COMPUTER STUDIES NOTES

FORM 1

**Classification of Computers**

1. Classify various types of computers
2. Identify areas where computers are used

**Classification of Computers**

There are different types of computers with different operational characteristics.
These computers can be classified into three categories, namely;

1. Classification by physical size and processing power.
2. Classification by functionality
3. Classification by purpose

Classification by Physical size and Processing power
There are four main groups in this category, namely:

1. Supercomputers
2. Microcomputers
3. Minicomputers/mini frames
4. Mainframe computers

**Supercomputers**A super computer is a sophisticated, expensive computer designed to execute complex calculations at a maximum speed permitted.
Super computers use multiple processors.
Supercomputers are used for scientific research especially for modeling complex, dynamic systems such as the worlds weather, motion in galaxys way.

**Microcomputers**

1. They are smaller, less expensive than mainframes.
2. They can be very powerful and capable of running many different applications.
3. Have the capability of being networked to other computers or used as stand-alone units.
4. They are commonly used as personal computers.

Microcomputers are further classified as illustrated. Roll over the mouse pointer to find out more about each microcomputer.

**Minicomputers**

1. They are smaller less expensive and less powerful than mainframe, and usually perform similar processes to mainframe but on a smaller scale.
2. They can support the same peripheral devices supported by mainframes.
3. They are mainly used network servers in the business industry and in medium scale business.

**Mainframe computers**

1. They are very large computers with a very high capacity of main storage and very expensive.
2. They can process large amount of data very fast.
3. They can support a large number of terminals.
4. They are used in big companies, banks, insurance companies and government

**Areas where computers are used**Computers are used in every day life to make it easier and faster to process; data to information. Some important application areas are:
A. Educational Institutions

**In schools, computers could be used in different ways.**

1. To teach computer studies
2. For keeping students records
3. For administrative and secretarial work
4. As a teaching aid
5. For marking multiple choice examination e.g. KCPE

**B. Homes**

1. For entertainment e.g. watching movies, playing music and games
2. Communication

**C. Hospitals**
In hospitals, computers are used for:

1. Keeping records for patients, drugs, personnel
2. Diagnostics purposes eg scanners.
3. Controlling life supporting machines in ICU

**D. In Commerce**Used in supermarkets and shops to keep stock and sales records.

**E.Industry**In industry, computers are used for controlling industrial processes eg. Automating production processes
F. Banks
In banks computers are used for:

1. Keeping records of financial transactions for customers
2. The Automated Teller Machines (ATM) are used for dispensing and

depositing cash

An ATM Machine

**G. Security**

**CCTV camera**Cameras are used:

1. By the police to detect and monitor criminal activities.
2. To monitor activities of people in sensitive areas, e.g. banks, supermarkets, big hotels, ports;etc.

**H. Tele-Communication**Computers are used as telephone communication devices e.g. mobile phones, computerized calling booths.
Below is an example of a mobile phone.