# Computer Applications



#### Software

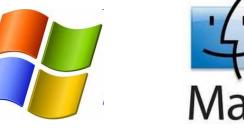
- Software is the name for programs that can run on your computer
- There are two types
  - ☐ System Software
  - □ Application Software





## System software

- Receives signals from keyboard and mouse
- Sends correct signals to monitor or printer
- Stores documents on disk
- Examples include Windows, Mac OSX, Linux







Application software can be used to

- Write letters
- Perform calculations
- Store and organise information
- Draw pictures
- Play games



#### Examples of application software are

- Word processor
- Spreadsheet
- Database
- Graphics













AppleWorks 5



Inside the box when you buy new application software you may find

- CD-ROM
- User Guide
- Installation Guide
- User Licence Agreement





CD-ROM

■ This stores the software





User Guide

This tells you about the features of the software and instructions on how to use them





Installation Guide

- This tells you how to install the software on your computer.
- It may also tell you about what type(s) of computer it can be installed on (PC or Mac) and the system requirements (how much hard disk space or memory is needed)



User Licence Agreement

Tells you how many copies of the program you can install and whether you can make copies or backups of the software





# Input Devices

- Mouse
- Keyboard
- Graphics Tablet
- Touchpad
- Scanner
- Digital Camera



## **Output Devices**

- Laser Printer
- Inkjet Printer
- Flatscreen Monitor (TTF, LCD)
- Monitor (CRT)



# **Backing Storage Devices**

- Floppy Disk
- Hard Disk
- CD-ROM, CD-R, CD-RW
- DVD-ROM, DVD-R, DVD-RW
- USB Flash Drive



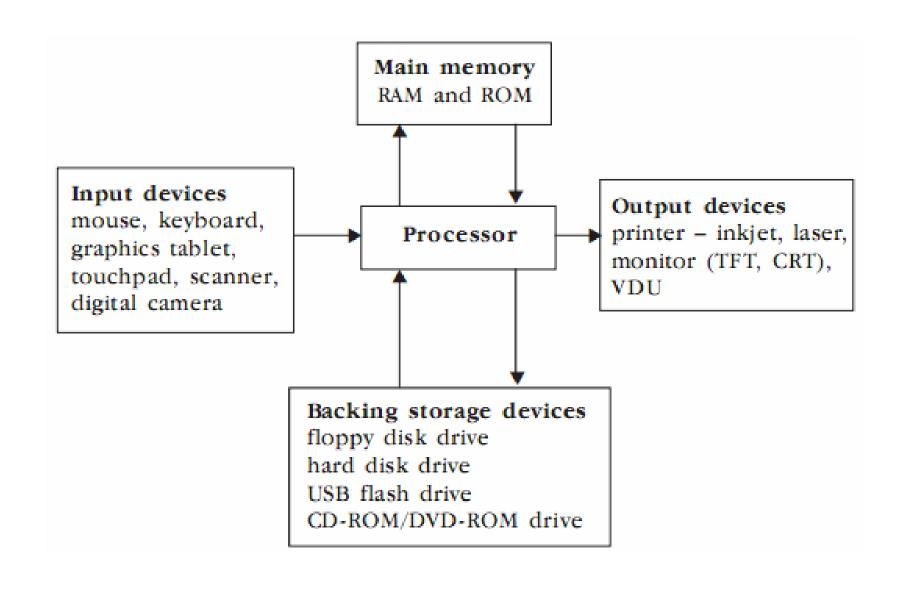
# Computer Storage

- 1 bit
- 1 byte
- 1 kilobyte (Kb)
- 1 megabyte (Mb)
- 1 gigabyte (Gb)
- 1 terabyte (Tb)

- 1 or 0
- 8 bits
- 1024 bytes
- 1024 Kb
- 1024 Mb
- 1024 Gb

# M

#### Block diagram of computer system





#### Memory

- Read Only Memory
- Kept when power off
- Holds system start up information
- Cannot be changed

- Random Access Memory
- Lost when power off
- Holds user data and files
- Changed when new programs loaded or files edited



## Help!

- On Line Help
- Files included with a program to explain specific functions of the program

- On Line Tutorial
- Files included with a program to walk you through the basic features

On Line just means "on the computer" - it does NOT mean on the Internet

# Applications



# Word Processing

- insert, amend and delete text
- change text font, size, style and colour
- justify the text
- use bullet points
- enter graphics and wrap text
- cut, copy and paste text



## Word Processing

- search and replace (find and change)
- spell check
- headers and footers
- tabs
- margins
- optical character recognition
- speech recognition

# M

## Spreadsheets

- Rows, columns, cells
- Cell reference
- Format as currency, fixed
- Numbers, text, formula
- Formula

```
□ +, -, *, /
```

- $\square = Sum (A1..A7)$
- $\square$  = Average (A1..A7)
- $\square = Max (A1..A7)$



#### Spreadsheets

- Replicate formula (fill down, fill right)
- Column width, row height
- Remove grid lines
- Show formulae
- Insert / delete rows / columns
- Sort
- Chart / graph



#### Database

- File of Records
- Each Record has several Fields
- Each Field can hold data
- Data types
  - □ Text
  - □Number
  - Calculation
  - □ Picture



#### Database

- Sort
  - □ On One or more fields
- Search
  - □ For data in one or more fields
- Add records (information about a new person/thing
- Add fields (extra information about a person or thing)



# Graphics - Drawing

- Draw pictures made up of shapes
  - Line
  - □ Rectangle
  - □ Oval / Elipse
  - □ Freehand



# Graphics - Drawing

- Change
  - □ Size
  - □ Position
  - □ Line colour / thickness
  - ☐ Fill colour / pattern
  - □ Order (bring to front / back)
  - ☐ Flip, Rotate, Scale



# Graphics - Painting

- Image is made up of dots of colour called Pixels
- Extra tools
  - □ Spray can
  - □ Eraser
  - □ Select part of picture (select rectangle, lasso)



# Graphics - Painting

- Make changes by changing the colour of pixels
- CANNOT move a shape once drawn or change its line colour/thickness or fill
- Can use Painting to edit digital photos