DAILY LESSON PLAN

School	EUSEBIO HIGH SCHOOL	Grade Level	7
Teacher	Romel Junio	Learning Area	TLE 7
Date		Quarter	Second

I. OBJECTIVES	
1. Content Standards	Students will be able to demonstrate proficiency in the conversion and calculation of digital storage units including bit, byte, kilobyte, megabyte, gigabyte, and terabyte, using appropriate conversion factors and formulas. Students will also understand the practical applications of these concepts in computing and digital technology.
2. Performance Standards	Upon completion of this lesson, students will be able to accurately convert and calculate digital storage units (bit, byte, kilobyte, megabyte, gigabyte, and terabyte) using appropriate conversion factors and formulas
3. Learning Competencies	Code: TLE_CSS9-Q2-M9.pdf At the end of the lesson, the learners should be able to: 3.1 Demonstrate the ability to differentiate between bit, byte, kilobyte, megabyte, gigabyte, and terabyte by accurately defining their respective values and relationships in digital storage. 3.2 Develop an appreciation for the importance of selecting appropriate storage units for different digital tasks, fostering an understanding of efficiency in data management. 3.3 Apply their knowledge of digital storage units by converting between different units through practical exercises and successfully performing calculations to store, retrieve, and manage data effectively.
I. CONTENT	Conversion and Calculation of Bit, Byte, Kilobyte, Megabyte, Gigabyte and Terabyte
II. LEARNING RESOURCES	
A. References	
1. TG pages	
2. LM pages	SLM 9: Conversion and Calculation of Bit, Byte, Kilobyte, Megabyte, Gigabyte and Terabyte pp. 7- 10

3. Textbook pages		
4. Additional materials from Learning Resource (LR) portal		
B. Other Learning Resources	Digital Learning Resources: PowerPoint presentation, laptop, HDMI. Traditional Learnings Resources: pictures, chalk, and TV.	

III. PROCEDURES	
A. Reviewing previous lesson or presenting the new lesson	The teacher will ask the student to compute the volume of the following Cube Rectangular prism
1. Establishing a purpose for the lesson	the students must arrange the following data measurements from lowest to highest by writing a to f on the space provided ____1. MB ____2. Bit ____3. Byte ____4. GB ____5. KB ____6. TB
a. Presenting examples/ instances of the new lesson	The teacher will present an example A computer has 8 gigabytes (GB) of RAM, each containing 4 megabytes (MB) of cache memory. Calculate the total storage size in megabytes. Solution: 1 gigabyte = 1024 megabytes Total cache memory = 8 GB × 4 MB/GB = 32 megabytes Total storage size = 8 GB × 1024 + 32 megabytes = 8192 + 32 megabytes = 8224 megabytes
1. Discussing new concepts and practicing new skills #1	today we're diving into the fascinating world of digital storage units. We'll be discussing the conversion and calculation of Bit, Byte, Kilobyte, Megabyte, Gigabyte, and Terabyte. First, let's get our terminology straight: - A bit is the smallest unit of data, represented by either a 0 or 1. It's like the building block of digital information. - A byte consists of 8 bits. This is what your computer uses to represent a character, like a letter or a number.

- Moving up, a kilobyte (KB) is made up of 1024 bytes. It's commonly used to measure the size of small files.

- A megabyte (MB) is 1024 kilobytes. This unit is frequently used for larger files, like high-resolution images or songs.

- A gigabyte (GB) is 1024 megabytes. Think of it as a unit used to measure storage devices' capacity, like your hard drive.

- Finally, a terabyte (TB is 1024 gigabytes. This is often used for large-scale storage devices or servers.

Now, let's get into some quick and easy conversion methods:

1. Bits to Bytes (and vice versa):
   - 8 bits = 1 byte
   - Example: Convert 8000 bits to bytes - Answer: 1000 bytes

2. Bytes to Kilobytes (and vice versa):
   - 1024 bytes = 1 kilobyte
   - Example: Convert 3456 bytes to kilobytes - Answer: 3.38 kilobytes
3. Kilobytes to Megabytes (and vice versa):
   - 1024 kilobytes = 1 megabyte
   - Example: Convert 2048 kilobytes to megabytes - Answer: 2 megabytes

4. Megabytes to Gigabytes (and vice versa):
   - 1024 megabytes = 1 gigabyte
   - Example: Convert 4096 megabytes to gigabytes - Answer: 4 gigabytes

5. Gigabytes to Terabytes (and vice versa):
   - 1024 gigabytes = 1 terabyte
   - Example: Convert 8192 gigabytes to terabytes - Answer: 8 terabytes

Remember, these conversions follow the pattern of dividing by 1024 when going to a smaller unit, and multiplying by 1024 when going to a larger unit.

Now, let's tackle a couple of practice problems:

1. Convert 110,214,321,212 bytes to gigabytes.
   - Answer: 102.65 gigabytes

2. Convert 384 megabytes to bytes.
   - Answer: 402,653,184 bytes

3. Convert 2,345,789 kilobytes to terabytes.
   - Answer: 0.002 terabytes

4. Convert 120 gigabytes to kilobytes.

	- Answer: 125,829,120 kilobytes
1. Developing mastery (Leads to Formative Assessment 3)	Students must identify the acronyms of each storage Gb Tb Kb Mb B b
2. Developing Mastery	Students must solve each of the following problems using conversion and calculation 1. Convert 70,890,564,320 bytes to Gigabytes. 2. Convert 2 TB to KB. 3. Convert 240 bits to byte. 4. Convert 400 bytes to bits. 5. Convert 18,967,432 bytes to megabytes.
3. Finding practical applications of concepts and skills in daily living	Students must write what they learned about conversion and calculation of storage.
4. Making generalizations and abstractions about the lesson	In the world of digital information, we deal with various units of storage, ranging from the smallest unit, the bit, to the largest unit, the terabyte. Each unit is a multiple or fraction of the one before it, following a pattern of powers of 1024. Remember, when converting from a smaller unit to a larger one, we multiply by 1024, and when going from a larger unit to a smaller one, we divide by 1024. This process allows us to navigate seamlessly between bits, bytes, kilobytes, megabytes, gigabytes, and terabytes, making it essential for tasks like file storage, data transfer, and system memory management. By mastering these conversions, you'll be equipped to handle a wide range of digital storage scenarios, whether you're managing files on your computer or dealing with large-scale data storage in professional settings.
5. Evaluating Learning	Student must answer the question What is the importance of knowing the right procedure in conversion and calculation of bit, byte, KB, MB, GB, and TB?
6. Additional activities for	Assignment that must given for the student for the incoming lesson

application or remediation	What is technical drawing?

IV. REMARKS	

V. REFLECTION

A. No. of learners who earned 80% on the formative assessment	
B. No. of learners who require additional activities for remediation who scored below 80%	
C. Did the remedial lessons work? No. of learners who have caught up with the lesson	
D. No. of learners who continue to require remediation	
E. Which of my teaching strategies worked well? Why did this work?	
F. What difficulties did I encounter which my principal or superior can help me solve?	
G. What innovation or localized materials did I use/discover which I wish to share with other teachers?	

Prepared by:

FAMOUS C. BUHAYAN
Pre-Service Teacher

Checked by:

ROMEL D. JUNIO
Master Teacher III

Noted by:

EVELYN B. YARIN
Head Teacher VI, TLE Department