

## Inserting Charts/Graphs

Using Excel 2000



6/2003

- Excel makes it easy to create a chart/graph from data that you have entered in your spreadsheet
- When you make a change to your data, your graph will automatically update as well

## Inserting Charts

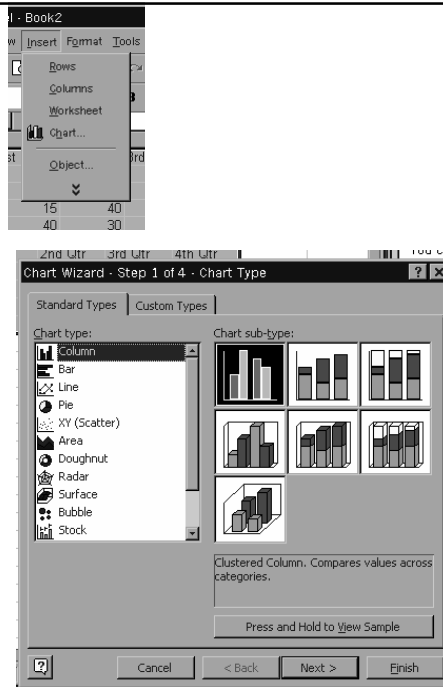
- There are 2 types of charts:
  - Embedded
    - Placed on a worksheet and saved with the worksheet
  - Chart Sheet
    - A sheet in a workbook that contains only a chart and is named Chart \_
- You can use the Chart Wizard to create your chart

- First create your spreadsheet with your data
- If you include row and column headers they can be included in your chart

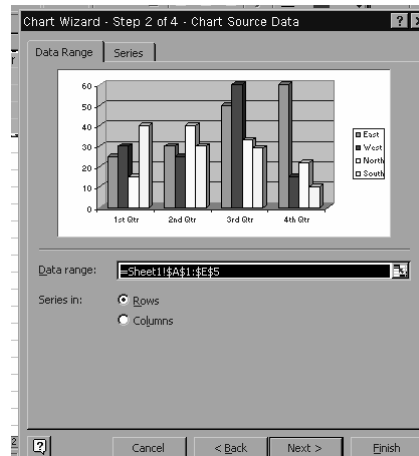
	A	B	C	D	E	
1	Group	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
2	East	25	30	50	60	
3	West	30	25	60	15	
4	North	15	40	33	22	
5	South	40	30	29	10	
6						
7						

- Next, select the range of cells to be included in your chart
- If you have included totals for your rows/columns, I would recommend NOT including this information in your graph

- Click Insert, Chart
  - Or click the Chart Wizard icon in the toolbar
- This opens your Chart Wizard
- Select a style
  - Be sure to take a look at Custom Types for some different ideas!
- Click Next

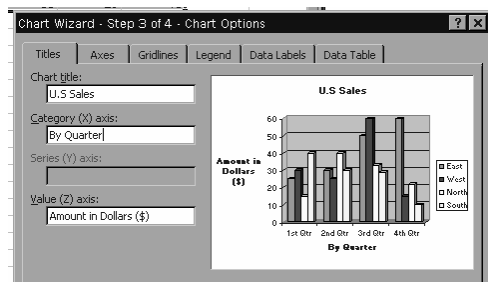


- This opens Chart Source Data window
- In Data Range – you will see the data that you selected.
- You can view in Rows (shown here) or Columns
- If you need to re-select data you can do so from this window
- Click Next



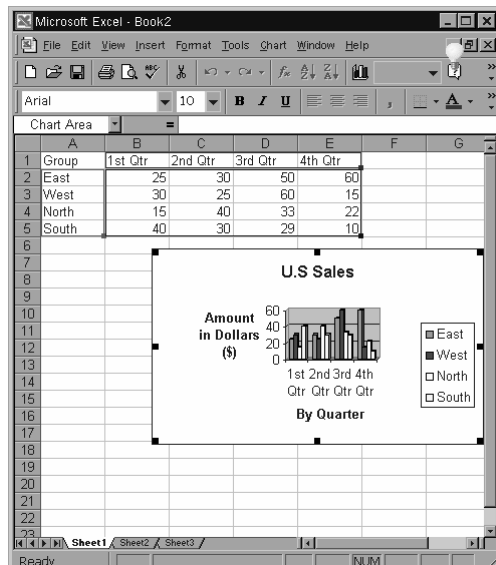
- Chart Options window
- You can enter at the Titles tab:
  - Chart Title, X axis(horizontal), Z axis (vertical)
- Gridlines – add add'n lines to your chart
- Legend – placement of legend
- Data Labels
- Data Table
- Click Next

Views in Excel 97 and XP may vary slightly




- Chart location
  - Choose whether this will be embedded in the worksheet
  - Or added as a separate sheet in your workbook
- Click Finish

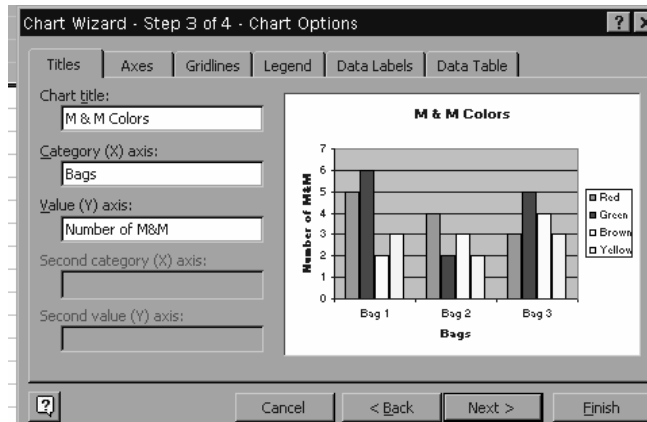
### Embedded chart



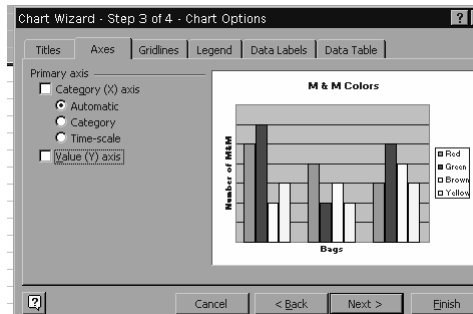
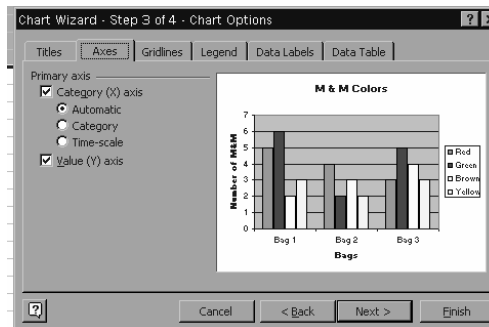
- To edit the data in an embedded chart
  - Just change the data in the spreadsheet and the information will update in the chart
- You can resize the chart by left clicking one time on the chart and using the black squares to resize
- To edit a chart sheet
  - just go to the sheet with the data and edit the information.
  - A Chart sheet will be named Chart 1 on the tab

- You do not need to use the wizard for a chart. If you select your data and click F11 – a new Chart Sheet will be created for you
- You can change the style of any chart by clicking one time on the chart, and clicking on the Chart Wizard icon
- You can create a chart using non-consecutive rows/columns of data (using Ctrl & click to select) 
- You can double click on any component of your chart to edit colors, etc.

- Let's take a detailed look at the additional tabs available on step 3 of 4 on the Chart Wizard

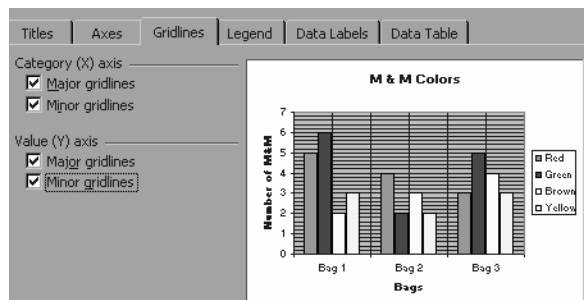
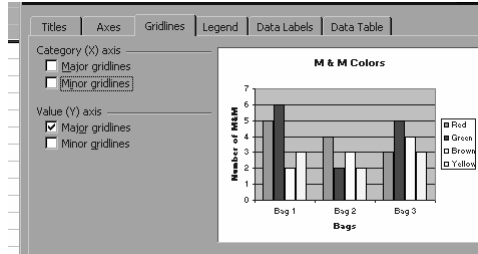


- X axis is horizontal
- Y axis is vertical
- Removing the ✓ for Category (X) axis will remove the Bag 1, Bag 2, Bag 3 info
- Removing the ✓ from Value (Y) axis will remove the number



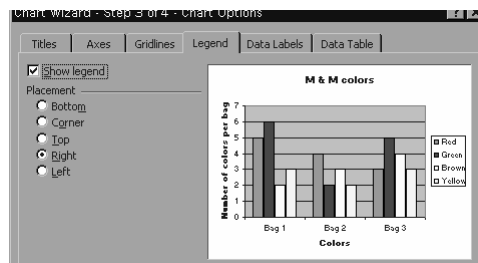
# Gridlines

- The default is to show the major gridlines for Y
- You can show as many or as few gridlines as you like by checking the boxes



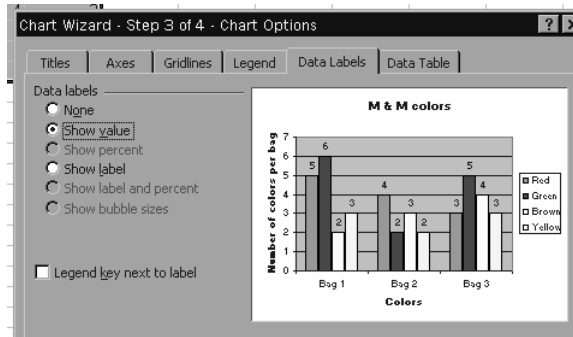
# Legends

- The legend is the small “box” on the RH side of your chart
- The default is to show the legend on the RH side
- You can change location of legend
- You can choose not to show a legend



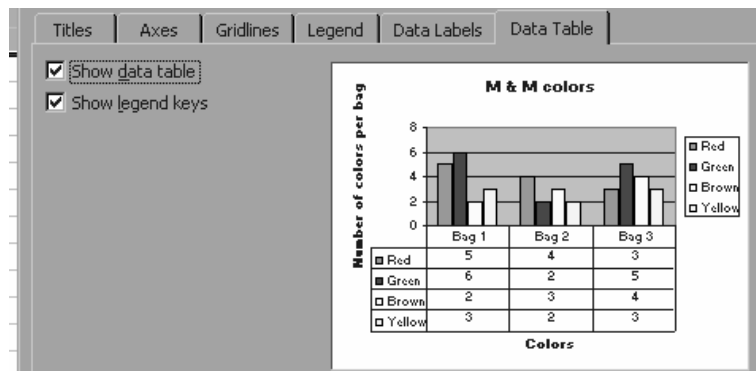
# Data Labels

- Data labels can show the value or label of each record
- The default is to show no data label
- This example shows the value only



# Data table

- A data table will show the same information that you selected from your spreadsheet
- This is an option you turn on or off.





## Changing elements of your chart

- You can change just about every element of your chart
  - Color of grid lines
  - Scale on Y axis
  - Tick marks
  - Axis titles
  - Color of data series
  - Color of legend
- You just double click on the element in the chart to open a Format window for that item

Double clicking on this gridline (or the numbers) will open the Format Axis window

The screenshot shows a spreadsheet with data for 'Bag 1' and 'Bag 3'. The bar chart displays the 'Number of colors per bag' on the Y-axis. The 'Format Axis' dialog box is open, showing the 'Patterns' tab. The 'Lines' section has 'Automatic' selected. The 'Major tick mark type' section has 'Outside' selected. The 'Minor tick mark type' section has 'None' selected. The 'Tick mark labels' section has 'None' selected. The 'Sample' section is empty.

	D	E
2	Bag 3	
4	3	
2	5	
3	4	
2	3	

Number of colors per bag

Bag 1

Format Axis

Patterns | Scale | Font | Number | Alignment

Lines

- Automatic
- None
- Custom

Style: [ ]

Color: Automatic

Weight: [ ]

Sample: [ ]

Major tick mark type

- None
- Outside
- Inside
- Cross

Minor tick mark type

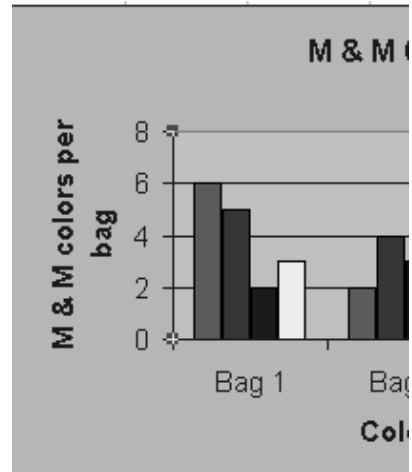
- None
- Outside
- Inside
- Cross

Tick mark labels

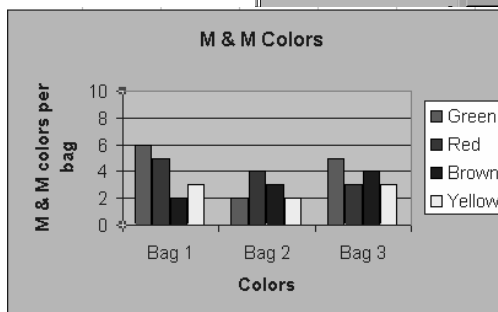
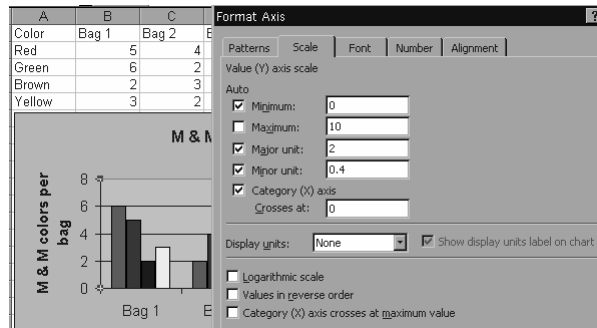
- None
- High
- Low
- Next to axis

The small "squares" show you what is selected

- From the Format Axis window, you can also set the scale
- Original shows 0 to 8 scale



- Changing the Y axis Maximum to 10 gives you this chart



B	C	D	E	F
Bag 1	Bag 2	Bag 3		
	5	4	3	
	6	2	5	
	2	3	4	
	3	2	3	

**M & M colors**

per bag

Bag 1 Bag 2 Bag 3

Colors

**Format Axis**

Patterns | Scale | Font | Number | Alignment

Lines

Automatic  
 None  
 Custom

Style: [dropdown]  
Color: Automatic  
Weight: [dropdown]

Major tick mark type

None  Outside  
 Inside  Cross

Minor tick mark type

None  Outside  
 Inside  Cross

Tick mark labels

None  High  
 Low  Next to axis

Sample

Double clicking here (or on the label) will only format the bottom line and label

B	C	D	E	F
Bag 1	Bag 2	Bag 3		
	5	4	3	
	6	2	5	
	2	3	4	
	3	2	3	

**M & M colors**

per bag

Bag 1 Bag 2 Bag 3

**Format Gridlines**

Patterns | Scale

Line

Automatic  
 None  
 Custom

Style: [dropdown]  
Color: Automatic  
Weight: [dropdown]

Sample

Double clicking on one of the inside gridlines opens Format Gridlines. You can also change the scale from this window as well

Bag 1	Bag 2	Bag 3
5	4	3
6	2	5
2	3	4
3	2	3

**M & M colors**

**Format Plot Area**

Border:  Automatic,  None,  Custom  
 Style: [Dropdown], Color: [Dropdown], Weight: [Dropdown]

Area:  Automatic,  None  
 [Color palette grid]  
 Fill Effects...  
 Sample: [Text box]

Double clicking on the background (between the grid lines) opens Format Plot Area

Color	Bag 1	Bag 2	Bag 3
Red	5	4	3
Green	6	2	5
Brown	2	3	4
Yellow	3	2	3

**M & M colors**

**Format Data Series**

Border:  Automatic,  None,  Custom  
 Style: [Dropdown], Color: Automatic, Weight: [Dropdown]

Area:  Automatic,  None  
 [Color palette grid]  
 Fill Effects...  
 Sample: [Text box]  
 Shadow  
 Invert if negative

- Double clicking on one of the data columns will select that series as well as the corresponding info in the legend
  - Change column for Green to green
  - You can also change the series order
  - Example: Make Green the first data shown

	Bag 1	Bag 2	Bag 3
Red	5	4	3
Green	6	2	5
Brown	2	3	4
Yellow	3	2	3

**M & M colors**

**Format Legend**

Patterns | Font | Placement

Border:  Automatic,  None,  Custom

Style: [Dropdown]

Color: Automatic [Dropdown]

Weight: [Dropdown]

Shadow

Area:  Automatic,  None

Fill Effects...

Double clicking on the legend will allow you to change the pattern, font and placement for the legend

Double clicking on the edge of the chart border will allow you to change or delete the border around the chart and add a fill color to the background of the chart

	Bag 1	Bag 2	Bag 3
Red	5	4	3
Green	6	2	5
Brown	2	3	4
Yellow	3	2	3

**M & M Colors**

**Format Chart Area**

Patterns | Font | Properties

Border:  Automatic,  None,  Custom

Style: [Dropdown]

Color: Automatic [Dropdown]

Weight: [Dropdown]

Shadow

Round corners

Area:  Automatic,  None

Fill Effects...

Double clicking on the edge of the chart border will allow you to change or delete the border around the chart and add a fill color to the background of the chart