

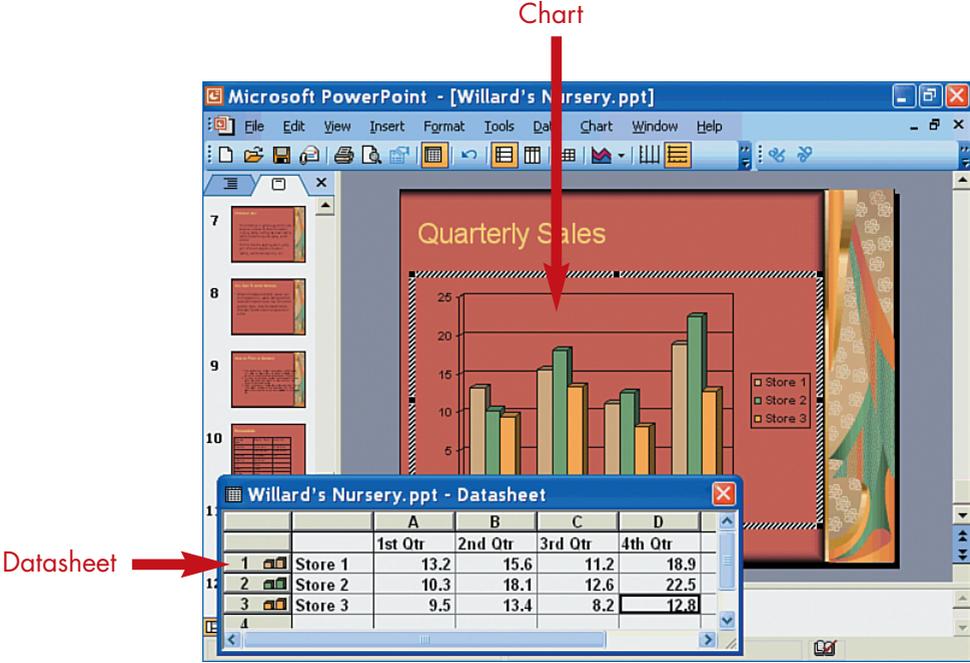
PART 7

Adding Charts and Diagrams

Charts and diagrams are a great way to present data to your audience. PowerPoint includes a charting feature that allows you to enter your own data to create a chart. You can choose from a variety of chart types, such as pie charts and bar graphs, and select chart colors that coordinate with your slide's color scheme.

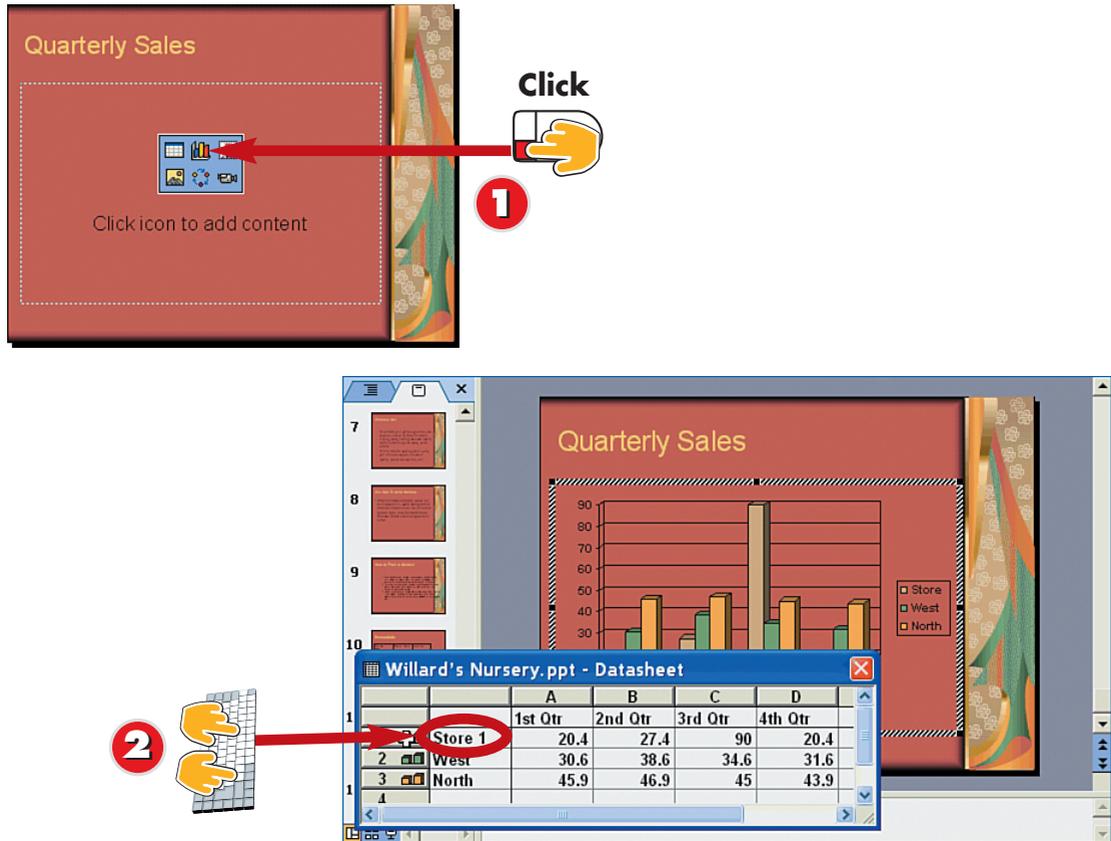
You can also create quick and easy diagrams such as organization charts, cycle diagrams, radial diagrams, pyramid diagrams, and more. Like the charting feature, the diagram feature lets you customize the appearance of the diagram as well as the information it displays.

PowerPoint's Charting Feature



Adding a Chart

Start



- 1 Click the **Insert Chart** icon in the placeholder slide object.
- 2 A datasheet appears, along with a default chart. To enter chart data, click in the first datasheet cell and type the data, and press **Enter**. PowerPoint moves the cursor to the next cell in the chart.

INTRODUCTION

You can create your own charts in PowerPoint using the charting feature. Several slide layouts include placeholder slide objects for creating charts. When activated, the chart feature opens a default column chart along with a datasheet. The datasheet resembles worksheets found in spreadsheet programs such as Microsoft Excel. You can enter your own chart information into the datasheet using rows and columns.

TIP

Adding a Chart Without a Chart Placeholder

You need not use a layout that already contains a chart placeholder; you can add a new chart to any slide. To do so, click the **Insert Chart** button on the Standard toolbar.



- 3 Continue adding your data to the cells. (Press **Tab** to move from cell to cell, or the arrow keys to move around the cells.) When you finish, click anywhere outside the datasheet.
- 4 PowerPoint returns you to Normal view, and the chart appears on the slide.

End

TIP

Enlarging the Datasheet

If you require more room in the datasheet for values, you can click and drag any corner of the datasheet to increase its size.

TIP

Resizing the Chart on the Slide

Click the chart to select it, and PowerPoint surrounds it with selection handles. You can then click and drag a handle to resize the chart. Charts act like any other slide object, which means you can resize them.

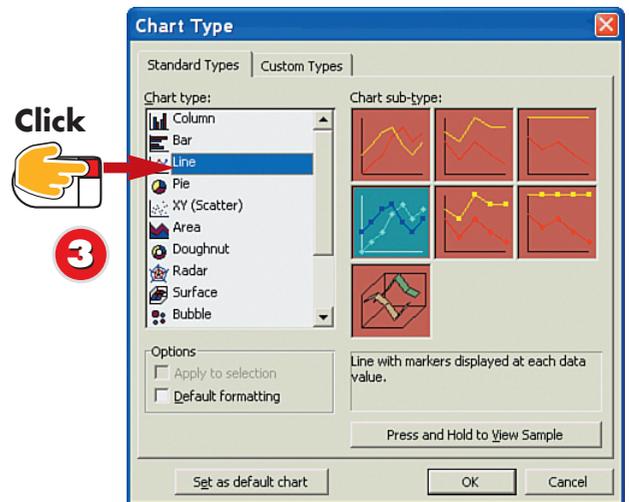
TIP

Deleting a Chart

To remove a chart object, first select the chart, and then press the **Delete** key on your keyboard.

Start

Changing the Chart Type



- 1** Double-click the chart.
- 2** Open the **Chart** menu and choose **Chart Type**.
- 3** The Chart Type dialog box opens. Click a chart type.

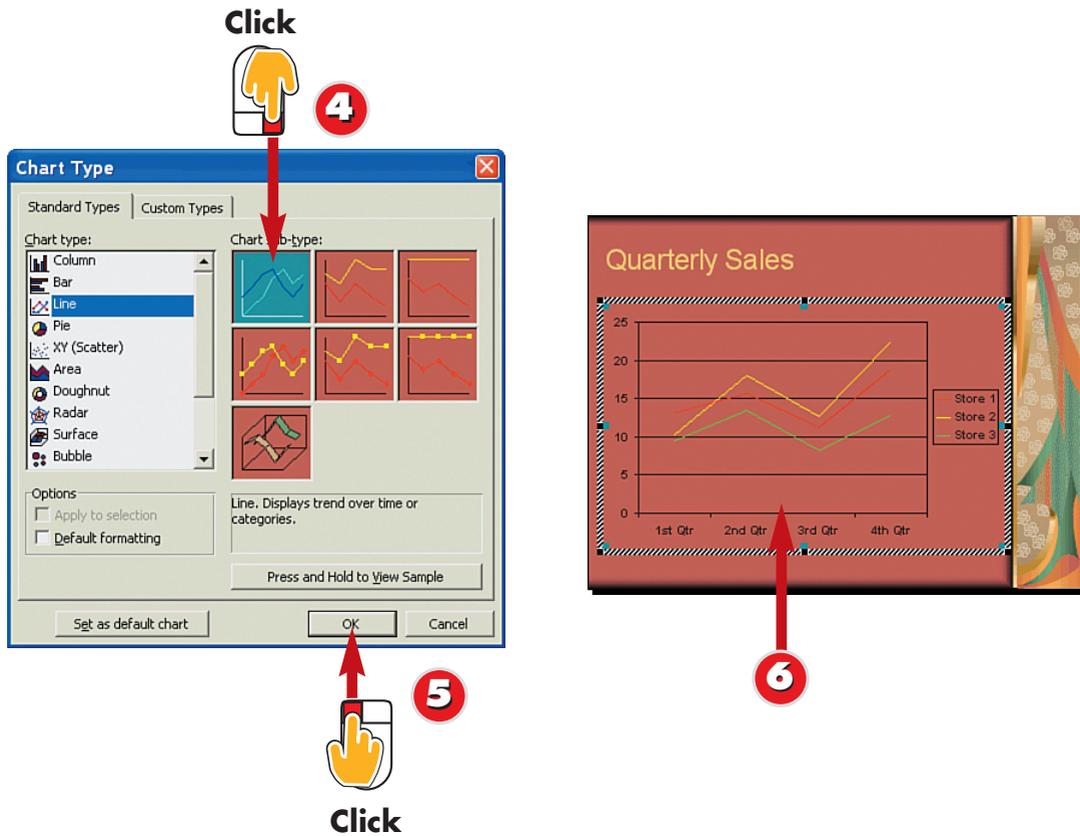
INTRODUCTION

By default, PowerPoint creates a column chart when you use the charting feature. You can, however, change the chart to another chart type, such as a pie chart or a line chart.

TIP

Which Chart Type Is Best?

The chart type you use depends on how you want to present the data. Use column, bar, and line charts to illustrate changes in values over time. Use pie charts to give percentage data a visual appearance.



- 4** Click a chart sub-type.
- 5** Click **OK**.
- 6** PowerPoint changes the chart type on the slide.

End

TIP

Chart Shortcut

When you double-click a chart, several chart-related buttons are added to the Standard toolbar; click the **down arrow** next to the **Chart Type** button to display a list of chart types, and then click the one you want to apply.

TIP

Exiting Chart Edit Mode

When you double-click a chart, PowerPoint switches you to Chart Edit mode and displays the chart along with the datasheet. To return to your slide, click anywhere outside the chart or datasheet.

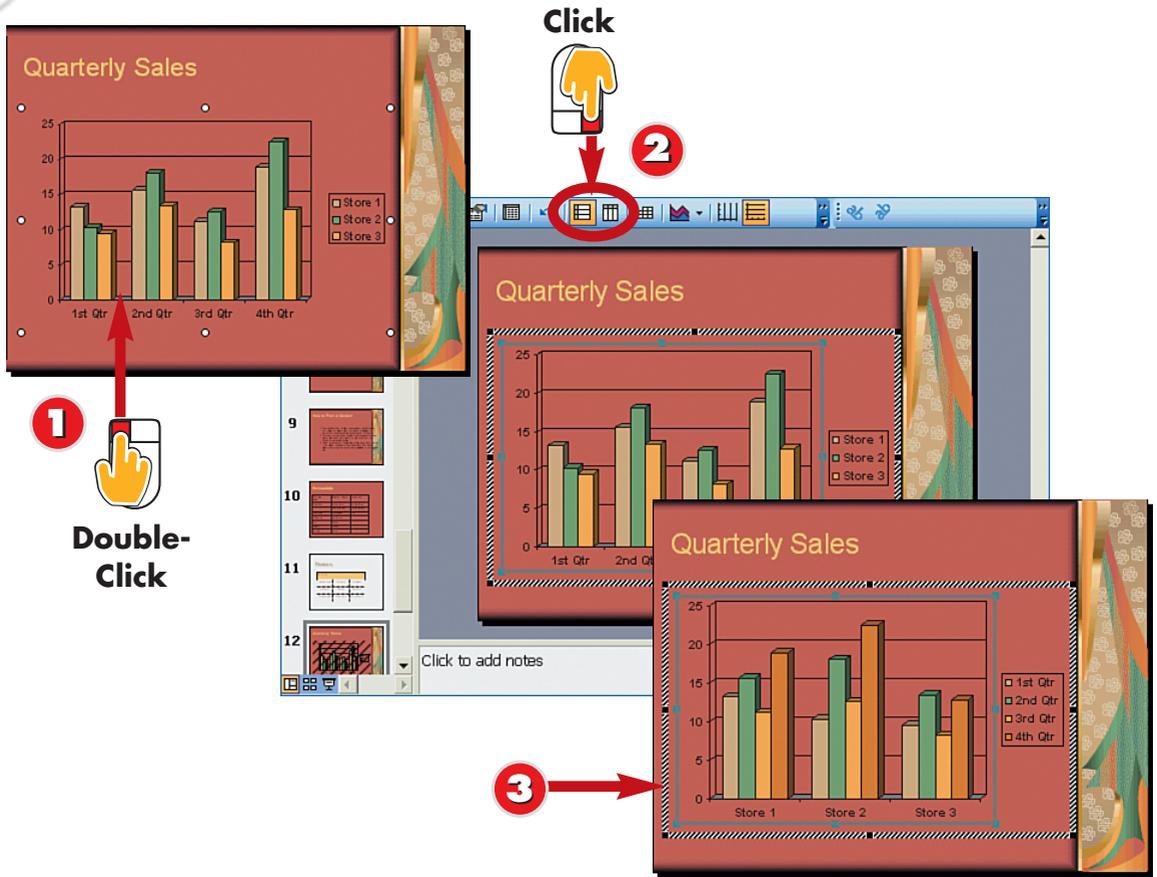
TIP

Hiding the Datasheet

In Chart Edit mode, click the **View Datasheet** button on the Standard toolbar to hide or display the datasheet.

Changing the Data Plot

Start



- 1 Double-click the chart.
- 2 Click the **By Row** or **By Column** button in the Standard toolbar.
- 3 PowerPoint changes the data plot.

End

INTRODUCTION

You can change the way in which your data is presented in a chart by changing the data plot. Data is plotted based on how you enter it into the datasheet, by row or by column. However, you can switch it around to change the data plot.

TIP

Displaying the Datasheet
Click the **View Datasheet** button on the Standard toolbar to hide or display the datasheet. For example, you might hide the datasheet to better see the chart area.

Adding the Datasheet to the Chart

Start

1 Double-Click

2 Click

3

	Store 1	Store 2	Store 3
1st Qtr	13.	10.	9.5
2nd Qtr	15.	18.	13.
3rd Qtr	11.	12.	8.2
4th Qtr	18.	22.	12.

- 1** Double-click the chart.
- 2** Click the **Data Table** button on the Standard toolbar.
- 3** PowerPoint adds the datasheet to the chart.

End

INTRODUCTION

By default, when you finish creating a chart, it displays on your slide without the datasheet that you used to enter values. You can, however, choose to display the datasheet as part of the chart to show your audience how you created the chart, or to print out with the slide.



TIP

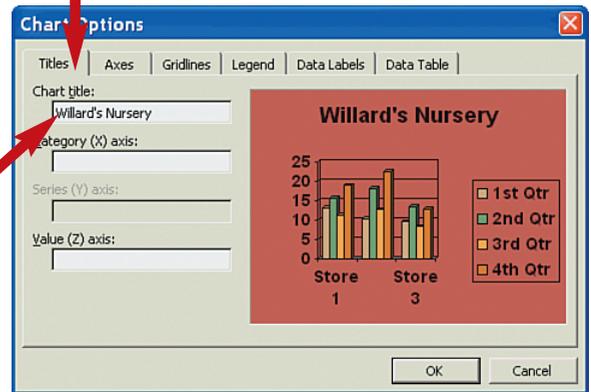
Removing the Datasheet
To remove the datasheet from the chart, double-click the chart, and then click the **Data Table** button again. The button toggles the datasheet on and off.

Start

Adding Chart Titles



Click

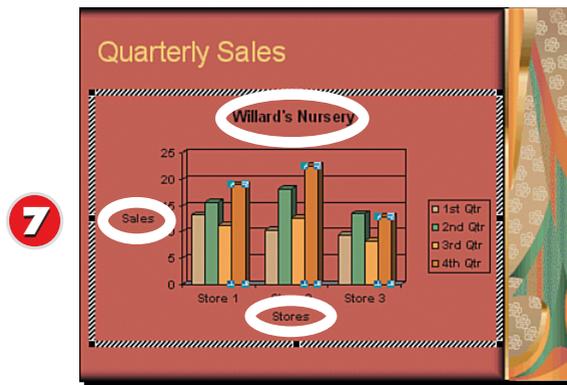
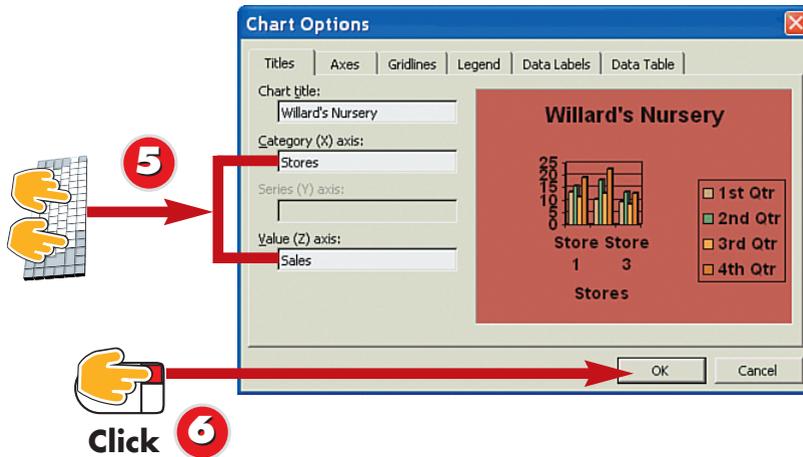


- 1** Double-click the chart.
- 2** Open the **Chart** menu and choose **Chart Options**.
- 3** The Chart Options dialog box opens. Click the **Titles** tab.
- 4** Click in the **Chart Title** field and type a chart title.

By default, PowerPoint charts do not include chart titles, but you can add a title using the Chart Options dialog box. You can also add titles to the x and y axes.

Moving Chart Titles

Once you add a title to your chart, you can reposition it at any time. Click the title to select its text box, and then click and drag it to move it on the chart.



- 5** Optionally, click inside an axis box and type a title for the axis.
- 6** Click **OK**.
- 7** PowerPoint adds the titles to the chart.

End

TIP

Title Heading or Chart Title?

If your slide layout already includes a title text box, you might not need an additional chart title.

TIP

Removing a Chart Title

To remove a title after you have added it to your chart, simply click the title text box and press the **Delete** key on your keyboard. You can also reopen the Chart Options dialog box to the **Titles** tab and delete the title. To do so, double-click the chart, open the **Chart** menu, and choose **Chart Options**.

Changing Chart Options

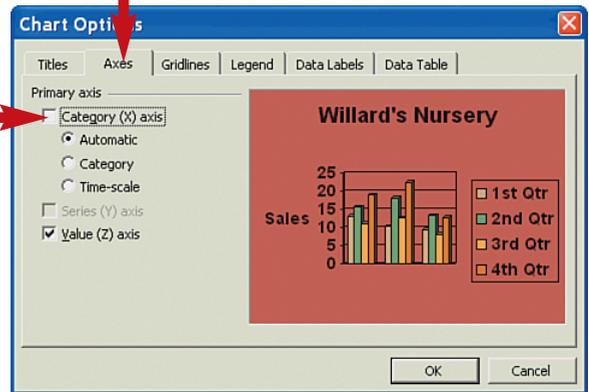
Start



Click



Click



- 1 Double-click the chart.
- 2 Open the **Chart** menu and choose **Chart Options**.
- 3 The Chart Options dialog box opens. Click the **Axes** tab.
- 4 Click an axis check box to display or hide the axis label. A check mark indicates that the label is displayed, while no check mark indicates that the label is hidden.

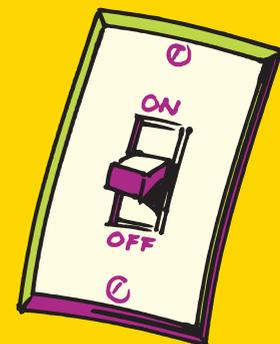
INTRODUCTION

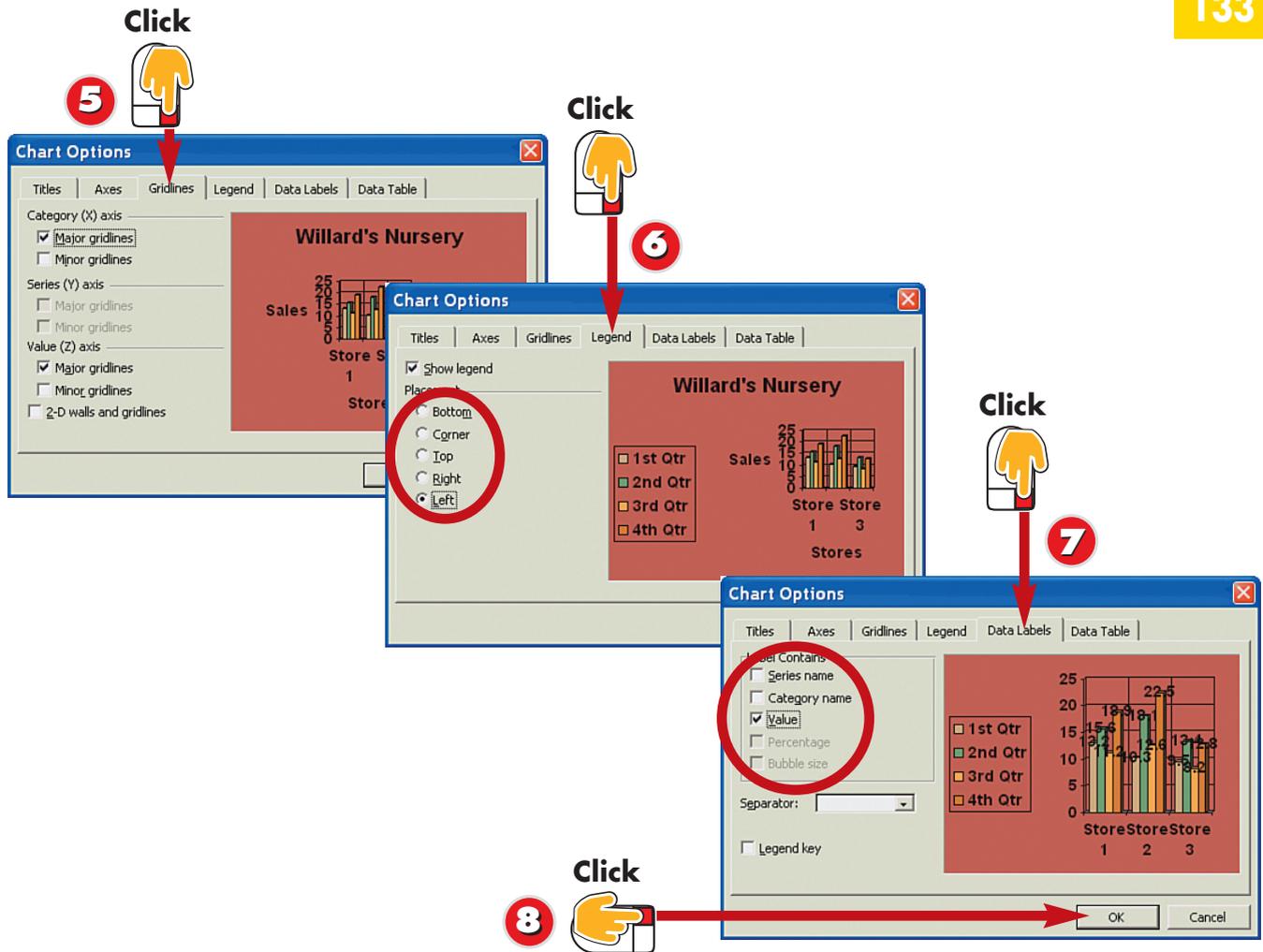
Using the Chart Options dialog box, you can display or hide axis labels, gridlines, and data labels; and control the placement of the legend. Each tab in the dialog box offers options for controlling what appears on your chart and lets you preview what the changes look like before applying them to the chart.

TIP

Which Axis Is Which?

The x axis is the horizontal axis on the chart. The y axis is the vertical axis on the chart.





- 5** Click the **Gridlines** tab, and click the gridlines you want displayed or hidden.
- 6** Click the **Legend** tab, and click the placement option you want to apply.
- 7** Click the **Data Labels** tab, and click the labels you want displayed or hidden.
- 8** Click **OK** to close the dialog box and apply your changes.

End

Turning Off Your Legend

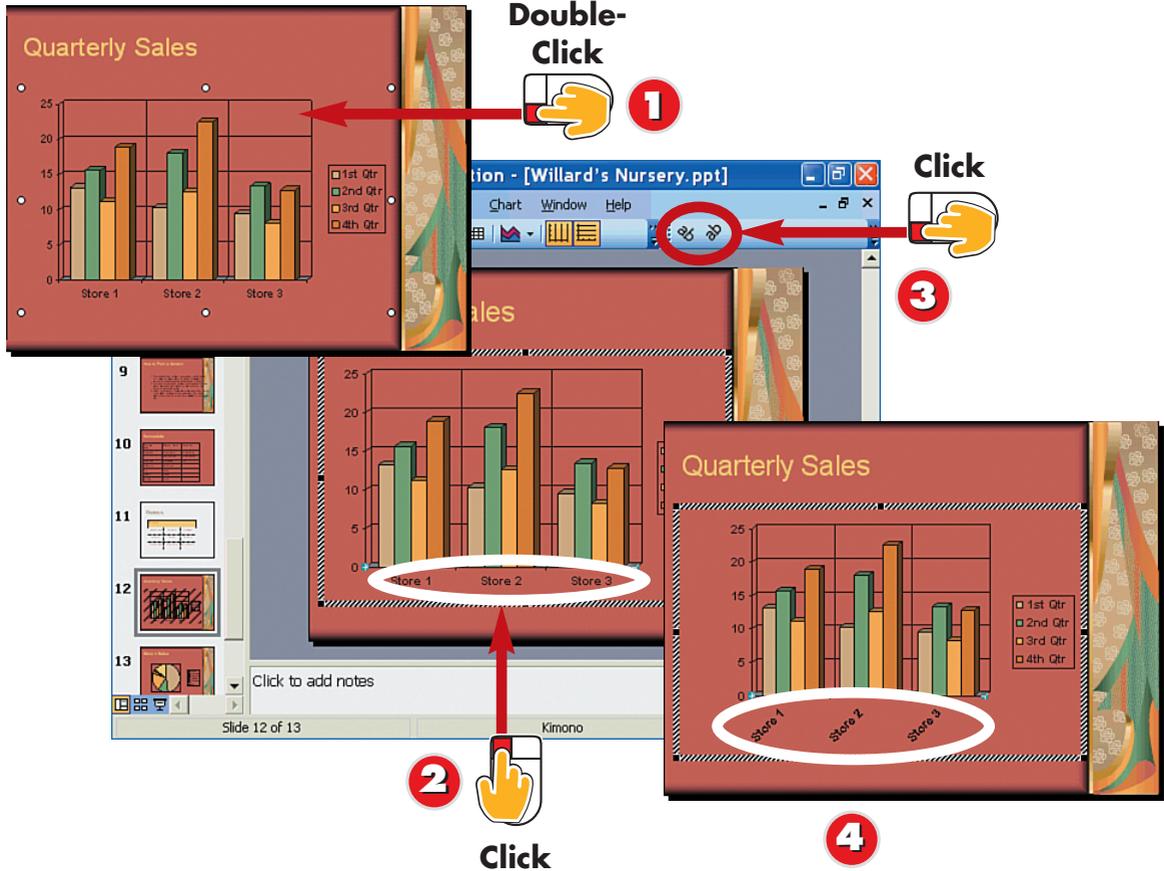
TIP Legends explain the color scheme for the data in your chart, but you may decide to turn yours off to free up space or if the chart data is pretty self-explanatory. To do so, open the Chart Options dialog box to the **Legend** tab and deselect the **Show Legend** check box.

Data Label Clutter

TIP By default, your chart's data labels are turned off because data labels tend to add clutter to charts. In addition, the more values you plot, the harder it is to read the labels. If your chart is simple, however, you can turn the labels on.

Rotating the Axis Labels

Start



- 1 Double-click the chart.
- 2 Click the axis you want to edit.
- 3 Click the **Angle Clockwise** or **Angle Counterclockwise** button on the Formatting toolbar.
- 4 PowerPoint angles the labels.

End

INTRODUCTION

If your axis labels are long, you can rotate them slightly to make them easier to read. For example, if your x-axis labels bump up against each other because of your chart's size or the amount of data it contains, you can angle the labels to make them more legible.

TIP

toggling On or Off

The **Angle Clockwise** and **Angle Counterclockwise** buttons toggle the angled labels on or off. To return to regular text, simply click the appropriate angle button again.

Formatting Chart Numbers

Start

1 Double-Click

2 Click & Drag

3 Click

4

	A	B	C	D	E	F
1	Birdseed	Birdhouse	Birdfeeder	Birdbaths	Birdhouses	Birdhouses
2	Store 1	\$321.76	\$174.39	\$278.90	\$72.45	\$81.55
3						
4						

- 1** Double-click the chart.
- 2** In the datasheet, click and hold while dragging the mouse across the chart numbers you want to format.
- 3** Click the **Currency**, **Percent**, or **Comma** button on the Formatting toolbar.
- 4** PowerPoint applies the formatting to the numbers in the datasheet and on the chart.

End

INTRODUCTION

You can apply number formatting to your datasheet to make your chart data display currency, percent, or comma symbols.

TIP

My Datasheet Is Missing!

If your datasheet is hidden, click the **View Datasheet** button on the Standard toolbar in Chart Edit mode to display the datasheet again.

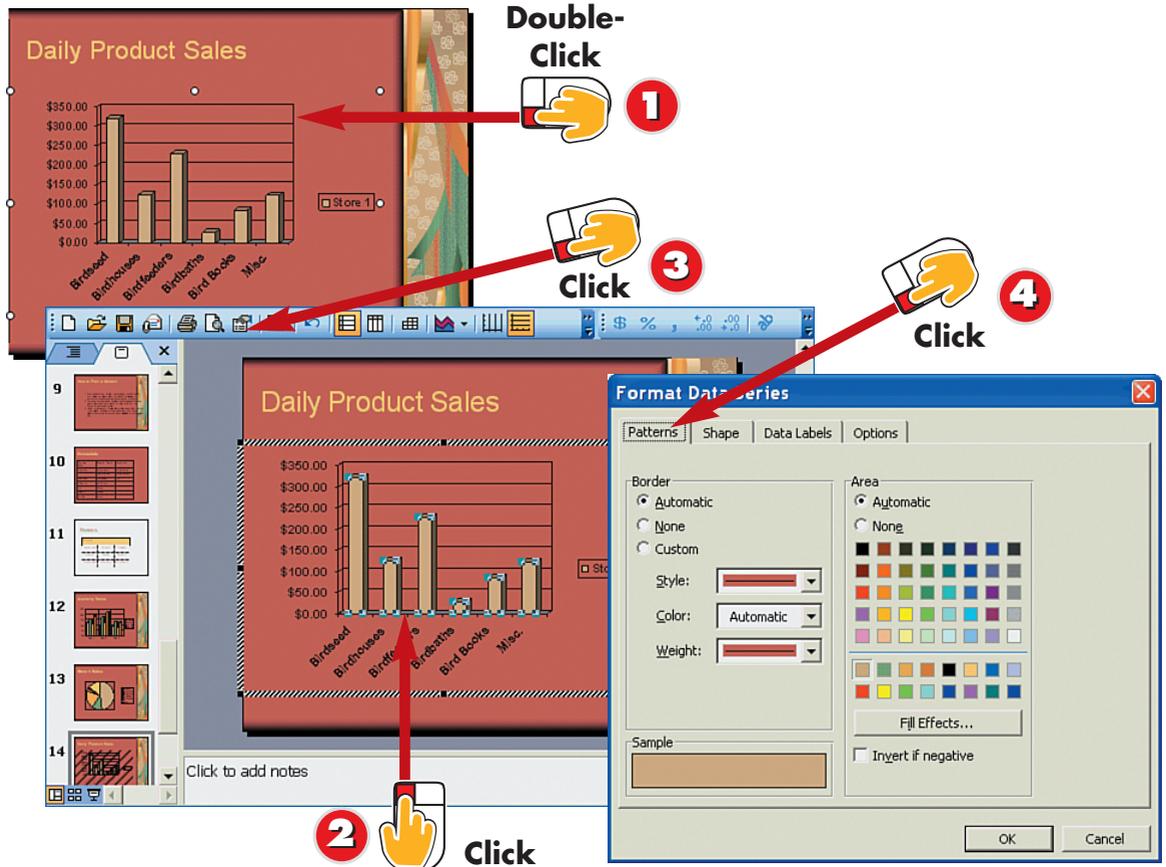
TIP

Controlling Decimals

To change the number of decimal places displayed in the data, click the **Increase Decimal** or **Decrease Decimal** buttons on the Formatting toolbar.

Start

Formatting the Data Series



- 1 Double-click the chart.
- 2 Click the data series you want to change.
- 3 Click the **Format Data Series** button.
- 4 The Format Data Series dialog box opens. Click the **Patterns** tab.

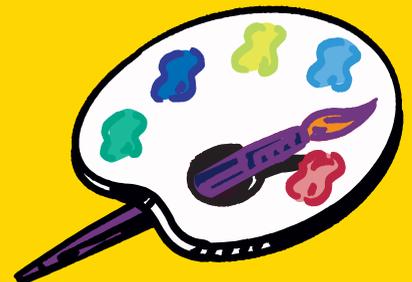
INTRODUCTION

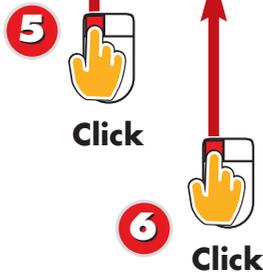
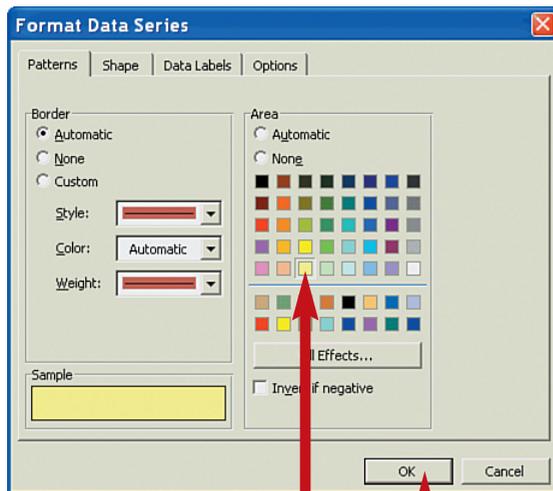
Another way in which you can customize your chart is to choose a different fill color for your chart data, also called the *data series*. For example, you might choose colors to go with your slide's color scheme or to make your data more legible to your audience.

TIP

Quick Color

You can also click the **Fill Color** button on the Formatting toolbar and select a color from the pop-up color palette to change the fill color of your data series.





7

- 5** Click a fill color.
- 6** Click **OK**.
- 7** PowerPoint applies the new color to the data series.

End

TIP

Border Control

You can use the **Border** options in the Format Data Series dialog box's **Patterns** tab to change the outline that surrounds the data series. You'll find options for setting a line color as well as line thickness.

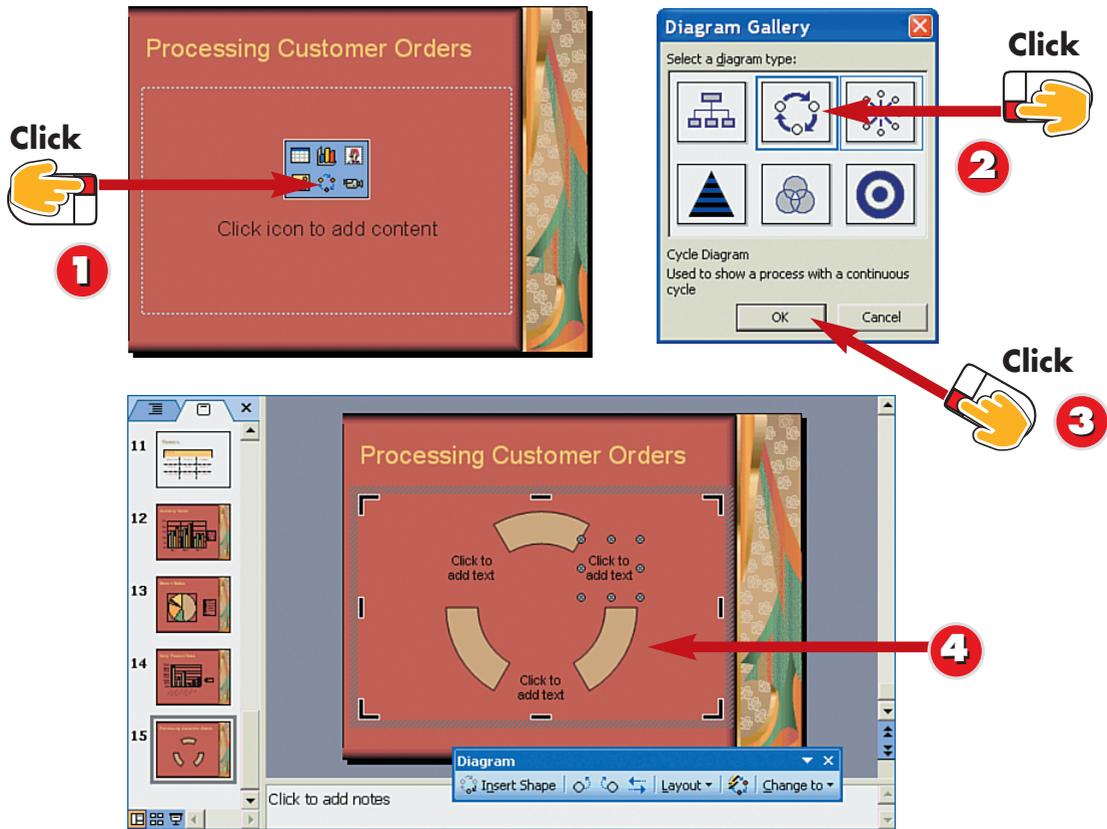
TIP

Formatting Legend Colors

You can format the colors used in your chart's legend using the Format Legend dialog box, which you open by double-clicking the legend. To apply a color to the legend's background, choose a color in the **Patterns** tab. To change the font, click the **Font** tab and select another.

Adding a Diagram

Start



- 1** Click the **Insert Diagram** icon in the placeholder slide object.
- 2** The Diagram Gallery dialog box opens. Click the type of diagram you want to use.
- 3** Click **OK**.
- 4** PowerPoint creates the diagram and places it on the slide along with the Diagram toolbar.

INTRODUCTION

You can create diagrams to show cycles, hierarchy patterns, and more. PowerPoint's diagram feature includes organizational charts, cycle, radial, pyramid, Venn, and target diagram types. When you add a diagram, PowerPoint inserts it onto your slide as a slide object, along with placeholder text.

TIP

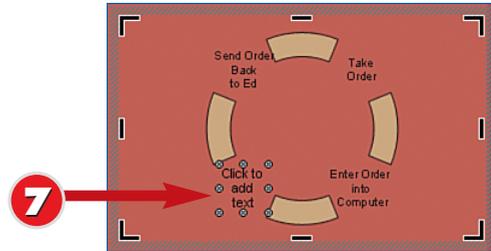
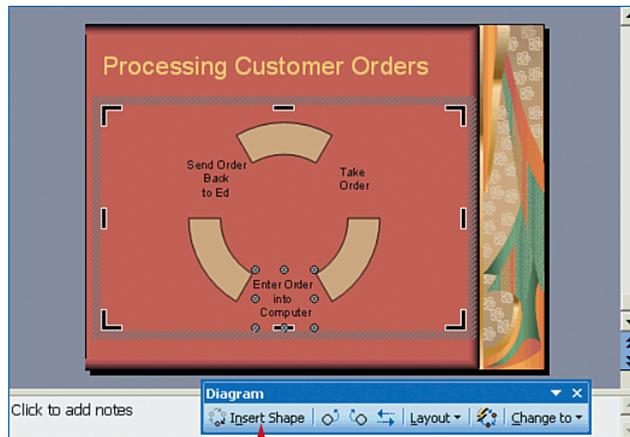
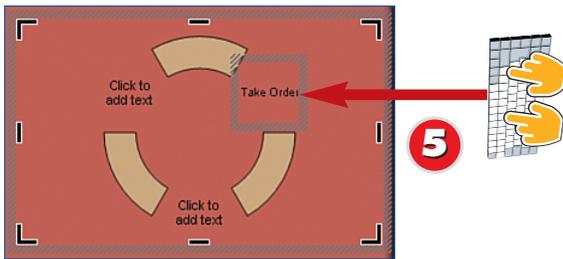
Adding Organization Charts

Although classified as a type of diagram, organization charts work a bit differently. See the task "Adding an Organization Chart" to learn how to add one to your slide.

TIP

Building a Diagram from Scratch

You need not use a layout that contains a diagram placeholder; you can add a new diagram to any slide. Simply click the **Insert Diagram** button on the Drawing toolbar and add a diagram as shown in these steps.



- 5** Click each placeholder text box and type your own diagram text.
- 6** Click **Insert Shape** to add another shape to your diagram.
- 7** PowerPoint inserts the new shape and another text box for your diagram text. The new shape appears and assumes the next position in the order of the diagram's hierarchy.

End

TIP

Reversing the Order

You can click the **Reverse Diagram** button on the Diagram toolbar to reverse the order of the shapes in your diagram.

TIP

Resizing Diagrams

Click the **Layout** button on the Diagram toolbar to reveal several commands for controlling the size of the diagram. Select the **Fit Diagram to Contents** command to resize the diagram around the current contents.

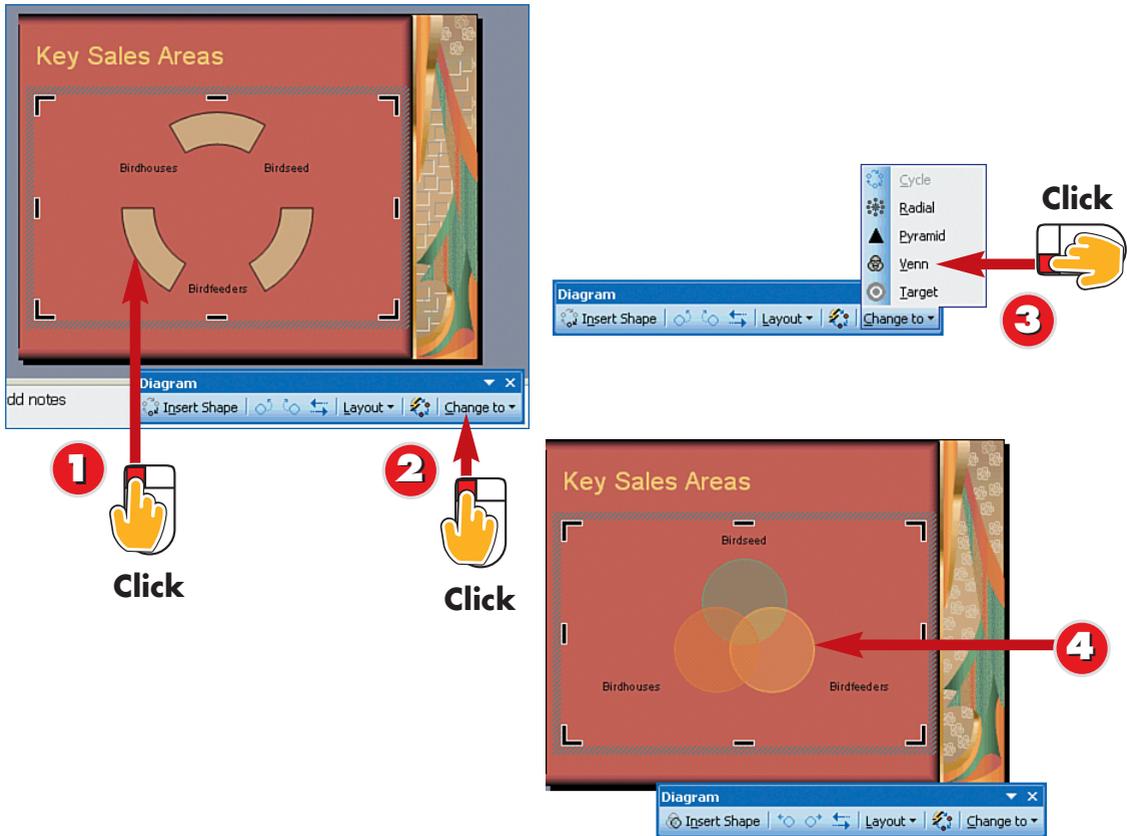
TIP

Changing Flow

You can click the **Move Shape Forward** or **Move Shape Backward** buttons in the Diagram toolbar to change the position of the current shape in the diagram.

Changing the Diagram Style

Start



- 1 Click the diagram to select it.
- 2 Click the **Change To** button on the Diagram toolbar.
- 3 Click a new style.
- 4 PowerPoint applies the style.

End

INTRODUCTION

If you added a diagram to your slide, you can swap diagram styles at any time. Using the Diagram toolbar, you can assign another diagram style without affecting any data you have previously entered into the diagram.

TIP

Changing Text Formatting

To assign another font to your diagram text, simply select the text and click the **down arrow** next to the **Font** button on the Formatting toolbar to choose another font style.

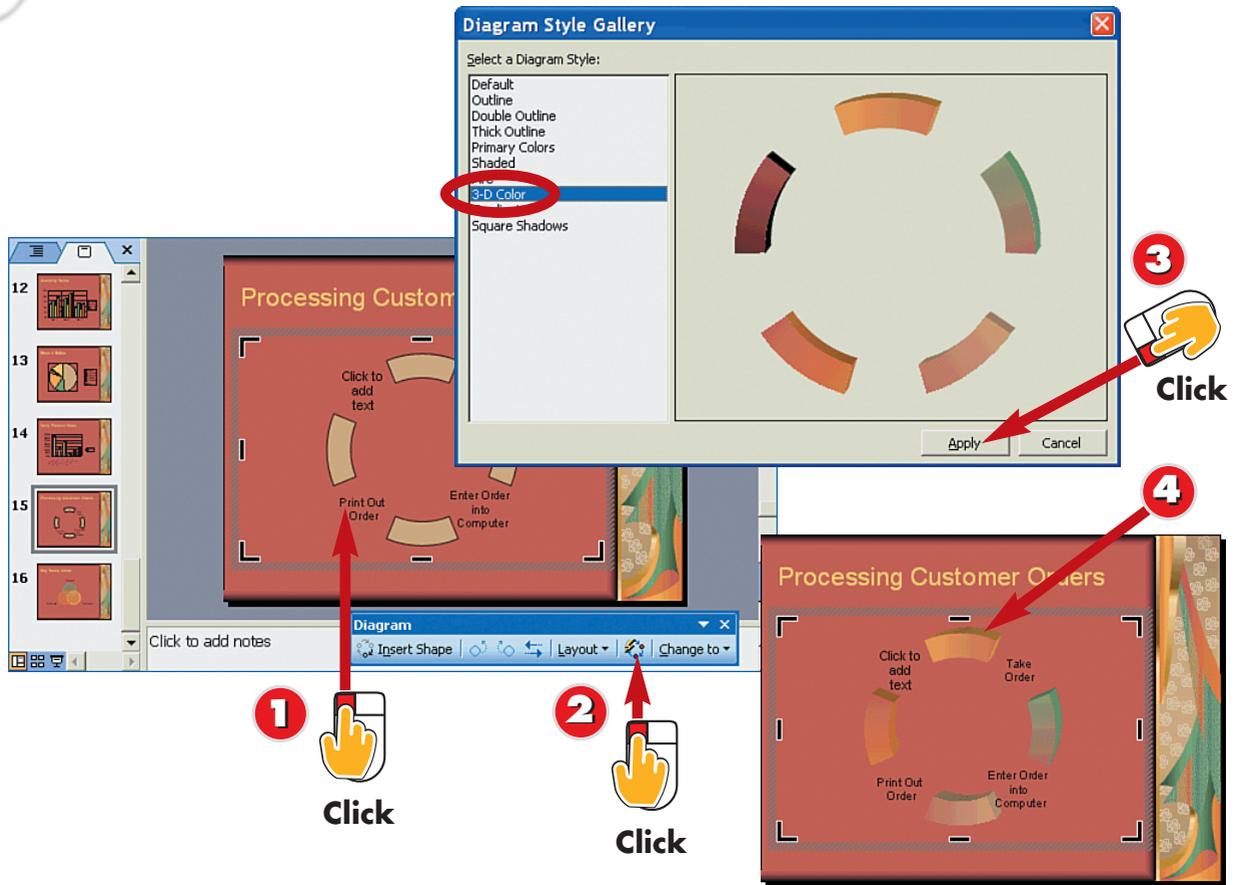
TIP

Diagram Styles

The diagram style you should choose depends on the order in which you want to present the diagram flow. For example, a cycle diagram shows continuous flow in a circular pattern, while a radial diagram shows outward flow from one source.

Formatting a Diagram

Start



- 1 Click the diagram to select it.
- 2 Click the **AutoFormat** button on the Diagram toolbar.
- 3 The Diagram Style Gallery dialog box opens. Click a style and click **Apply**.
- 4 PowerPoint applies the style.

End

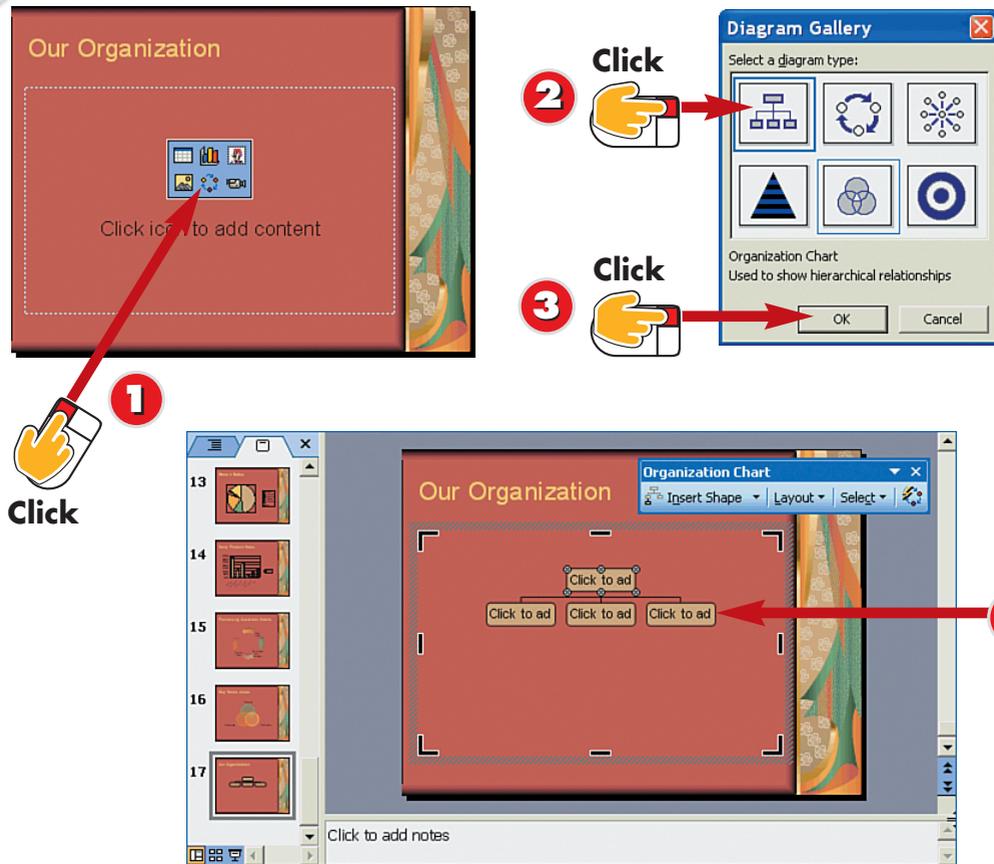
INTRODUCTION

When you add a diagram to a slide, PowerPoint applies default formatting to the diagram. With the AutoFormat feature, you can change the diagram's shape, colors, and style to something more compatible with your presentation design.



Adding an Organization Chart

Start



- 1** Click the **Insert Diagram** icon in the placeholder slide object.
- 2** The Diagram Gallery dialog box opens. Click the **Organization Chart** option.
- 3** Click **OK**.
- 4** PowerPoint creates the chart and places it on the slide along with the Organization Chart toolbar.

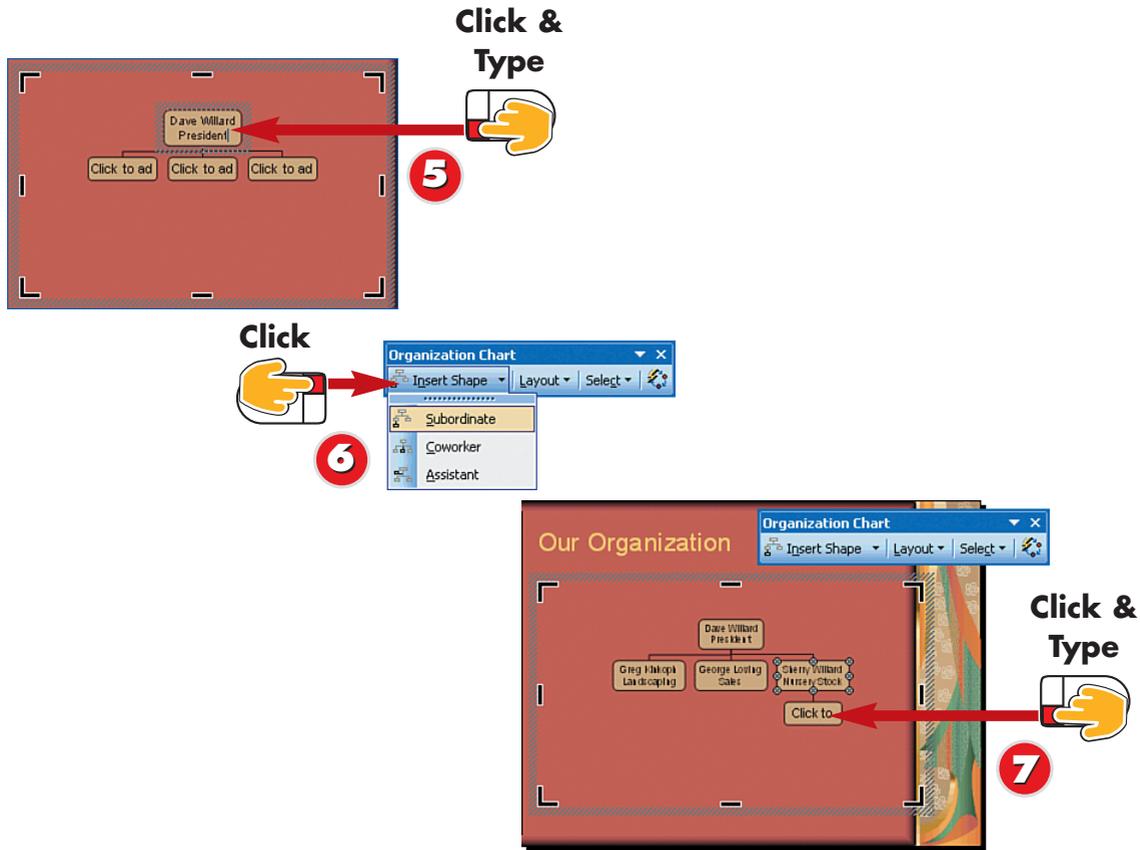
INTRODUCTION

Add an organization chart to a slide to show a structure, such as a corporate structure or a chain of command. You can then add shapes to the chart to extend the structure. Organization chart shapes are classified as subordinate, coworker, or assistant, and are connected by lines called *connecting lines*. Subordinate shapes are added directly below the current shape. Coworker shapes are added to the right of the current shape. Assistant shapes are added off to the side, yet below the current shape.

TIP

Using Another Layout

By default, PowerPoint builds your organization chart using a standard layout that starts with one shape at the top, like a pyramid. You can choose from several other layouts if you click the **Layout** button on the Organization Chart toolbar.



- 5** Click a shape and type your own chart text; repeat for each shape in the organization chart.
- 6** To add another block to the chart, click the shape you want to add a new shape to, click the **Insert Shape** button on the Organization Chart toolbar, and click a shape type.
- 7** PowerPoint adds the shape and connects it to the current shape. Click the new shape and type the desired text.

End

TIP

Changing the Formatting

You can use the AutoFormat feature to change the organization chart style. Click the **AutoFormat** button on the Organization Chart toolbar to open the Organization Chart Style Gallery dialog box, where you can choose from a variety of different shapes and styles for your chart. Click a style, and click **Apply**.

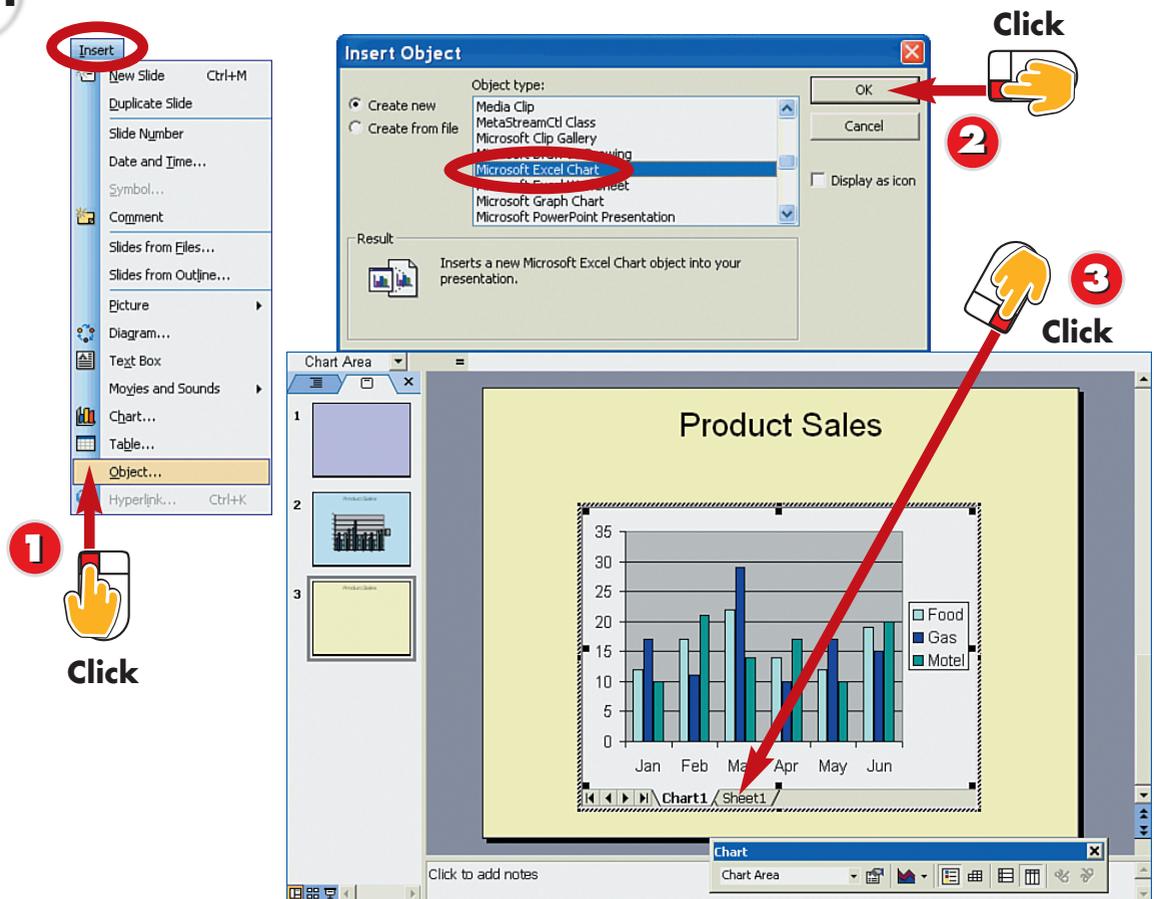
TIP

Adding a New Organization Chart

You need not use a layout that already contains a diagram placeholder; you can add a new organization chart to any slide. Click the **Insert Diagram** button on the Drawing toolbar.

Start

Adding a Microsoft Excel Chart



- 1** Open the **Insert** menu and choose **Object**.
- 2** The **Insert Object** dialog box opens. Click **Excel Chart** and click **OK**.
- 3** PowerPoint displays a worksheet, a chart and the **Chart** toolbar. Click the **Sheet1** tab.

INTRODUCTION

If you are an experienced Microsoft Excel user, you can add a new Excel chart and worksheet to your slide and enter your own chart data. When you activate this feature, a single worksheet and a chart sheet display on your slide. The toolbars also include Excel tools, such as the AutoSum and Paste Function tools, which you can use to create formulas and format the worksheet cells.

TIP

Zooming

You might need to zoom your view of the chart to better see the data you want to enter. See Part 1 to learn more about zooming in or out to see slides.

4 Enter your chart data.

	Birdseed	Birdhouses	Birdfeeders
Jan	12	17	10
Feb	17	11	21
Mar	22	29	14
Apr	14	10	17
May	12	17	10
Jun	19	15	20

5 Click the **Chart1** tab to view the data as a chart.

6 To change the chart type, click the **Chart Type** button in the Chart toolbar and select a type from the options that appear.

7 The new chart type is applied. Click anywhere outside the chart to deselect the chart.

- 4** Enter your chart data.
- 5** Click the **Chart1** tab to view the data as a chart.
- 6** To change the chart type, click the **Chart Type** button in the Chart toolbar and select a type from the options that appear.
- 7** The new chart type is applied. Click anywhere outside the chart to deselect the chart.

End

TIP

Editing a Chart

To return to the worksheet you used to create the chart, double-click on the chart.

TIP

Adding a Worksheet

To add a plain worksheet—but no Excel chart—to your slide, open the **Insert** menu and choose **Object** to open the Insert Object dialog box. Select **Microsoft Excel Worksheet** and click **OK**. A single worksheet is added.

TIP

Adding an Existing Chart

Use the Copy and Paste commands to add an existing Excel chart to a slide. Open Excel, select the chart, and click the **Copy** button. Return to PowerPoint, click where you want the chart to go, and click the **Paste** button.