and use arrows to show your thinking**.** 2. 4 287 + …….. = 4 300 3. 5 624 + ……… = 6 000 | | follow the calculation steps  work out the answer on the board  confirm the answer using subtraction as inverse operation.  Workout the answer on the board | |
| 1. **CLASSWORK** (Suggested time: 15 minutes | | |
| 1. Solve the problem below:   **The school fee at a certain school is R1 460. Manare’s mother pays with four R200 notes,**  **six R100 notes and three R20 notes. Elizabeth’s father pays with five R200 notes,**  **four R100 notes, one R50 note and one R10 note.**   1. Use number sentence to show the ways of paying the school fees above. 2. Use arrows to show how Elizabeth’s father paid her school fee. 3. Describe by using a number sentence to show three other ways in which R1 460 can be made up from different banknotes. 4. Calculate by breaking down the second number into place value parts to add 5. 4 628 + 2 775 6. 4 775 + 2 628 7. Use the inverse of addition to check if the solutions are correct. | | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | | |
| 1. **Emphasise**  * that calculations can be performed using different methods. * the meaning of mathematical terminology and operations are appropriately used. * that the steps are mathematically correct * that the inverse operations are used to check whether the 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), workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Recommended Homework**:   |  |  |  | | --- | --- | --- | | DBE textbooks (LB) | DBE workbook 1 | Any other textbook | | Page 130 Act. 11 (e-h)  Page 131 Act. 2 (a-d)  Page 133 Act.8 (a & b) | Page 86. Act .2  Page 87. Act. 3 (a-f) |  | | | |

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**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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| **PROVINCE:** |  | | |
| **DISTRICT:** |  | | |
| **SCHOOL:** |  | | |
| **TEACHER’S NAME:** |  | | |
| **DATE:** |  | | |
| **DURATION**: | 1. Hour | | |
| 1. **TOPIC: WHOLE NUMBERS: addition and subtraction. (Lesson 3)** | | | | | |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should be able to:**  add whole numbers to at least 4 digits**.**  use range of techniques to perform and check addition of whole numbers to at least 4 digits including:   * rounding off and compensating * addition and subtraction as inverse operations | | | | | | |
| 1. **RESOURCES:** | | | | DBE Text book (TG&LB), DBE workbook 1, any other textbook | | | | |
| 1. **PRIOR KNOWLEDGE:** | | | | * Addition of whole numbers up to 3 digits * Rounding off to 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. | | | | | | | | |
| 1. **INTRODUCTION** (Suggested time: 10 Minutes)  * Numbers can be rounded off to make estimates of the answers for calculations before you do the calculations accurately.   **Example**  3 56**7** rounded off to nearest 10 is 3 570  3 5**6**7 rounded off to nearest 100 is 3 600  3 **5**67 rounded off to nearest 1000 is 4 000  Complete the table below:     |  |  |  |  | | --- | --- | --- | --- | | **Number** | **Nearest 10** | **Nearest 100** | **Nearest 1 000** | | 6 499 |  |  |  | | 7 500 |  |  |  | | | | | | | | | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | | | | | | |
| **Teaching activities** | | | | | **Learning activities**  (Learners are expected to: | | | |
| **Activity 1**  **Introduce rounding off to add by explaining the following**:   * Four digits can be calculated by rounding off to the next multiple of ten, hundred and thousand   Calculate   1. Round off to the nearest 1000 and calculate the sum of the rounded number   **Example**  5 567 + 2 359  6 000 + 2 000 = 8 000   1. Calculate by rounding off the following numbers by the next multiple of **1000.** 2. 4 473 + 3 052 3. 2 564 + 1 247 4. 5 516 + 1 682 5. 7 625 + 2 145   **Activity 2**  Use Activity 1 no.2 **(a)** to demonstrate rounding off and compensating on the board   * Rounding off both numbers to the next multiple of thousand. * Rounding off the first number up and the second number down to the next multiple of thousand  1. Calculate by rounding off to the nearest 1000.   **Example**  4 473 + 3 052  4 000 + 3 000 = 7000   1. Calculate by compensating to get an accurate answer.   7 000 + 473 + 52 = 7 525   1. Calculate by compensating your answers in activity 1 no.3 (c) to get the accurate answers. 2. Use the inverse of addition to check if your solutions are correct   **Activity 3**  Give learners steps to follow when adding by rounding off to nearest 100 and compensating:   * Round the first number up to the next multiple of thousand. * Round the second number down to the next multiple of thousand.  1. Calculate by rounding off to the nearest 100.   **Example** 2 564 + 1 247  3 000 + 1 000 = 4 000   1. Calculate by compensating to get an accurate answer.   3 000 + 1 000 = 4 000 – 436 + 247= 3 811   1. Calculate by compensating your answers in activity 1 no.3 (d) to get accurate answers. 2. use the inverse of addition to check if your solutions are correct, | | | | | Follow the steps.  Workout their answers  Follow the calculation steps.  work out the answer on the board  Follow the calculation steps.  work out the answer on the board  Confirm the answer using subtraction as inverse operation. | | | |
| 1. **CLASSWORK** (Suggested time: 15 minutes | | | | | | | | |
| * Divide learners into manageable groups * Allocate different numbers in each group. * Each group must show their calculations on the board.  1. Give approximate answers for the questions by rounding off to the nearest 1 000. 2. 4 513 + 3 221 3. 5 632 + 2 141 4. 3 605 + 3 154 5. 6 613 + 5 332 6. 2 376 + 1 442 7. Calculate the above numbers by compensating to get the accurate answers 8. Use the inverse of addition to check if the solutions are correct. | | | | | | | | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | | | | | | | | |
| 1. **Emphasise**  * that calculations can be performed using different methods. * that the meaning of mathematical terminology and operations are appropriately used. * that the steps are mathematically correct * that inverse operations are used to check whether the 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), workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Recommended Homework**:   |  |  |  | | --- | --- | --- | | DBE Textbooks LB) | DBE workbook 1 | Any other textbook | | * Page 134 No 1-4 | * Page 91 Act.4 (a-i) |  | | | | | | | | | |

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**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour |
| 1. **TOPIC: WHOLE NUMBERS: addition and subtraction. (Lesson 4)** | | | |

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| 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 4 digits.  use range of techniques to perform and check written and mental calculations with whole numbers including:   * estimation * using a number line * building up and breaking down numbers * addition and subtraction as inverse operations |

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| 1. **RESOURCES:** | | DBE textbook (TG & LB), DBE workbook 1, any other textbook. | |
| 1. **PRIOR KNOWLEDGE:** | | * Subtraction of whole numbers up to 3 digits * Use strategies such as building up and breaking down, number lines, rounding off in tens | |
| 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. **INTRODUCTION** (Suggested time: 10 Minutes) | | | |
| Numbers can be rounded off to make estimates of the answers for calculations before the calculations accurately done.   1. Complete the statements below:   8 457 is closer to ………. than ………so 8 457 rounded off the nearest thousand is ……….     1. Use the number line below and to complete the statement.   2 1999 is closer to ………… than ……………. So, 2 199 rounded off to the nearest thousand is. ……………     1. Indicate the answers on the number line above. | | | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | |
| **Teaching activities** | | **Learning activities**  (Learners are expected to: |
| Activity 1  **I**ntroduceestimation by rounding off the numbers to the nearest 1 000 to get an approximate answer   1. Estimate the answer of the following numbers by rounding off to the nearest 1000 to subtract. 2. 7 858 – 4 742 3. 3 857 – 2 162   **Example.**     1. 7 858 – 4 742   8 000 – 5 000 = 3 000   1. 3 857 – 2 162   4 000 – 2 000 = 2 000  **Activity 2**  Introduce breaking down all numbers according to place value parts to subtract  Give learners steps to follow when subtracting:   * Subtract the second number from the first number * Break down both numbers and separate the parts of the first number by **+** signs and all the parts of the second number which you are subtracting by a **–** sign   **e.g.** **7 858 – 4 742 =7 000 + 800 + 50 + 8 ­– 4 000 – 700 – 40 – 2**   * Group the thousands, hundreds, tens and units to subtract * Write the final answer  1. Calculate by breaking down all numbers according to place value parts to subtract   **Example 1. Use no.(b)**  3 857 – 2 162 = 3 000 + 800 + 50 + 7 – 2000 – 100 – 60 – 2  700 1  = (3 000 – 2 000) + ( 800 – 100)+ (50 – 60) + (7 – 2)  = 1 000 + 600 + (150 –60) + (7­– 2)  = 1 000 +  600 + 90 + 5  = 1 695  **Example 2.**  3 000 – 2 000 = 1 000  700 – 100 = 600  150 – 60 = 90  7 – 2 = 5  Therefore 3 857 – 2 162 = 1 000 + 600 + 90 + 2 = 1 695   1. Use the above methods and calculate no **(a)** to get an accurate answer. 2. use the inverse of subtraction to check if the solutions are correct:   **Example** 1 695 + 2 162 = 3 857 | | Estimate the answers.  Follow the calculation steps.  Workout the answer on the board  Confirm the answer using addition as inverse operation |
| 1. **CLASSWORK** (Suggested time: 15 minutes | | | |
| 1. Solve the problem below:   **Jana has already paid back R 2 386 of the R 4 437 she borrowed from Petra**   * 1. Round the numbers off to the nearest 1000 and make an estimate of how much Jana still has pay back.   2. Also make an estimate by rounding off to nearest 100   3. Calculate the accurate amount he has to pay.  1. Give the approximate answers for the numbers below by rounding off the nearest 1 000. 2. 3 542 ­– 1 331 3. 7 284 – 7 763 4. Calculate the accurate answers of the above questions by breaking down all numbers according to place value parts to subtract. 5. Use the inverse of subtraction to check if the solutions are correct. | | | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | | | |
| 1. **Emphasise**:  * that calculations can be performed using different methods * estimation * building up and breaking down * that the meaning of mathematical terminology and operations used. * that the steps are mathematically correct * that 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), workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Recommended Homework**:   |  |  |  | | --- | --- | --- | | DBE text book( LB) | DBE workbook 1 | Any other textbook | | Page 135 Act.5( b-d) and 6 - 9 | Page 93 Act. 2 and 3 (a-d) |  | | | | |

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**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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| --- | --- |
| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | * + 1. Hour |
| 1. **TOPIC: WHOLE NUMBERS:** addition and subtraction**. (Lesson 5)** | | | |
| 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 4 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. **RESOURCES:** | | DBE textbook (TG & LB), DBE workbook 1, any other textbook. | | | |
| 1. **PRIOR KNOWLEDGE:** | | * Subtraction of whole numbers up to 3 digits * Use strategies such as building up and breaking down, rounding off in tens and hundreds. | | | |
| 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. **INTRODUCTION** (Suggested time: 10 Minutes)   **Revise the inverse operation strategy. Learners may work in pairs to save time.**   1. Complete the following: 2. 1 000 = 500 + , 1 000 – 500 = . 3. 1 000 = 700 + , 1 000 – = 300 4. 1 000 = 400 + , , 1 000 – 400 = 5. 1 000 = 600 + , 1 000 – 400 = 6. 1 000 = 900 + , 1 000 – = 100 7. What do you notice about your answers above? | | | | | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | |
| **Teaching activities** | | **Learning activities**  (Learners are expected to: | |
| Activity 1  **Introduce subtracting by breaking down the number to be subtracted**  Give learners the following steps to subtract:   * Subtract the two numbers * Break down the second number, subtract the parts separately * Keep on subtracting. * Write the final answer  1. Calculate:    1. 5 132 – 2 021    2. 8 496 – 6 374    3. 6 564 – 6 152   **Example 1** calculate: 5 132 – 2 021  = 5 132 – 2 000 – 0 – 20 – 1  = 5 132 – 2000 3 132 – 20 3 112 – 1 3 111  **Example :2 based on the above numbers:**  5 132 – 2 020 – 1 = 3 111   1. Calculate (b & c) by breaking down the second number to subtract 2. use the inverse to check if the solutions are correct   **Activity 2**  **Introduce Subtraction by adding on**  Give learners the following steps to subtract   * Subtraction can also be done by filling up multiples of 10, 100 and 1 000. * Use (a) as an example   **1.**  Calculate:   1. 7 234 – 4 876 2. 8 187 – 5 592 3. 7 386 – 3 163  * Find out how much should be added to 4 876 to reach 7 234 * Add on in steps from 4 876 until you reach 7 234. * check how much you had to add on in total:   **Example**  4 876 + **24** → 4 900 + **100** → 5 000 + **2 234** = 7 234.  In total you added on 24 + 100 + 2 234 = 2 358.  Therefore, 4 876 + 2 358 = 7 234 and 7 234 − 4 876 = 2 358.   1. Calculate (b & c) by using add on method to subtract. 2. use the inverse of addition to check if the solutions are correct | | Follow the steps  Work out their answers  Confirm the answer by addition.  Follow the steps.  Work out the answers.  Work out their answers.  Confirm the answers by addition. | |
| **CLASSWORK** (Suggested time: 15 minutes | | | |
| 1. Calculate by breaking down the second number to be subtracted 2. 6 287 – 6 277      1. 5 932 – 4 821 2. 6 724 – 1 720 3. Calculate by using add-on method to subtract 4. 7 236 – 2 875 5. 6 721 – 4 503 6. 9 000 – 1 234 7. Use the inverse of subtraction to check if the solutions are correct. | | | |
| **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | | | |
| 1. **Emphasise**  * that calculations can be performed using different methods such as **add on method and breaking the second number to be subtracted.** * that the meaning of mathematical terminology and operations used. * that the steps are mathematically correct * that 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 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 130 Act.8( a & b), and 12 (a & b)  Page 132 Act. 3(a-f) |  |  | |  |  |  | | | | |

**MATHEMATICS LESSON PLAN**

**GRADE 4**

**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 6)** | | | | |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson learners should know and be able to:**   * recognise and use the commutative and associative properties of whole numbers. * add and subtract whole numbers to at least 4 digits | | | | | | |
| 1. **RESOURCES:** | | | | DBE textbook (TG& LB), DBE workbook 1, any other textbook | | |
| 1. **PRIOR KNOWLEDGE:** | | | | Number sentence | | |
| 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 |
| 1. Complete the table below:  |  |  | | --- | --- | | 1 600 – 400 – 100 = | 1 600 – 100 – 400 = | | (1 600 – 400) –100 = | 1 600 – (400 ­– 100) = |  1. What do you notice about your answers in each of the rows?   **Responses**   * The difference of the numbers in the first row is 1 100 * The answers of the numbers in second row are different * Subtraction is not commutative * When subtracting two numbers from a first number, the last two numbers cannot be grouped |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to: |
| **Activity 1**  Ask learners to work in pairs and solve the following:   1. Calculate the following numbers by subtracting the second number in parts. You can subtract the parts in any order you prefer: 2. 4 687 – 2 143 3. 7 958 – 7 644 4. 6 345 – 4 340 5. 3445 – 1 234   Give them a chance to work on the board | Work in pairs and respond to the questions.  Explain by calculating on the board. |
| **Activity 2**   1. Calculate the following: 2. (3 800 – 600) – 500 3. 3 800 – 600 ­– 700 4. 3 800 – (600 –500) 5. What do you notice about your answers in (a & b)? 6. Compare your answers in (a & c) what do you notice? 7. What is your conclusion about the answers above? | Work out the answers |
| 1. **CLASSWORK** (Suggested time: 15 minutes)   **Learners may work in pairs.**   1. Calculate in any way you prefer, but do calculations inside brackets before other calculations.      1. 6 433 − 3 233 − 1 200 2. 6 433 − (3 233 − 1 200) 3. 6 433 − (3 233 + 1 200) 4. 7 856 – 5 743 + 1 010 5. 7 856 − (5 743 + 1 010) 6. 7 856 − (5 743 − 1 010) 7. Compare your answers in (a & c); (d & f) what do you notice? | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | |
| 1. **Emphasise that:**  * **subtraction is not commutative** * the order of the second number when subtracting from the first number does not matter the answer will be the same. * when subtracting two numbers from a first number, the last two numbers cannot be grouped. * using brackets is helpful with grouping of numbers. It indicates which operations have to be done first.  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), workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Recommended Homework**:   |  |  |  | | --- | --- | --- | | DBE textbook (LB) | DBE workbook1 | Any other textbook | | Page 133 Act. 8 (c-d) |  |  | | |

**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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| **PROVINCE:** |  | | |
| **DISTRICT:** |  | | |
| **SCHOOL:** |  | | |
| **TEACHER’S NAME:** |  | | |
| **DATE:** |  | | |
| **DURATION**: | 1. Hours | | |
| 1. **TOPIC: WHOLE NUMBERS:** addition & subtraction **(Lesson 7)** | | | | | |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson learners should and be able to** solve problems in contexts involving whole numbers including financial contexts. | | | | | | |
| 1. **RESOURCES:** | | | | DBE text book (TG & LB), DBE workbook 1, any other textbook | | | | |
| 1. **PRIOR KNOWLEDGE:** | | | | * Word problems on addition and subtraction to at least 3- digit whole numbers * Use strategies such as building up and breaking down, rounding off in tens, hundreds and thousands | | | | |
| 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. **INTRODUCTION** (Suggested time: 10 Minutes) 2. Ask learners to change the words to write number sentences for the following problems: 3. **Add** 5 000 **and** 900. 4. **Take** 500 **from** 8 000 5. **Increase** 360 by 2 100 6. **Decrease** 2 700 by 700. 7. Calculate the solutions of the problems above. | | | | | | | | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | | | | | | |
| **Teaching activities** | | | | | **Learning activities**  (Learners are expected to: | | | |
| **Activity 1**   1. A salesman earned **R4 328** during November. During December, the amount earned **increased** to **R7 435**. How much **more** money did he earn during December **than** in November?   Use **(a)** to unpack the steps below together with learners.  Ask learners which steps they need to follow to 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 **R7 435** **─ R4 328 =** * Solve the problem   7 435 **─4 000 3 435 ─300 3 135 ─20 3 15 ─ 8 =3 107**    The salesman earned **R3 107** more in December than in November.  Give learners an opportunity in their groups to read the problem below **(b**) and follow the steps to calculate the solutions.   1. Thabo had 2000 litres of milk. He sold 256 litres of milk in the first week and 193 litres in the second week. How many litres did he sell altogether?   Allow them to use any method to solve the problems as prescribed by the policy document. | | | | | Follow the steps to solve word problems in their groups.  Choose any method and calculate the solution. | | | |
| **8.CLASSWORK** (Suggested time: 15 minutes) | | | | | | | | |
| Solve the following problems**:**   1. Lerato walked 5 683m. In the same period of time; Sipho walked 7 349m. How many further than Lerato did Sipho walked? 2. Jongi struggled to sell his bicycle. He decreased the original price of his bicycle by R4 456. He sold the bicycle for R1 500. What was the original price of his bicycle? | | | | | | | | |
| **9.CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | | | | | | | | |
| 1. **Emphasise that**:  * learners must read the problem with understanding by underlining the key words. * they must derive the plan by writing the accurate number sentence. * they must carry out the plan and use any method to solve the problem. * they must reflect by checking whether their solutions were correct or not (inverse operations can be used)  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), 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 | | Page135 no. 5 (a-c) and no.8 | Page 88 Act.4 (a-b) and 5.  Page 94 Act. 4 (a-b), 32-33 Act. 2-3 |  | | | | | | | | | |

**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour |
| 1. **TOPIC: WHOLE NUMBERS:** Multiplication **(Lesson 1)** | | | |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should know and be able to:**   * use a range of techniques to perform and check written and mental calculations with whole numbers including * building up and breaking down numbers * estimation * recognize and use distributive property | | | | |
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| 1. **RESOURCES:** | DBE Textbook, National workbook 1, Textbooks |
| 1. **PRIOR KNOWLEDGE:** | * Rounding off to the nearest 10, 100 and 1 000 * Multiplication of 1-digit numbers by numbers up to 10 * Basic multiplication facts |
| 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)   **Mental Maths**   1. Complete the following table:  |  |  |  |  | | --- | --- | --- | --- | | Diagram | Addition Sum | Words | Multiplication Sum | |  |  |  |  | |  |  | Four groups of |  | |  |  |  |  | |  |  |  |  | |  |  |  |  |  1. **Round the following numbers to the nearest number indicated in the column:**  |  |  |  |  | | --- | --- | --- | --- | | Number | Nearest | Nearest | Nearest | |  |  |  |  | |  |  |  |  | |  |  |  |  | |
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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to: |
| Activity 1  Learners are given two grid papers on which they do the following activities:   1. Mark with crosses on the grids.     This is not easy to multiply mentally   1. Cut the second grid to form two grids, one with and the other with     The second grid is easier to multiply and learners should be able to see that this gives them , which is equal to 119 in total  Therefore:, since after cutting the paper we have groups of together with .  Activity 2  **Example 1**: **Multiplication by multiples of**   1. If and ,   How much is , and how much is ?   1. If ,   How much is ?    **Example 2**: Distributive property (Distribute one of the numbers)  Multiplication of 2-digit by 2-digit numbers, of which one of the numbers is a multiple of 10:          **Or**  +   |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |  |  |  |  | |  |  |  |  |     **Example 3**: Distributive property (Distribute both numbers)  Multiplication of 2-digit by 2-digit numbers, by distributing both numbers. Calculate:   1. can be calculated as follows:   hence      **Or**  +   |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |  |  |  |  | |  |  |  |  |   **Or**  ) | -be actively involved in the activities, so as to understand the property that is demonstrated. Where clarity is needed, they should ask clarity-seeking questions.  -work as a team to assist one another in doing activities , especially where they need to be involved in doing practical work. |
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| 1. **CLASSWORK** (Suggested time: 15 minutes |
| 1. Calculate each of the following (by distributing the one which is not a multiple of ): 2. Calculate each of the following (by distributing both numbers): |
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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** 2. **Emphasise that**: 3. the objective of building up and breaking down numbers is to ensure that bigger numbers can be solved by using basic multiplication facts from multiplication tables. 4. though the answer for 3 x 4 is equal to the answer for 4 x 3, the two are not the same. 5. bonds of 10 and multiplication by 10 and its multiples are important skills 6. 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 textbook4 for learners’ homework. The selected activities should address different cognitive levels.   |  |  |  | | --- | --- | --- | | DBE Textbook | National workbook | Textbook | |  | Page 124 Number 3 |  | |

**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1. Hour |
| 1. **TOPIC: WHOLE NUMBERS:** Multiplication **(Lesson 2)** | | | |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson learners should know and be able to** use a range of techniquesperformand check written and mental calculations with whole numbers including rounding off and compensating | | | | |
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| 1. **RESOURCES:** | DBE Textbook, National workbook 1, Textbooks |
| 1. **PRIOR KNOWLEDGE:** | * Rounding off to the nearest 10, 100 and 1 000 * Multiplication of 1-digit numbers by multiples of 10 * Bonds of 10 |
| 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) :   **Mental Maths Activities**   1. Rounding off to the nearest .Look at the number lines given and describe them (DBE workbook 1 Page 126):    1. Round off to the nearest .     1.2. What will be when we round it off to the nearest    It will be zero. (Learners to discuss in their groups why it is zero, so as to help one another in understanding the concept)  1.3. What will be when we round it off to the nearest ?    It will be , and this must also be discussed why it is , since it also helps in concept development.   1. Round the following off to the nearest 10:   2.1. 2.2. 2.3.  2.4. 2.3. 2.6.  2.7. 2.8. 2.9. |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | |
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| Activity 1  Calculate the following multiplication exercises by approximating one or both numbers, then multiply without approximation and compare the answers:  **Example 1**:  Multiplication of 2-digit by 2-digit numbers by approximating both numbers.  (by approximating the multiplier and the multiplicand)                **Example 2**  Multiplication of 2-digit by 2-digit numbers by approximating one of the numbers.  by approximating the multiplier)  3 250  (by approximating the multiplicand)      )          **Example 3**  (Rounding up and compensating)  (Using the distributive property)      Check reasonableness of the answer by means of estimation. | * discuss in pairs and give their examples where necessary.   Work, work in pairs and discuss the answers. | | |
| 1. **CLASSWORK** (Suggested time: 15 minutes) | | |
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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | |
| 1. **Emphasise that:**  * knowledge of bonds of 10 is necessary to be able to use rounding off and compensating, * multiplication by 10 and its multiples is also necessary.  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 textbook, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels.   **Recommended Homework**:   |  |  |  | | --- | --- | --- | | DBE Textbook | National workbook | Textbook | | Page 167 No 6 | Page 127 Number 3 |  | | |

**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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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** use a range of techniques to perform and check written and mental calculations with whole numbers including doubling and halving. | | | | | |
| 1. **RESOURCES:** | | | | DBE textbook, DBEl workbook 1(TG and LB), any other textbook | | | |
| 1. **PRIOR KNOWLEDGE:** | | | | * Even and odd numbers * Multiplication and Division as inverses of each other * Doubling and halving as opposites | | | |
| 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. **INTRODUCTION** (Suggested time: 10 Minutes)   Revise the concepts using Mental maths type questions to include the following:  **Mental Maths**  **Examples:**  a. ‘Mary has in her purse, but Matome has double/twice/two times that amount. How much money does Matome have?  b. Auntie brought tinkies from the shop and she divides it in half between her son and me. How many tinkies will each of us have?  c. True/ False: 1. Halve of any even number is also even.  2. Double any even number will be even.  3. Double any odd number will be odd.  4. Double any odd number is even.  5. Double any even number is odd.  6. Half of any odd number is also odd.  7. Half of any even number is odd.  8. Half of any odd number is even. | | | | | | | |
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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | |
| **Teaching activities** | **Learning activities**  (Learners are expected to: | | |
| Activity 1  Multiply the following by doubling and halving:  **Example 1**:  Before starting with the process, we must ensure that at least one of the numbers is even. is an even number and hence we can apply our method   |  |  | | --- | --- | | Halving | Doubling | |  |  | |  |  | |  |  | |  | |   Every time when doubling one number, we must halve the corresponding number.  **Example 2:**  34 and 60 are both even numbers, which makes it easy to use the method, and we can actually decide to double/halve any of the two numbers   |  |  | | --- | --- | | Halving | Doubling | |  |  | |  |  | |  |  | |  |  | |  |  | |  | |   **Example 3:**  In this example we cannot use doubling and halving since both numbers are even, and we cannot find a whole number when halving any of them, but since our focus is on getting whole numbers as solution, we can only use other multiplication methods.  **Example 4:**  In this example we have an even number and an odd number, but cannot use the method since it gets complicated to the point that we will still struggle to get the answer, since it cannot break into a 1-digit number or a multiple of 10.   |  |  | | --- | --- | | Halving | Doubling | |  |  | |  |  | |  |  |   So, we now find , where none of them has been simplified.  **Teaching tip**:  Teachers need to select examples carefully for the method to work | -be actively involved by answering questions when the teacher is presenting the lesson, as they are the ones who must answer questions related to halving and doubling the numbers.  -must da activities as posed by the teacher. | | |
| 1. **CLASSWORK** (Suggested time: 15 minutes | | |
| Calculate the following (by doubling and halving): | | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | |
| 1. **Emphasise that:**  * the method works if one of the numbers is even, since we will have a problem of finding half of two odd numbers, since we are only working with whole numbers. * while halving one side, we double the number in the other column. * clarity concerning words such as halving and doubling is necessary.  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, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels.   **Recommended Homework**:  Calculate the following by doubling and halving: | |

**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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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** use a range of techniques to perform and check written and mental calculations with whole number including building up and breaking down numbers(factors) | | | | | | | |
|  | | | | | | | |
| 1. **RESOURCES:** | | | | DBE Textbook, DBE workbook 1, any other textbook | | | | | |
| 1. **PRIOR KNOWLEDGE:** | | | | * Basic multiplication facts * Associative property * Multiplication of 1-digit by up to 3-digits * Multiples of | | | | | |
| 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. **INTRODUCTION** (Suggested time: 10 Minutes)   **Mental Maths**  Break down the number by multiplying or a combination.  Example | | | | | | | | | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | | | | | | |
| **Teaching activities** | | | | | **Learning activities**  (Learners are expected to: | | | |
| Calculate  **Example 1**: **Example 2:** | | | | | -work in pairs to find two numbers which when multiplied together gives specific product, so that they can use basic multiplication facts to multiply the 2-digit numbers | | | |
| 1. **CLASSWORK** (Suggested time: 15 minutes) | | | | | | | | |
| Calculate the following (by breaking down numbers into factors): | | | | | | | | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | | | | | | | |
| 1. **Emphasis that:**  * a number that is broken down into factors should be that which will enable making use of basic multiplication principles easier to use. The target number should be the one which can decompose into 1-digit factors.  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 textbook, DBE workbook and/or any other textbook for learners’ homework. The selected activities should address different cognitive levels.   **Recommended Homework**:  Calculate each of the following.  (a)  (b)  (c) | | | | | | | |

**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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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** solve problems in contexts involving whole numbers, including financial contexts | | | | | |
| 1. **RESOURCES:** | | | | DBE Textbook, DBE workbook 1, Textbooks | | | |
| 1. **PRIOR KNOWLEDGE:** | | | | * Multiplication of 2-digit by 2-digit numbers. * Basic multiplication skills | | | |
| 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)   **Mental Maths**  Revise the concepts using Mental maths type questions to include the following:  (Learners can talk about the problems in their respective groups and come up with answers, where the focus will be on how they came up with different answers.)   1. A group of children have been given sweets each. How many sweets altogether? 2. Three friends are having a party, and each of them contributes to buy food. How much is their total contribution? 3. A rich company donates bags of toys to your school. If there are toys in each bag, what is the total number of toys that are donated to the school by the company? |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | |
| Teaching **activities** | **Learning activities**  (Learners are expected to: | | |
| **Example 1**:  In a certain class there are learners. If each learner has fingers, how many fingers are there altogether?  Solution:  The activity needs to be written in mathematical language, i.e.    Here it is important for the teacher to ensure that learners understand the difference between and 4, even though they have the same answer.  (In the activity we are talking about 34 groups of 10, which is different from )  e.g. - if the doctor prescribes tablets three times a day, you end up drinking tablet in one day.  - This is different from taking tablets two times a day, as you shall have taken an overdose, which will create problems for you.  **Example 2**:  Learners sell sweets during market day. They put sweets in a packet. How many sweets will they need to fill packets?    Solution  Since there are sweets in each packet, and there are packets, it implies that there groups of  Method: (Learners from this stage can use any method that will help them in finding the answer)  The first point would be to interpret the word problem into mathematics, so learners can solve the problem in different ways, including repeated addition or inspection.              They will need sweets  **Or**  Any other method learned in previous lessons  **Example 3**:  (Counters will be used to model the solution before using any calculation techniques, so as to check learners’ understanding of context.)  A rich company gives boxes of toys to a school. Each box contains toys. How many boxes are needed to pack toys?  Here the learners need to be highlighted to the fact that we need a number which when multiplied by . | -work in groups to engage in the solution of different activities | | |
| 1. **CLASSWORK** (Suggested time: 15 minutes) | |
| DBE Textbook Page 168  Unit 5.4 (Number 1 to 4) | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | | |
| 1. **Emphasise that:**  * Understanding of the context is very important since learners need to convert the situation to mathematical language. Situation need to be analysed in order to establish the correct mathematical operation to apply in each situation.  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 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 1 | Any other textbook | | Page 168 Unit 5.4 (Number 9(a) and 9(b)) | Page 121 worksheet 44b  (Number 4) |  | | | |

**MATHEMATICS LESSON PLAN**

**GRADE 4**

**TERM 2: April – June**

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| **PROVINCE:** |  | | | |
| **DISTRICT:** |  | | | |
| **SCHOOL:** |  | | | |
| **TEACHER’S NAME:** |  | | | |
| **DATE:** |  | | | |
| **DURATION**: | 1. Hour | | | |
| 1. **TOPIC: WHOLE NUMBERS:** Multiplication **(Lesson 6)** | | | | | | |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should know and be able to solve problems involving whole numbers, including:**   * **Comparing two or more quantities of the same kind (ratio)** * **Comparing two quantities of different kinds(rate)** | | | | | | | | |
| 1. **RESOURCES:** | | | | DBE Textbook, DBE workbook 1(TG and LB), any other textbook | | | | | | |
| 1. **PRIOR KNOWLEDGE:** | | | | * Basic multiplication facts * Multiplication of 2-digit by 2-digit numbers | | | | | | |
| 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. **INTRODUCTION** (Suggested time: 10 Minutes)   **Mental Maths**  **The activity is found in DBE Workbook Page 116**  What are the following numbers lines showing?  1.    2.    3. Show the multiples on the number line: | | | | | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | | | | | | |
| **Teaching activities** | | | | | **Learning activities**  (Learners are expected to: | | | |
| **Example 1**  Jane makes juice by mixing juice concentrate with water. For every cups of concentrate, she uses cups of water.  Copy and complete the following table, and then use it to answer the questions that follows:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Cups of concentrate |  |  |  |  |  | | Cups of water |  | \_\_\_ | \_\_\_ | \_\_\_ | \_\_\_ |  1. How many cups of water will she use with cups of concentrate? 2. How many cups of water will she use with cups of concentrate? 3. How many cups of water will she use with cups of concentrate? 4. How many cups of concentrate will she use with cups of water?   **Teaching Guidelines**:   * Count in to complete top row, and in to complete bottom row. * Another approach: for every cups of concentrate she uses cups of water, **sos**, and hence will go together with **r** etc. * We now say the **ratio** of concentrate to water is Ratio, just like difference, compares quantities which are the same.   **Example 2** :  Solve the following problem by showing it on the number line:    How much will of cheese cost?  Solution:    Number sentence :  grams of cheese will cost  The learners should be taught at this stage that, to answer the question they need to write a sentence which explains what they did, and not only the number line.  **Teaching Guidelines :**   * In the example above it is shown that for every of cheese, we pay * Like in the 1st example, we count in top row and in to complete bottom row. * Unlike in example1, here we are comparing different quantities (i.e. grams and amount) * We call this rate and express it as 1st quantity/2nd quantity, where in this case it is | | | | | -work in groups to complete the activities given by the teacher | | | |
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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| |  |  | | --- | --- | | DBE textbook | DBE workbook 1 | | Page 160 Unit 5.5 Number 6 - 8 | Page 117 worksheet 43 Number 2 (b) – 2(d) | |
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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** 2. **Emphasise that:** 3. Interpretation of ratio and rate are more important than memorising the steps   followed in solving the problems.   1. What the learners learn should relate to life situation, hence the context must be relevant to them. 2. examples should not only be limited to the ones done in class.   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, National workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.   |  |  |  | | --- | --- | --- | | DBE Textbook | National workbook | Textbook | | Page 169 Activity 5.5 (Number 1 and 2) |  |  | | |