

JSS3 COMPUTER STUDIES SCHEME OF WORK

1. Graph I
2. Graph II
3. Graph (Practical)
4. Human Issues I
5. Human Issues II
6. Computer Virus I
7. Computer Virus II
8. Practical (Introduction to Paint)
9. Paint Environment

WEEK 1

TERM: First Term

SUBJECT: COMPUTER STUDIES

TOPIC: GRAPH (1)

CLASS: JSS 3

NUMBER IN CLASS: 9

AVERAGE AGE: 14

PREVIOUS LESSON:

MAIN AIM: To help the students understand what graph is and its uses

SUBSIDIARY AIMS: By the end of the lesson, the students should be able to:

- ✓ Definition and uses of Graphs,
- ✓ Types of charts and their uses,
- ✓ Construction of standard graphs and charts from given records in a worksheet.

PERSONAL AIM: To assist the students understand how to construct graphs given a record in a worksheet.

ASSUMPTION: It is assumed the students have never been exposed to electronic graph plotting.

ANTICIPATED PROBLEMS: the students find it difficult to use electronic graph plotting tools.

POSSIBLE SOLUTION: the teacher takes them through the Microsoft excel chart tools.

TEACHING AIDS: computer, marker pen, marker board, charts and diagrams.

STEP1: Definition of Graphs

A graph is a diagram showing the relationship between varying quantities. It is also a diagram used to indicate the relationship between two or more variable quantities.

Uses of Graphs

As indicated above, graphs are used for the following purposes;

- 1) To display results of computer mathematical solutions in diagram forms.
- 2) To indicate the relationship between two variable quantities.
- 3) To measure quantities along two axes set at right angles to each other.
- 4) In comparing variables in a table.
- 5) In enhancing report presentation.

Step 2: Types of graphs and their uses:

There are different types of charts (graphs) available in spreadsheet programs, such as Microsoft Excel, Lotus1,2,3, Sage, and Peachtree. Common charts available and their uses include the following:

- a) **Column:** This chart compares values across columns. Sub-types include:
 - **Clustered column:** This chart compares values across a group.
 - **Stacked column:** This chart compares the contribution of each value to total in a group of class.
 - **Others are;** 100% stacked column, 3-D columns, clustered column with a 3-D visual effect, stacked column with a 3-D visual effect.
- b) **Bar chart:** Bar chart sub-types include:
 - **Clustered bar:** This chart compares values across a group.
 - **Stacked bar:** This chart compares the contribution of each value to total in a group of class.
 - **Others are;** 100% stacked bar, 3-D bar, clustered bar with a 3-D visual effect, stacked bar with a 3-D visual effect.
- c) **Line graph**
 - This graph displays trends over time or series
 - Stacked line: this display the trend of the contribution of each value over time or a series.
 - **Others are;** 100% stacked line, 3-D bar, clustered line with a 3-D visual effect, stacked line with a 3-D visual effect.
- d) **Pie Chart:** This chart displays the contribution of each value to a total. Pie chart types include the following:
 - Pie with a 3-D visual effect: This pie chart has a 3-Dimensional appearance.
 - Pie with a pie: this is a pie chart with user defined value extracted and combined into a second pie.
 - Exploded pie: This displays the contribution of each value to the total while retaining individual values.
 - Exploded pie with 3-D visual effect.
 - Bar of pie: This is a pie chart with user-defined values stacked into a stacked bar.

Other types of charts are; Scatter chart, Area chart, Doughnut chart, Radar chart, etc.

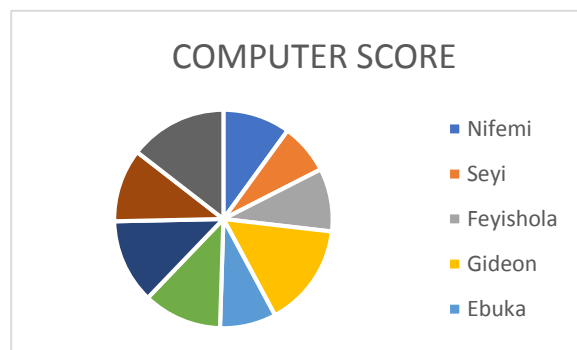
STEP 3: Creating Graphs in a Worksheet

To create a graph in a worksheet, such as Excel, you must first enter data into the worksheet. The type and arrangement of data usually determine the type of chart to use in getting the best results.

To create a graph in Excel, do the following

1. Open a new excel spreadsheet and enter your data into the excel spreadsheet in table format. Your data should have column headers, row headers and data in the middle.
2. Highlight the cells containing the information to be plotted in the graph.
3. While the text is still selected, click insert and then navigate to the charts group.
4. Select the chart type you want to use. E.g. pie chart.
5. The chart is created.

| NAME | COMPUTER SCORE |
|-----------|----------------|
| Nifemi | 60 |
| Seyi | 45 |
| Feyishola | 56 |
| Gideon | 92 |
| Ebuka | 50 |
| Ibukun | 70 |
| Jaja | 75 |
| Shammah | 65 |
| Santos | 87 |



EVALUATION:

1. Define a graph?
2. State the uses of graphs?
3. List five (5) types of graphs?

SUMMARY:

- A graph is a diagram....