SAMPLE LESSON: MATHEMATICS

Class: Form 2

Title of Module: Elementary Statistics and Probability   **Title of Chapter:** STATISTICS

Title of Lesson: Collection and representation of discrete data on a Frequency distribution table   **Duration of Lesson:**

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Class: Form 2D   **Sequence:** 4   **Duration:** 50 minutes   **Date:** 23rd of Feb. 2018

Class Enrolment: M=23, F=22, T=45

Module 8: Elementary Statistics and Probability

Topic: STATISTICS

Lesson: Collection and representation of discrete data on a Frequency distribution table

Objectives: At the end of this lesson the students should be able to:

- Collect raw data.
- Draw up a frequency distribution table using the raw data collected.
- Represent the information on the frequency distribution table.

Motivation: statisticians study how often a particular event or situation occurs. For example, they may want to find out how often a road accident is caused by a pedestrian, by a drunk driver, by a faulty vehicle and so on. To do this they study the frequency of the events.

Prerequisite: know methods of data collection studied in module 4.

REFERENCE: - August 2014 Mathematics teaching syllabus Form two. Ministry Of Secondary Education, Cameroon

- Andrew T. Tamabang (2007) form 2 Mastering Mathematics, (1st edition) Cambridge university press.

    -website: superteacher.com

Stages/Duration	Teaching / learning Activities	Teacher's Activities	Students' Activities	Learning Points
Introduction (5mins)	**Pre-requisite Knowledge** State some methods of data collection **Problem Situation** How many students had the following as their first marks in Mathematics: a)8 b)10 c)11 d)16?	Asks questions and take note of the responses to be verified later.	Respond to the questions asked orally.	
Lesson Development (20mins)	**Activity 1** 1)Collection of raw data. 2)Tally the recordings. Marks | Tally 3)From the distribution table, how many students had as marks:8,10,11 and 16? 4)Compare these results to the previous ones on problem situation and conclude. **Activity 11** <table><tr><td>Marks</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>No of Students</td><td></td><td></td><td></td><td></td><td></td></tr></table>	Provides pieces of papers to be distributed to each student. Asks each student to write his or her first term mark for Mathematics out of 20. Calls up two students to copy the data on the board. Teacher instructs students to copy the work on the board in their books. Teacher sends a student to work on the board.	Each student writes down his or her mark on the piece of paper and later reads it to be copied on the board by the two students assigned by the teacher. Another set of two students carry out the tally on the board while the rest of the students follow up very keenly and confirm or point out any corrections. Students work individually and compare their solutions. Then copy the corrected work in their books.	Raw data is data that has not been arranged. If the collection of data involve responses from people or by observation, it is a good idea to organise a table in which to record (or tally) the observations or responses. Tallies are best placed in groups of five that is four vertical strokes crossed by one diagonal stroke. This makes the count of the total very convenient. The name of the table is the frequency distribution table. The **frequency** of a particular data value is the number of times the data value occurs. A **frequency table** is constructed by arranging collected data values in

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	1)From the tally table, complete the above table. 2)What is the row with the number of students called? 3)What name is given to such a table?	Asks students to attempt the exercise individually. Moves round the class to check on students' work.		ascending order of magnitude with their corresponding frequencies.
Summary (3mins)	**Frequency** is how often something occurs. By counting frequencies we can make a **Frequency Distribution** table.	Teacher summarizes activity and answers learners' questions if any	copy	
Exercise of Application (12 mins)	The raw data on the the number of smart phones owned per family in a certain town in Cameroon were recorded as follows:1, 2, 1, 0, 3, 4, 0, 1, 1, 1, 2, 2, 3, 2, 3, 2, 1, 4, 0, 0, 3, 4, 3,2,3,0, 1, 2, 0,3. a)Draw a frequency distribution table to represent these data. b) from your table state how many families had exactly 3 smart phones.	writes the exercise on the chalkboard. Ask a student to read it aloud. Moves around to check students work. Then ask a student to go and solve on the chalk board.	Copy the exercise in their individual exercise books. Listen attentively to any instructions and attempt solving in their exercise books. And propose alternative solutions if any.	

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Conclusion (10 mins.	Homework 1)Mastering maths book1 page 263 activity 2 A frequency distribution table was used to draw the graph below . a) what is the name given to such a graph ? b) Using the graph copy and complete the frequency table below. 	Kind of fruit	Oranges	Apples	Bananas	Grapes	Pears
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N0 of students							Writes the references from textbook. Writes question 2 on the board.	copy	