

# Introduction to Computers

## Mouse and keyboard basics

### Key Concepts to Remember

#### **Modern computers are virtually impossible to damage!**

You have to be an expert to really hurt a computer unless you hit it with a hammer, so don't be afraid of damaging it!

#### **Computers can only do what the user tells them**

Computers will perform the same basic tasks over and over in the same way. This ability to repeat a task precisely helps humans because computers can do tasks that we might find tedious and repetitive. But it comes at a cost: computers will also repeat the same mistake over and over again, if humans provide the wrong information. Computer scientists call this principle "Garbage in, Garbage out." Just remember that you, the computer user, are in control—not the machine!

#### **Computers can only answer yes or no questions**

Complicated programs may seem to allow the computer to solve problems independent of human intervention, but the computer just uses binary language in order to make a series of Yes/No determinations. This Yes/No limit on computer language causes them to be unforgiving if humans don't provide precise information because a computer cannot figure out what we mean the way another human being can. If "Men are from Mars and Women are from Venus," computers are from an entirely different solar system than humans!

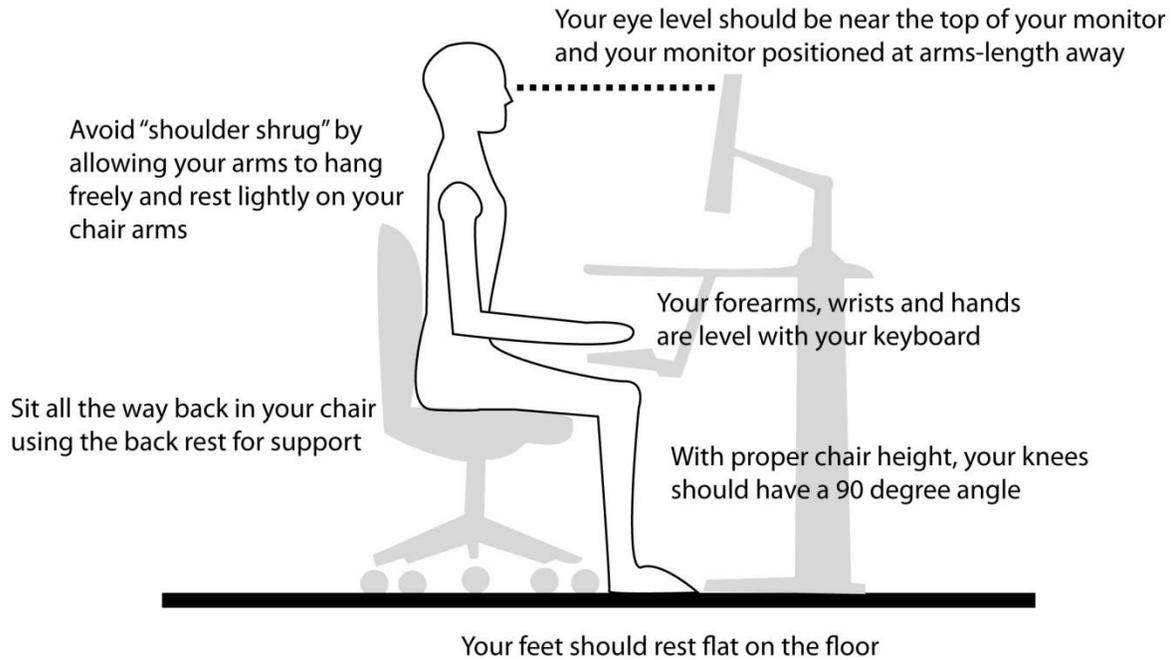
#### **Electronics, including computers, change rapidly!**

Gordon Moore, an early computer scientist, noticed that the amount of information we can store on a silicon chip doubles every two years or so. The ratio holds true for other computer components as well. Since televisions, cell phones, cameras, and computers are all controlled electronically now, this means that all electronic devices get better and less expensive rapidly. It also means electronics get out of date more quickly: a ten year old computer is 32 times less powerful than a computer produced today, for example, and is unable to perform many of the tasks a newer machine can. But a machine made two years ago may work for you—it will be slower, but may be good enough. And the machine from two years ago will often be much more cost effective.

# Keyboard Basics

## Preparing the work area

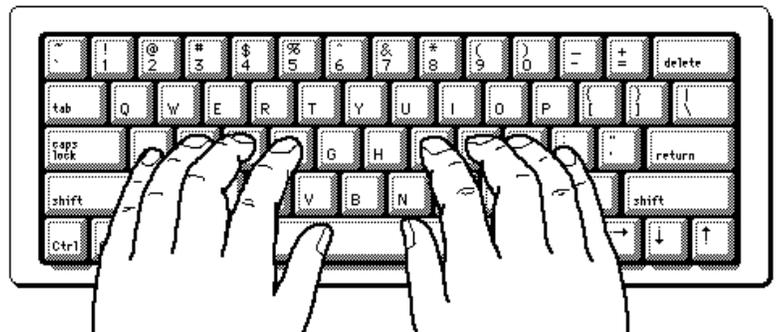
Typing is done with the entire body—proper hand position begins with proper posture and proper setup of the work station:



## Positioning the hands

To position your hands correctly:

- Turn your hand palm up and cup your hand with slightly curled fingers as if holding a tennis ball
- Place your hands in this position with your fingers over the proper keys on the home row of the keyboard as in the diagram below.
  - Notice that **F** and **J** usually have a raised line on them to make them feel different—one of the keys to improving speed and accuracy is not looking at the keyboard. You’ll always know you’ve found the home keys if you can feel that raised line with your left and right forefingers
- Make sure that your elbows remain at a 90 degree angle and your wrists are straight—forearms are neither held above the hands so the hand hangs below to touch the keys nor held below the hands so the hand must flex upward to reach the keys
- When typing you should strive to move the fingers as little as possible, instead making an effort at moving your entire arm with slight shoulder movements.
- You will make slight finger movements as well, so remember to return your fingers to the home keys after each keystroke



# Mouse Basics

## Moving the Mouse

The mouse should be placed on a flat surface, trackball or laser (on an optical mouse) facing down, and buttons facing up. The mouse cursor moves when the trackball/laser is moved across a flat surface. If the ball does not roll or the laser does not move, the mouse cursor does not move. Try lifting the mouse off the pad and setting it down at the other side of the pad. The mouse cursor position will not change.

## Click

Press the left mouse button once. This will move the text cursor to that location on the page.

## Double-Click

Rapidly click the left mouse button twice. This is often done to select a word or open a program.

## Click and Drag

To click and drag means to hold down the left mouse button and move the mouse on the pad. For example, to highlight or select text, click (single click, left button) where you want to begin. Drag the cursor to the end of the desired text. Release the mouse button. The text is now selected. To select one word, double-click it.

## Drag and Drop

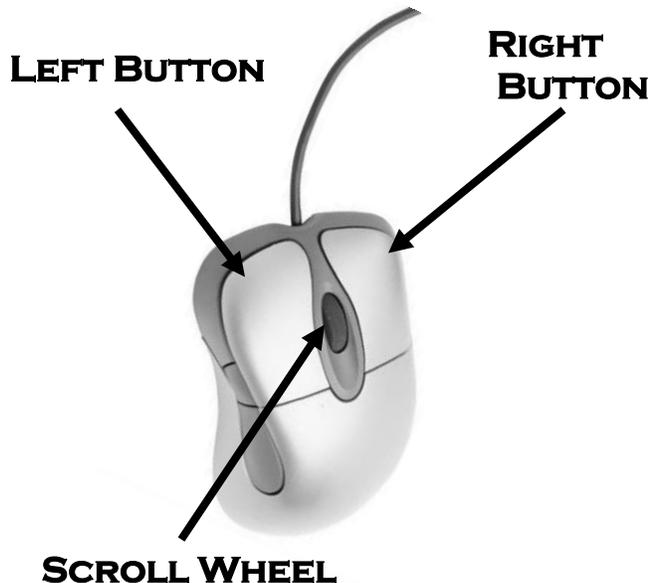
Some items can be moved by clicking the item, holding down the mouse button, and dragging the item to a new location. Try this with an icon on the desktop.

## Right-Click

Click the right mouse button once for context-sensitive functions.

## Scroll Wheel

Rolling the scroll wheel up and down will scroll up and down the page you are viewing on the screen.



## CORRECT POSITIONING OF HAND:

