The RETURN key is simply a carrige return. The ENTER key is what executes the actual statements.

Mathematica is case sensitive. All Mathematica commands start with capital letters. If your commands all start with lower-case letters, you will not conflict.

To see all commands that start with **P**, type: **P** and then **<alt> k**. Mathematica will then show you all the known commands starting with **P**. To see all commands that start with Plot, type: **Plot** and then **? k**.

To see the template for Plot, type **Plot**, and then **<alt> i**.
Note, this was not working yet. I will try and fix it. You should see: *Plot[f, {x, xmin, xmax}])*

If you forget what Plot does, type: **?Plot**

If you want to see the options of Plot, **Options[Plot]**

The semi-colon is used supress printing the output. It can also separate statements on a single line:
a=b; c=d;

The single = is used to set x=4; The == is used to make an equation to be solved, x^2==4 which will have solutions x=2 and x=-2.

There are 3 type of brackets: **() , { }, [ ]**
2(a+b)   groups mathematics
{a,b,c} groups lists
Sqrt[2]   groups functional arguments

There are 2 ways to write commands.
Expand[(a+b)^50]
(a+b)^50 //Expand
I prefer the second since it separates the expression from the operation.
The second form is harder to write when there is more than one argument in the function.

How to load in an auxilary package: Needs["Graphics`PlotField`"]
This defined the command

?PlotGradientField

PlotGradientField[f, {x, x0, x1, (xu)}, {y, y0, y1, (yu)},
   (options)] produces a vector field plot of the gradient
   vector field of the scalar function f by calculating
   its derivatives analytically.

How to print.   Select the expressions (cells) that you want to print by dragging the mouse along the right edge of the window. From the FILE menu, select PRINT SELECTION. B

How to save your document to a disk.   From the FILE menu, select the SAVE command. The Save window will show you where the file is to be saved. Make sure that this is on your disk.

Where to find interesting documents:
I keep sample files on my web page:
        http://www.physics.smu.edu/~olness/ftp/MathematicaCourseWare/

Here are common commands:

Command	Description
// N	Give numerical value
// Expand	
// Factor	
// Simplify	
Solve[x^2==1,x]	
Integrate[x^2 ,x]	Indefinite Integral
Integrate[x^2 ,{x,0,1}]	Definite Integral
D[x^2 ,x]	Derivative
Plot[x^2 ,{x,0,1}]	1-D plot
Plot3D[x^2 + y^2 ,{x,0,1},{y,0,1}]	2-D plot
ContourPlot[x^2 + y^2 ,{x,0,1},{y,0,1}]	Contour plot
ParametricPlot[{fx, fy}, {t, tmin, tmax}]	Parametric Plot
Series[Exp[x],{x,x0,5}]	Series expansion about x0 to 5-th order
// Normal	Turn Series expansion into Normal expression
mat= {{a,b},{c,d}}	A Matrix
mat // MatrixForm	Print in pretty format
mat.mat	Matrix Multiplication
Det[mat]	Determinant of matrix
Inverse[mat]	Inverse matrix