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| **DAILY LESSON PLAN**  **MATHEMATICS FORM 3** | | | | |
| **CLASS** |  | | **DAY** | Choose an item. |
| **WEEK** | Choose an item. | | **TIME** |  |
| **DATE** | Click or tap to enter a date. | | **DURATION (minutes)** |  |
| **LEARNING AREA** | Number and Operations | | | |
| **UNIT/TOPIC** | Indices | | | |
| **CONTENT**  **STANDARDS** | 1.1 Index Notation | **LEARNING STANDARDS** | | 1.1.1, 1.1.2 |
| **LEARNING OBJECTIVES** | **At the end of learning, students will be able to:**   * Represent repeated multiplication in index form and describe its meaning * Rewrite a number in index form and vice versa | | | |
| **ACTIVITY** | **Starter:**  Teacher explains the concept of index form and introduce the term “base” and “index”. Teacher asks the students to write repeated multiplication in the form *an*.  **Activity:**   1. Students in pairs and in turn need to change the repeated multiplication on the card to a number in index form and vice versa in a fixed time. 2. Each pair of students uses various methods to present the results in step 1.     Index card  **Closure:**  Teacher discusses all the answers. | | | |
| **REFLECTION** | Students were able to achieve the learning objectives successfully.  Students were able to achieve the learning objectives with guidance.  Students were not able to achieve the learning objectives. | | | |

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| **DAILY LESSON PLAN**  **MATHEMATICS FORM 3** | | | | |
| **CLASS** |  | | **DAY** | Choose an item. |
| **WEEK** | Choose an item. | | **TIME** |  |
| **DATE** | Click or tap to enter a date. | | **DURATION (minutes)** |  |
| **LEARNING AREA** | Number and Operations | | | |
| **UNIT/TOPIC** | Indices | | | |
| **CONTENT**  **STANDARDS** | 1.2 Law of Indices | **LEARNING STANDARDS** | | 1.2.1, 1.2.2, 1.2.3 |
| **LEARNING OBJECTIVES** | **At the end of learning, students will be able to:**   * Relate the multiplication of numbers in index form with the same base, to repeated multiplications, and hence make generalisation * Relate the division of numbers in index form with the same base, to repeated multiplications, and hence make generalisation * Relate the numbers in index form raised to a power, to repeated multiplication, and hence make generalisation | | | |
| **ACTIVITY** | **Starter:**  Teacher asks students to write the calculation in expanded form.  That is,  Then teacher asks students to see how many times the number 3 is multiplied by itself.  **Activity:**   1. Teacher provides guidance to the students on how to carry out the activity in textbook, pp. 6 & 7, and hence make generalisation . 2. Teacher provides guidance to the students on how to carry out the activity in textbook, pp. 8 & 9, and hence make generalisation. 3. Teacher provides guidance to the students on how to carry out the activity in textbook, pp. 10 & 11, and hence make generalisation. 4. Teacher asks students to do exercises in the workbook and textbook.   **Closure:**  Teacher discusses all the answers. | | | |
| **REFLECTION** | Students were able to achieve the learning objectives successfully.  Students were able to achieve the learning objectives with guidance.  Students were not able to achieve the learning objectives. | | | |

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| **DAILY LESSON PLAN**  **MATHEMATICS FORM 3** | | | | |
| **CLASS** |  | | **DAY** | Choose an item. |
| **WEEK** | Choose an item. | | **TIME** |  |
| **DATE** | Click or tap to enter a date. | | **DURATION (minutes)** |  |
| **LEARNING AREA** | Number and Operations | | | |
| **UNIT/TOPIC** | Indices | | | |
| **CONTENT**  **STANDARDS** | 1.2 Law of Indices | **LEARNING STANDARDS** | | 1.2.4 - 1.2.7 |
| **LEARNING OBJECTIVES** | **At the end of learning, students will be able to:**   * Verify that *a*0 = 1 and *a*–*n* = ; *a* ≠ 0 * Determine and state the relationship between fractional indices and roots and powers. * Perform operations involving laws of indices. * Solve problems involving laws of indices. | | | |
| **ACTIVITY** | **Starter:**  Teacher explains to the students that in addition to positive indices, *an*, that have already learned, *n* could be zero, negative and fraction.  **Activity:**   1. Teacher provides guidance to the students on how to carry out the activity in textbook, p.14, and hence make generalisation *a*0 = 1 2. Teacher provides guidance to the students on how to carry out the activity in textbook, pp.14 & 15, and hence make generalisation 3. Teacher uses the textbook to explain the relationship between and , and hence make generalisation 4. Teacher uses the textbook to explain the relationship between and and , and hence make generalisation:        1. Teachers explains the method for calculating values in the form of . 2. Teacher asks each student to write one example that meets the index law that has been learned on a piece of paper. 3. Teacher discusses examples in solving problems involving the laws of indices. 4. Teacher asks students to do exercises in the workbook and textbook.   **Closure:**  Teacher discusses all the answers. | | | |
| **REFLECTION** | Students were able to achieve the learning objectives successfully.  Students were able to achieve the learning objectives with guidance.  Students were not able to achieve the learning objectives. | | | |