

## LESSON PLAN

**TEACHER NAME:** *Mwalimu Teacher*

**SCHOOL:** *XYZ High school*

**FORM/CLASS:** 3A

**NO. OF STUDENTS:** 35

**DATE:** *Wednesday 15<sup>th</sup> May 2016*

**TIME:** *10:00 – 10:40 a.m.*

**SUBJECT:** *Computer Studies*

**TOPIC:** *Elementary Programming*

**SUB-TOPIC:** *Algorithm Design Using*

*Flow Charts*

**SCHEMES OF WORK REFERENCE:** *Week 2 Lesson 1*

### OBJECTIVES

At the end of the lesson the learner should be able to:

- i) Define a flow chart
- ii) Describe the flow chart design standard symbols
- iii) Design a program algorithm using a flow chart

TIME	CONTENT	LEARNING ACTIVITIES	LEARNING RESOURCES/REFERENCES
5 Mins	<p><b><u>Introduction</u></b></p> <ul style="list-style-type: none"> <li>– Review of the previous lesson by asking the following questions:                             <ol style="list-style-type: none"> <li>i) Define the terms: Algorithm</li> <li>ii) State two examples of algorithm design tools</li> </ol> </li> <li>– Introduce the new lesson on algorithm design using flow charts</li> </ul>	<p>Question and answers Class discussion Note taking</p>	<p>Realia: A recipe for making tea Longhorn Secondary Computer Studies, Book 3, Pages 80-86</p>
8 Mins	<p style="text-align: center;"><b><u>Lesson Development</u></b></p> <p><b>Step I: Flow Chart</b></p> <ul style="list-style-type: none"> <li>– Define the term Flow Chart: <i>Pictorial representation of a program algorithm using standard symbols</i></li> <li>– Discuss the following standard Flow Chart Symbols:                             <ul style="list-style-type: none"> <li>• <i>Terminals (Begin/Start)</i></li> </ul> </li> </ul>	<p>Class Discussion Questions &amp; answers Note Taking</p>	<p>Flowchart standard symbols chart A laptop A projector Longhorn Secondary Computer Studies, Book 3, Pages 80-86</p>

	<ul style="list-style-type: none"> <li>• <i>Process symbol</i></li> <li>• <i>Input/output symbol</i></li> <li>• <i>Decision symbol</i></li> <li>• <i>Connector</i></li> <li>• <i>Flow lines</i></li> <li>• <i>Annotation</i></li> </ul>		
12 Mins	<p><b>Step II: Flow chart design</b></p> <p>– Draw sample algorithm flow chart for a program that accepts two integer values as input, computes and gives the sum as output</p>	<p>Class Discussion Illustration Questions &amp; answers Note Taking</p>	<p>Chart showing the algorithm flowchart A laptop A projector Longhorn Secondary Computer Studies, Book 3, Pages 80-86</p>
15 Mins	<p><b>Step III: Class Exercise and marking</b></p> <p>– Draw a flowchart that show the algorithm for the program that computer the sum of the first 50 natural numbers</p>	<p>Drawing of the flowchart Note taking</p>	<p>A flowchart showing the algorithm solution A laptop A projector Longhorn Secondary Computer Studies, Book 3, Pages 80-86</p>
5 Mins	<p><b><u>Conclusion</u></b></p> <p>– Review the lesson on the following:</p> <ul style="list-style-type: none"> <li>○ Definition of flowchart</li> <li>○ Algorithm design using Flowchart symbols</li> </ul> <p>– Assignment:</p> <ol style="list-style-type: none"> <li>i) With the aid of a diagram, discuss the standard symbols used algorithm design using a flow charts</li> <li>ii) Using a flow chart, design an algorithm for a program that accepts the radius of circle, computes and displays its area.</li> </ol> <p>– Inform the learners on the next topic on Algorithm design using Pseudocode</p>	<p>Question and answer Class discussion Note taking</p>	<p>Flowchart standard symbols chart A laptop A projector Longhorn Secondary Computer Studies, Book 3, Pages 80-86</p>
<b>LESSON EVALUATION</b>			

