

Visualizing Data

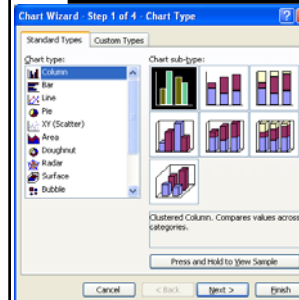
- ❖ Spreadsheets organize numerical data and calculations in tabular form
- ❖ Numerical information contained in a worksheet can be expressed visually in the form of a **chart**
 - ◆ Charts allow the user to show numerical data in ways that are meaningful and quickly understood
 - ◆ Easy to see trends both historical and predictive
 - ◆ Easy to compare data series and identify patterns



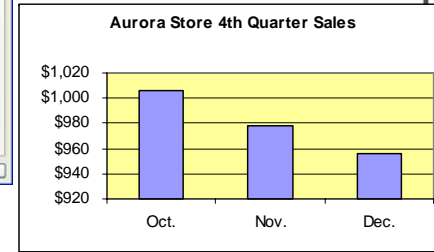
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Selecting a Range and Chart

First, the cells to be charted are selected



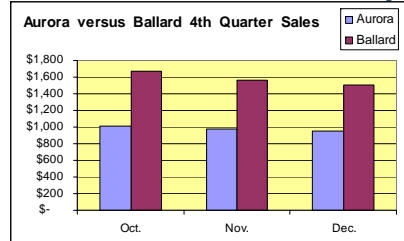
Catapult Coffee 4th Quarter Sales				
	Oct.	Nov.	Dec.	Total
Aurora	\$ 1,006	\$ 978	\$ 956	\$ 2,940
Ballard	\$ 1,675	\$ 1,566	\$ 1,502	\$ 4,743
Eastlake	\$ 1,378	\$ 1,340	\$ 1,198	\$ 3,916
Phinney	\$ 1,312	\$ 1,390	\$ 1,150	\$ 3,852
Total	\$ 5,371	\$ 5,274	\$ 4,806	\$ 15,451



Multiple Series Column Charts

- ❖ What is represented?
- ❖ Chart elements
 - ◆ **Category Labels** – descriptive text entries (Aurora, Ballard, Oct)
 - ◆ **Data Points** – numeric values (cell data)
 - ◆ **Data Series** – grouping of data points (2 data series exist in this chart specified by the row data)
- ❖ This is Column Chart
 - ◆ Compares two series
 - ◆ Multiple Data Series Chart

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Stacked Bar Chart

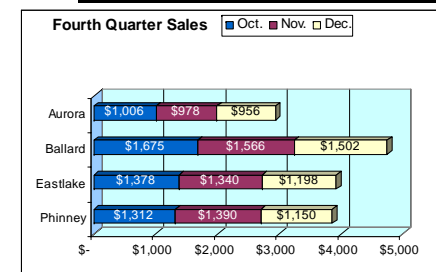
- ❖ What is represented?

cells to be charted

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Stacked Bar Chart

- ◆ Best for comparing multiple data series with a total value
- ◆ Compares Total Quarterly Sales for each location
- ◆ This chart also displays values



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Pie Charts: Parts of a Whole

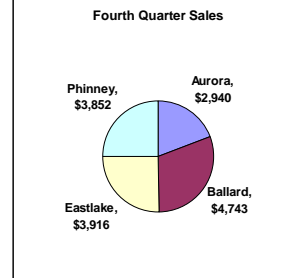
❖ What is represented?

cells to be charted

Catapult Coffee 4th Quarter Sales				
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❖ Pie Chart

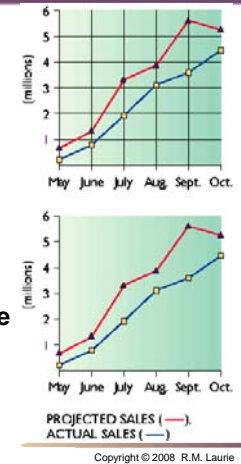
- ◆ Best for comparing Parts of a Whole
- ◆ Represent just a single value and shows parts of the whole
- ◆ Percentage of Sales by location
- ◆ This chart also displays values



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Line Charts: Trends

- ❖ Line Charts are the best way to visualize trends or cycles over a period of an extended period of time
- ❖ Line graphs are usually used when there are many values or complex data
- ❖ Examples:
 - ◆ Stock Price versus Time
 - ◆ Corporate Revenue versus Time
 - ◆ Sales versus Time



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Object Linking and Embedding (OLE)

- ❖ Create document in one application that contains objects from another application
- ❖ **Embedded object** – stored in the document
 - ◆ Excel chart becomes part of the Word document
- ❖ **Linked object** – stored in its own file
 - ◆ Changes in this file automatically updated in the main document
- ❖ **Multitasking** – the ability to have more than one application open at the same time
 - ◆ Use taskbar to switch between open applications

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