

TERM THREE

WEEKLY LESSON NOTES – B7

WEEK 5

Week Ending: 14 th OCT, 2022	DAY:	Subject: Computing				
Duration: 50mins		Strand: Communication Networks				
Class: B7	Class Size:	Sub Strand: Introduction to Programming				
Content Standard: B7.4.1.1.1 understanding of the concept of programming	Indicator: B7.4.1.1.3 Demonstrate the use of constants and variables used in programming	Lesson: 1 of 2				
Performance Indicator: Learners can demonstrate the use of constants and variables used in programming		Core Competencies: CI 6.3: DL5.1:				
Reference: Computing Curriculum P.g. 19						
Keywords: Algorithm, source code, compiler, data type, variable, constant, conditional, array, loop, function, class						
Activities For Learning & Assessment						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Resources</th> <th style="width: 40%;">Progression</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <p>Starter (5 mins)</p> <p>Ask learners questions to review what they already know about programming.</p> <ul style="list-style-type: none"> • What makes your computers and phone work? • Do you know how your favorite game was developed? <p>Share performance indicators and introduce the lesson.</p> <p>Main (35 mins)</p> <p>This activity should be done groups. Write down these questions each on a paper.</p> <ol style="list-style-type: none"> 1. What is computer programming? 2. State and explain any four terminologies used to describe programming concepts. 3. Identify and explain the various data types. <p>Give learners enough time to finish the task. Call group 1 to do a presentation to the whole class. Allow learners to ask questions for more clarification.</p> <p>Revise with learners on the meaning of programming. Programming is the process of creating a set of instructions that tell a computer how to perform a task.</p> <p>Remind learners that programming is done using a variety of computer programming languages, such as JavaScript, Python and C++.</p> <p>Have learners mention some computer application softwares they know. Example: Microsoft Office, Mavis Beacon, FIFA, etc.</p> <p>Learners describe and demonstrate how these softwares work.</p> </td> <td style="vertical-align: top;"> <p>Pictures and videos</p> <p>Demonstrate the use of constants and variables used in programming</p> </td> </tr> </tbody> </table>			Resources	Progression	<p>Starter (5 mins)</p> <p>Ask learners questions to review what they already know about programming.</p> <ul style="list-style-type: none"> • What makes your computers and phone work? • Do you know how your favorite game was developed? <p>Share performance indicators and introduce the lesson.</p> <p>Main (35 mins)</p> <p>This activity should be done groups. Write down these questions each on a paper.</p> <ol style="list-style-type: none"> 1. What is computer programming? 2. State and explain any four terminologies used to describe programming concepts. 3. Identify and explain the various data types. <p>Give learners enough time to finish the task. Call group 1 to do a presentation to the whole class. Allow learners to ask questions for more clarification.</p> <p>Revise with learners on the meaning of programming. Programming is the process of creating a set of instructions that tell a computer how to perform a task.</p> <p>Remind learners that programming is done using a variety of computer programming languages, such as JavaScript, Python and C++.</p> <p>Have learners mention some computer application softwares they know. Example: Microsoft Office, Mavis Beacon, FIFA, etc.</p> <p>Learners describe and demonstrate how these softwares work.</p>	<p>Pictures and videos</p> <p>Demonstrate the use of constants and variables used in programming</p>
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Guide learners to discuss the use of variables and constants as useful ingredients for defining values that are used within a function or program.

- Learners to understand that in programming, constants are used to store information that is never going to change.
- Learners to understand variables in programming as any characteristics, number, or quantity that can be measured or counted.

E.g. age, sex, country of birth, class grades, eye color, etc.

Have learners use the internet to search for more practical example of variables and constants in programming.

Example:

During the running of a program, there will be times when the program needs to remember/ sort a value so it can be read and used later on.

Variable name	Value	Constant Name	value
Level	4	VAT	20
High score	1202	Days	365
Surname	Smith	Bonus	100

In groups, learners discuss the benefits of using variables instead of constants in a program.

Reflection (10 mins)

Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.

Take feedback from learners and summarize the lesson.

Homework/Project Work/Community Engagement Suggestions

- State three benefits of using variables and constants in a program.

Cross-Curriculum Links/Cross-Cutting Issues

None

Potential Misconceptions/Student Learning Difficulties

Learners may not easily understand the concepts and terminologies under programming

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