Excel II

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Overview

Excel is a Spreadsheet program that allows the user to create many types of spreadsheets for all occasions.

To open Excel

1. Click on **Start.** Menu will appear.

2. Click on **All Programs**.

3. Click on **Microsoft Excel**.

4. A blank worksheet appears.
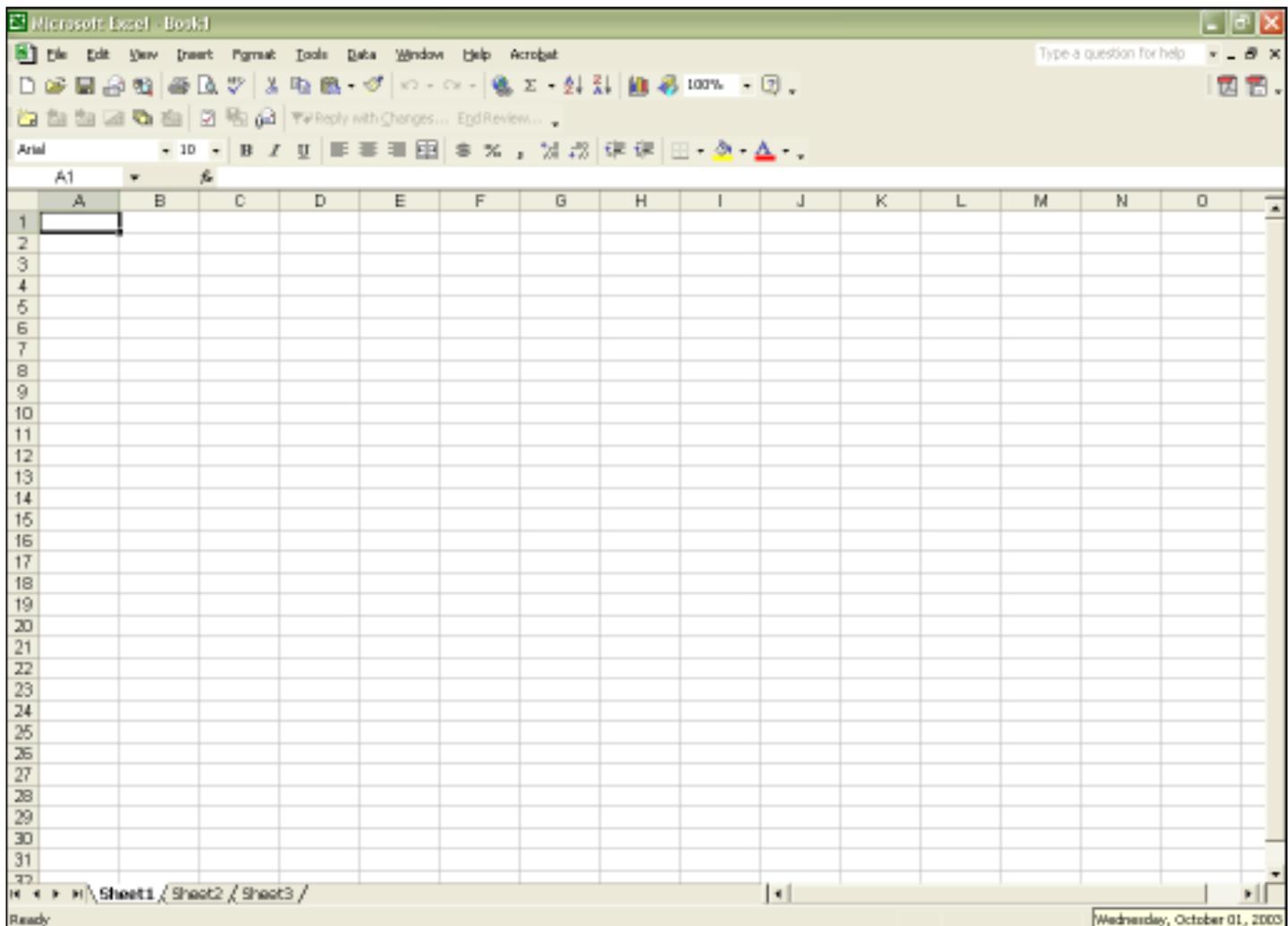
Setting up the spreadsheet

Setting up the spreadsheet is important to do before adding formulas to the spreadsheet.

1. In cell A1type **Name** in bold letters.

2. In cell B1 type **Hours** in bold letters.

3. In cell C1 type **Rate** in bold letters.

4. In cell D1 type in **Salary** in bold letters.

5. In cell A5 type **TOTAL** in bold letters.

6. In cell A6 type **Average Pay** in bold letters.

7. In cell A8 type **Min hours** in bold letters.

8. In cell A9 type **Max hours** in bold letters.

9. In cell A11type in **Ceiling rate** in bold letters.

10. In cell A12 type **Floor rate** in bold letters.

	A	B	C	D
1	Name	Hours	Rate	Salary
2				
3				
4				
5	TOTAL			
6	Average Pay			
7				
8	Min hours			
9	Max Hours			
10				
11	Ceiling Rate			
12	Floor Rate			

Inputting data

Input the data into the spreadsheet that will be used for creating the formulas.

1. In cell A2 type **Joe.**

2. In cell A3 type **Sally.**

3. In cell A4 type **Tom.**

4. In cell B2 type **28.**

5. In cell B3 type **35.**

6. In cell B4 type **15**.

7. In cell C2 type **10.58**.

8. In cell C3 type **11.75**.

9. In cell C4 type in **9.45**.

	A	B	C	D
1	Name	Hours	Rate	Salary
2	Joe	28	10.58	
3	Sally	35	11.75	
4	Tom	15	9.45	
5	TOTAL			
6	Average Pay			
7				
8	Min hours			
9	Max Hours			
10				
11	Ceiling Rate			
12	Floor Rate			

	A	B	C	D
1	Name	Hours	Rate	Salary
2	Joe	28	10.58	
3	Sally	35		
4	Tom	15	9.45	
5	TOTAL			
6	Average Pay			
7				
8	Min hours			
9	Max Hours			
10				
11	Ceiling Rate			
12	Floor Rate			

	A	B	C	D
1	Name	Hours	Rate	Salary
2	Joe		10.58	
3	Sally	35	11.75	
4	Tom		9.45	
5	TOTAL			
6	Average Pay			
7				
8	Min hours			
9	Max Hours			
10				
11	Ceiling Rate			
12	Floor Rate			

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Using the AutoSum Icon

The AutoSum icon is used for totaling a range of cells. AutoSum also allows the user to use other functions that are associated with this feature.

1. Click on cell B5.

2. Click on the AutoSum button on the toolbar. This brings up the sum function. Depending on where numbers are, Excel tries to create a range of cells that it thinks will be used.

3. Using the mouse, select the range of cells that are going to be added up (B2-B5).

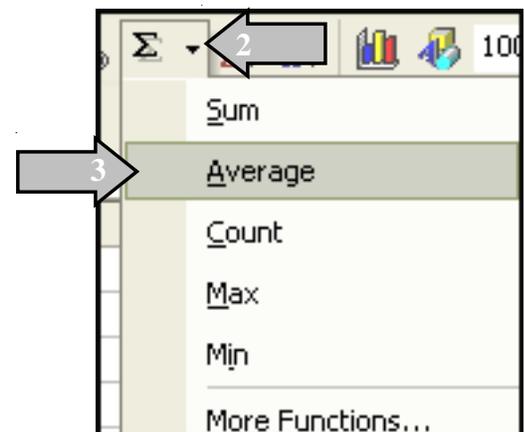4. Once selected, click on the Enter key on the keyboard.

Average Formula
In this example we will find the average of the rate of pay for the employees.

1. Click on cell C6.

2. Click on the down triangle to the right of the AutoSum button. This displays a dialog box.

3. Select Average.

4. The formula is entered into the cell, showing the range of cells that will be used.

5. Select cells (C2-C4) for the rates of pay for all employees.

6. Select Enter on the keyboard.

7. The average for the range of cells is in C6.

	A	B	C
1	Name	Hours	Rate
2	Joe	28	10.58
3	Sally	35	11.75
4	Tom	15	9.45
5	TOTAL	78	
6	Average Pay		

Sum
Average
Count
Max
Min
More Functions...

FLOOR   =AVERAGE(C2:C4)

	A	B	C	D	E
1	Name	Hours	Rate	Salary	
2	Joe	28	10.58		
3	Sally	35	11.75		
4	Tom	15	9.45		
5	TOTAL	78			
6	Average Pay		=AVERAGE(C2:C4)		
7			AVERAGE(**number1**, [number2], ...)		
8	Min hours				
9	Max Hours				
10					
11	Ceiling Rate				
12	Floor Rate				

	A	B	C
1	Name	Hours	Rate
2	Joe	28	10.58
3	Sally	35	11.75
4	Tom	15	9.45
5	TOTAL	78	
6	Average Pay		10.59333

Multiplication Formula

In this example we will figure out the Salary amount for each employee.

1. Click on cell D2.

2. On the keyboard click on the = equals sign. This tells Excel that a formula is being formed.

3. After the equals sign, type an open parenteses.

4. Type in the first cell referece that will be needed B2.

5. Select the astrick symbol * (which stands for multiplication).

6. Type in the second cell reference that will be used C2 and close the parenteses.

7. On the keyboard, click Enter.

8. The salary has been calculated.

9. Using the fill handle to the right of the box, drag it down to the last employees cell and that will calculate the salary for each person based on the formula put it.

	Name	Hours	Rate	Salary
1	Name	Hours	Rate	Salary
2	Joe	28	10.58	=

	A	B	C	D
1	Name	Hours	Rate	Salary
2	Joe	28	10.58	=(

	A	B	C	D
1	Name	Hours	Rate	Salary
2	Joe	28	10.58	=(B2*C2)

	A	B	C	D
1	Name	Hours	Rate	Salary
2	Joe	28	10.58	296.24

Salary
296.24
411.25
141.75

Minimum Formula

This formula returns the minimum number in a range of selected cells.

Using the spreadsheet that was created for Employee Hours and Rate of Pay. Find the Minimum hours worked in this department.

1. With the spreadsheet created open, In cell A8 type in Min Hours.

2. Click on cell B8 to highlight it.

3. Click on the down triange next to the AutoSum button and select Min. A formula will appear in cell B8.

4. With the mouse, select the range of cells to be used in the formula (B2-B4).

5. On the Keyboard, click Enter.

6. The Minimum Hours worked out of the range of employees selected will appear.

Maximum Formula

This formula returns the maxi-mum number in a range of se-lected cells.

Using the spreadsheet that was created for Employee Hours and Rate of Pay. Find the Maximum hours worked in this department.

1. With the spreadsheet created open, In cell A9 type in Max Hours.

2. Click on cell B9 to highlight it.

3. Click on the down triange next to the AutoSum button and select Max. A formula will app-ear in cell B9.

4. With the mouse, select the range of cells to be used in the formula (B2-B4).

5. On the Keyboard, click Enter.

6. The Maximum Hours worked out of the range of employees selected will appear.

Types of Charts and their Uses

1. **Area** - An Area chart emphasizes the magnitude of change, rather than time and the rate of change. It also shows the relationship of part to a whole by displaying the sum of the plotted values.

2. **Bar** - A Bar chart shows individuals figures at a specific time or shows variations between components but not in relationship to the whole.

3. **Bubble** - A Bubble chart compares sets of three values in a manner similar to a scatter chart with the third value displayed as the size of the bubble marker.

4. **Column** - A Column chart compares seperate (noncontinuous) items as they vary over time.

5. **Cone** - A Cone chart displays columns with a conical shape.

6. **Cylinder** - A Cylinder chart displays columns with a cylindrical shape.

7. **Doughnut** - A Dougnut chart shows the relationship of parts to the whole.

8. **Line** - A Line chart shows trends and change over time at even interverals. It emphasizes the rate of change over time rather than the magnitude of change.

9. **Pie** - A Pie chart shows proportions and relationships of parts to the whole.

10. **Pyramid** - A Pyramid chart displays columns with a pyramid shape.

11. **Radar** - A Radar chart emphasizes differences and amounts of change over time and variations and trends. Each category has its own value axis radiating from the center point. Lines connect all values in the same series.

12. **Stock** - A Stock chart shows four values for a stock - open, high, low, and close.

13. **Surface** - A Surface chart shows trends in values across two dimensions in a continuous curve.

14. **XY (Scatter)** - A Scatter chart shows either the relationships among numeric values in several data series or plots the interception points between x and y values. It shows uneven intervals of data and is commonly used in scientifc data.

Creating a chart

1. In cell A1 type in **Name**.

2. In cell B1 type in **Score 1**.

3. In cell C1 type in **Score 2**.

4. In cell D1 type in **Average**.

5. In cells A2-A6 type in the names **Sarah, Joe, Barbara, Celeste, and Randy**.

6. In cells B2-B6 type in the scores as follows: **98, 75, 64, 80, and 88**.

7. In cells C2-C6 type in the scores as follows: **89, 88, 95, 75, and 77**.

8. Create a formula in cell D2 that will get the average of cells B2 and C2.

9. Use the fill handle to drag the formula down to all the names in the list.

Now that we have created the spreadsheet to go with the chart we are ready to create the chart.

	A	B	C	D
1	Name	Score 1	Score 2	Average
2	Sarah	98	89	93.5
3	Joe	75	88	81.5
4	Barbara	64	95	79.5
5	Celeste	80	75	77.5
6	Randy	88	77	82.5

fx =AVERAGE(B2:C2)

C	D
Score 2	Average
89	93.5
88	81.5
95	79.5
75	77.5
77	82.5

Creating a Chart

1. Using the mouse select and highlight all cells with information in it for the chart.
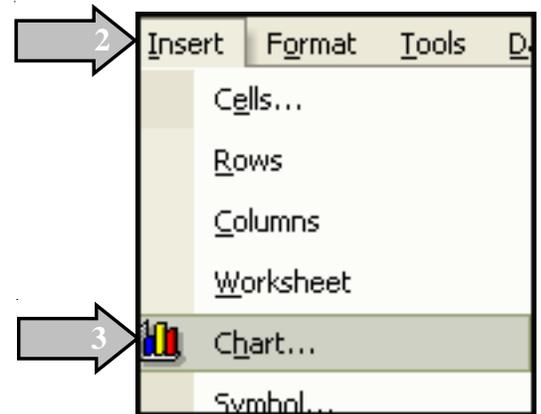
2. Click on **Insert** on the Menu bar.
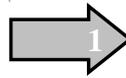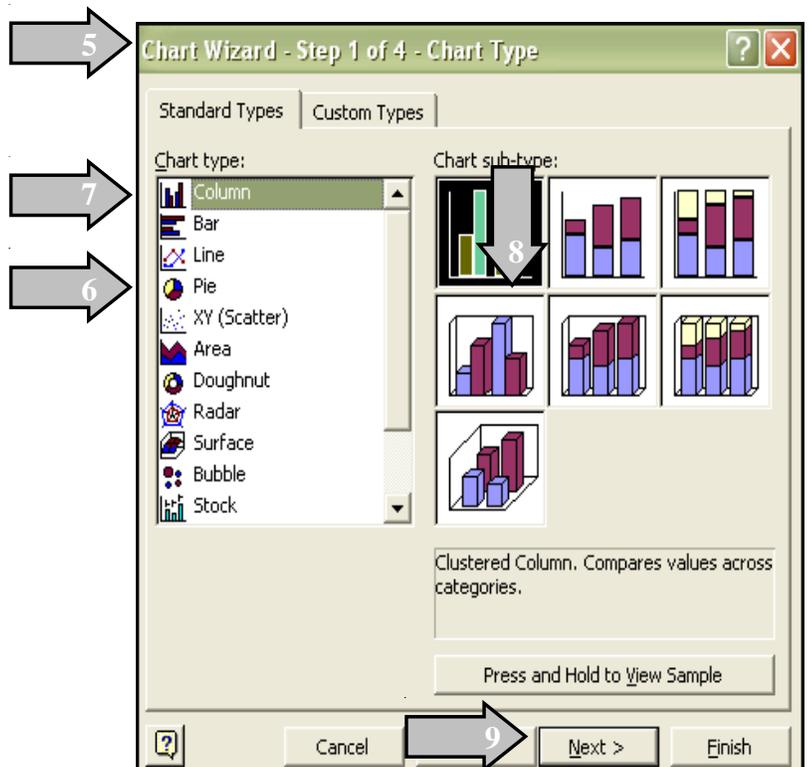
3. Click on Chart.

or

4. Click on the **Chart Wizard button** on the Standard Toolbar.

5. The Chart Wizard appears.

6. Under Standard Types, select the type of chart to be used.

7. In this example, select **column**.

8. Select the first chart in the second row.

9. Click **Next**.

	A	B	C	D
1	Name	Score 1	Score 2	Average
2	Sarah	98	89	93.5
3	Joe	75	88	81.5
4	Barbara	64	95	79.5
5	Celeste	80	75	77.5
6	Randy	88	77	82.5
7				

Insert   Format   Tools   D.
  Cells...
  Rows
  Columns
  Worksheet
  Chart...
  Symbol...

Chart Wizard - Step 1 of 4 - Chart Type

Standard Types | Custom Types

Chart type:
Column
Bar
Line
Pie
XY (Scatter)
Area
Doughnut
Radar
Surface
Bubble
Stock

Chart sub-type:

Clustered Column. Compares values across categories.

Press and Hold to View Sample

Cancel   Next >   Finish

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10. The Chart Wizard shows what the chart will look like.

11. The **Data range** is the selected data from the spreadsheet. To change the information click on the box to the right of the high lighted area.

12. To change the way the rows and columns appear, click on the appropriate circle, and it will change to that view.

13. Click on the **Series Tab**.

14. The **Series box** shows the column headings that were selected from the spreadsheet.

15. Across from that is the **Name box** and the **Values box** for the highlighted Series. The boxes show where on the spreadsheet this information came from.

16. The **Category (X) axis labels** are the names of the employees. Click on the box to the right to see on the spreadsheet where they came from.

17. Click on **Next**.
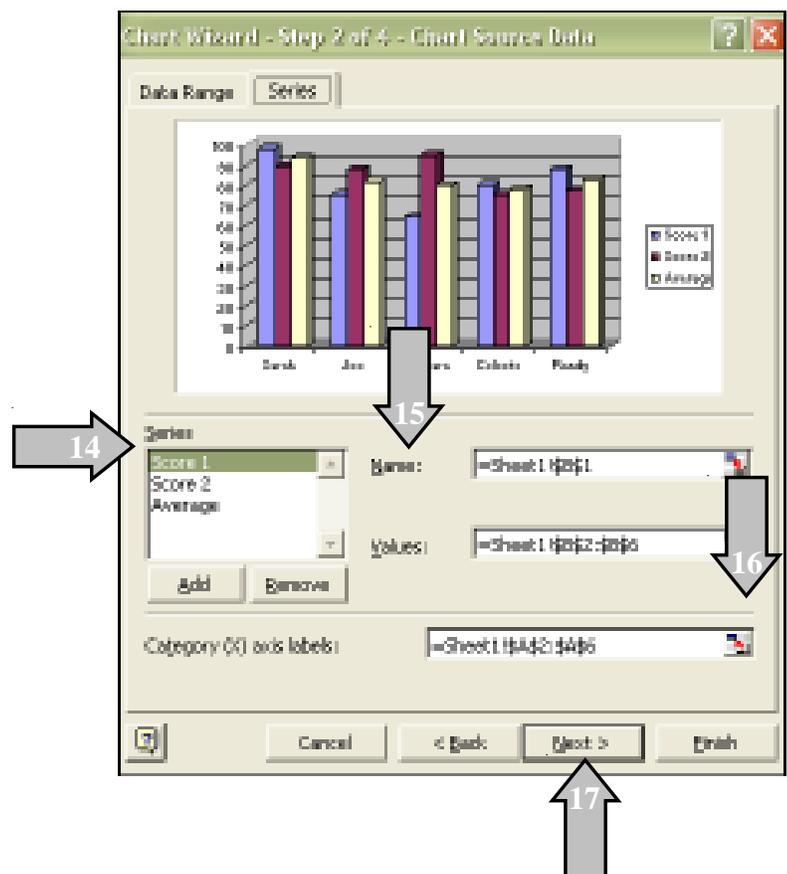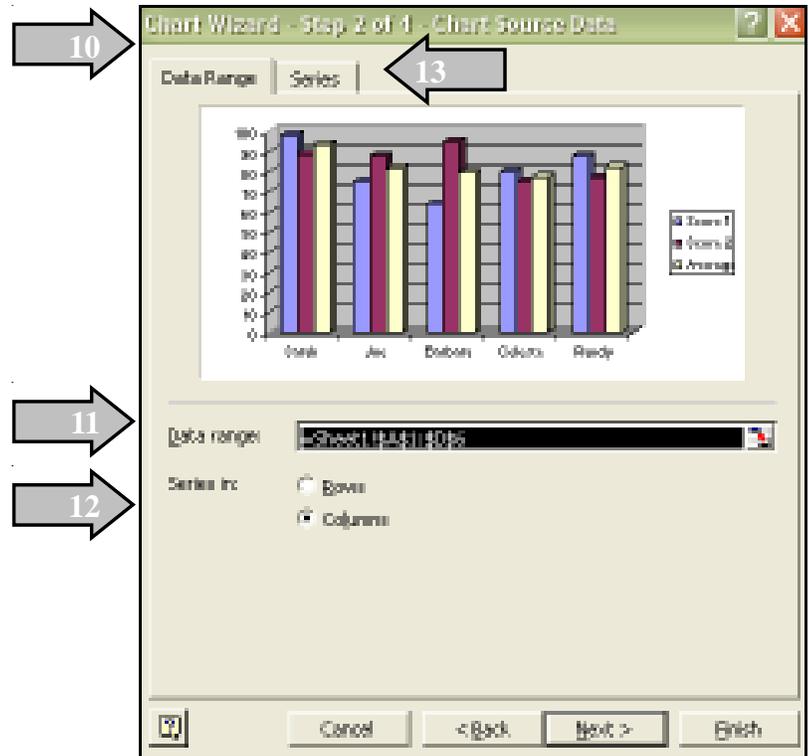
1. Chart title allows the user to put a title at the top of the chart.

2. Category (X) axis allows the user to put a title underneath the X axis or along the bottom of the chart for that information.

3. Value (Z) axis allows the user to put a title to the left side of the chart representing those values.

4. Click on the Legends tab.

5. Here is where the placement of the legend can be adjusted.
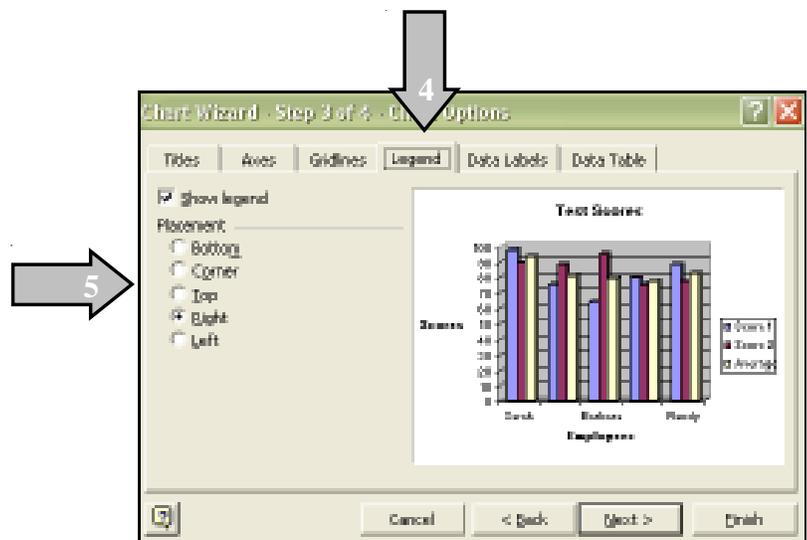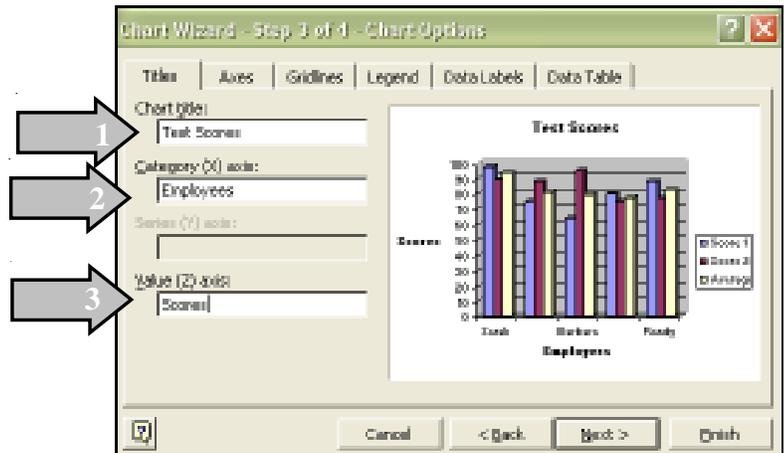
6. Click on **Data labels**.

7. This allows the user to add labels on the chart depending on what information is needed.

8. Click on **Next.**

9. The last step is to put the chart in a specific location.

10. If the chart should go into a new sheet, click on the circle.

11. If the chart should go into a worksheet as an object then click on this circle.

12. Click on **Finish**.

13. Final chart as an object in the spreadsheet.