**MATHEMATICS LESSON PLAN**

**GRADE 8**

**TERM 1: January – March**

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

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| 1. **TOPIC: WHOLE NUMBERS: Revision (Lesson 6)** |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **Learners should know and be able to:-**   * use a range of strategies to perform and check written and mental calculations with whole numbers including: * determine factors and multiples * determine Prime factors of numbers to at least 3-digit whole numbers. * determine the LCM and HCF of numbers to at least 3-digit whole numbers, by inspection or factorization. * solve problems involving whole numbers, including ratio, rate and speed, distance and time. * solve problems that involve whole numbers, percentages and decimal fractions in financial contexts |

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| 1. **RESOURCES:** | Textbooks, DBE Workbook, Sasol-Inzalo Book, Calculator | |
| 1. **PRIOR KNOWLEDGE:** | * Properties of numbers * Calculation strategies * Factors and multiples * Solving problems | |
| 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) | | |
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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | |
| **Teaching activities** | | **Learning activities**  **(Learners are expected to : )** |
| Design a worksheet that has carefully selected questions to address all the concepts in whole numbers like the one below. Let learners work on the worksheet on their own and guide them. Try to identify where errors are in their thinking and correct them. This calls for the teacher to engage in discussions with learners. Allow learners to communicate their thinking verbally. | |  |
| 1. Complete the following: 2. the factors of 28 are: …………………………………… 3. the prime factors of 28 are: ……………………………. (2) 4. the positive multiples of 7 that are less than 60 are ………. (2) 5. the multiplicative inverse of is (2) 6. the whole numbers between 1 and 30 whose square roots are rational numbers are……. (2) 7. Write the following numbers as products of their prime factors: 8. 84 9. 326     Now use these answers to find the following:   1. the HCF of 84 and 326 2. the LCM of 84 and 326 3. Choose the correct answer: The LCM of 9 and 6 is…   **A** 54 **B** 36 **C** 18 **D** 3   1. Mpho borrows R6 000 from a bank at 13% interest per year, for a period of 36 months. How much should he pay back at the end of the period? 2. Rashied borrows R6 000 from a bank at 14% interest per year, for a period of 104 weeks. How much should he pay back at the end of the period? | | Work on the worksheet individually. They support each other when there is a need. |
| 1. A shop owner gives 35% discount on CD’s. After discount you have to pay R 95.00. What is the price for a CD before the discount? 2. Eddie borrowed money for one year and has to pay 20% interest per year. At the end of the year he has to pay back R1 800 to clear his debt. How much did he borrow at the beginning of the year? 3. Sipho buys a fridge for R4 499 (cash price) on credit agreement. (hire purchase). He has to pay a deposit of R400. His monthly payment is R 273.00 for two years. If the monthly payments go into arrears, the fridge will be repossessed. 4. Calculate the total amount that Sipho will have paid for the fridge? 5. How much extra has Sipho paid for the fridge? 6. Give your answer as a percentage of the cash price. 7. Nathi, Paul and Tim worked in Mr Setati’s garden. Nathi worked for 5 hours, Paul for 4 hours and Tim for 3 hours. Mr Setati gave the boys R600 for their work. If they are paid the same amount per hour, how should they divide the R600 among the three of them?      1. The municipal head gardener wants to buy 324 trees to plant along the main street of the town. The trees cost R27 each, and an amount of R9 400 has been budgeted for the trees. Is the amount of R9 400 enough to purchase 324 trees? 2. Water from a tap flows at a rate of 12 litres per minute. How long will it take to fill one container with the capacity of 360 litres? 3. The latest range of Spiderman winter pyjamas will cost € 8.50 per item. If the Rand-Euro exchange rate is R 11.36 to € 1, how much will each set of pyjamas cost in Rands? | |  |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK** (Suggested time: 5 minutes) | | |
| 1. When dealing with word problems put an emphasis on:  * Reading the word problems * Summarizing or visualizing the problems and understand the questions * Finding out the adequate operations * Developing number sentences from the problems * Using the techniques * Writing the answers in a proper way  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 Sasol-Inzalo workbooks, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels. | | |