Create Forms 5

KEY TERMS

- Blank Form tool
- common filters
- filter
- filter by form
- Form Design button
- Form tool
- Form Wizard
- Themes

You are the owner of the Graphic Art Institute, a small fine-arts gallery dedicated to presenting challenging and contemporary visual arts and educational programs. The current exhibition is successfully under way; you are now calling for submissions for the next exhibition—a juried art show featuring photographic work from the local region. The competition is open to all regional artists who use photographic processes in their work. This particular event will be open to digital submissions. As each submission is received, you will enter the artist and image information into an Access database for easy retrieval. In this lesson, you learn how to create forms using a variety of methods; how to apply a Theme to a form; and how to sort and filter data within a form.
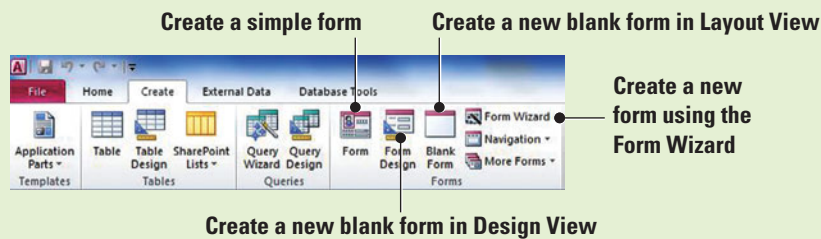
SOFTWARE ORIENTATION

Forms Group

The Forms group (Figure 5-1) is located on the Create tab in the Ribbon and can be used to create a variety of forms.

Figure 5-1

Forms group

Create a simple form

Create a new blank form in Layout View

Create a new form using the Form Wizard

Create a new blank form in Design View

Use this figure as a reference throughout this lesson as well as the rest of this book.

CREATING FORMS

The Bottom Line

A form is a database object that you can use to enter, edit, or display data from a table or query. Forms can be used to control access to data by limiting which fields or rows of data are displayed to users. For example, certain users might need to see only certain fields in a table. Providing those users with a form that contains just those fields makes it easier for them to use the database. Think of forms as windows through which people see and reach your database in a more visually attractive and efficient way.

You can create forms in several different ways, depending on how much control you want over the form's design. Forms that include all fields in a table can be quickly created through a single mouse-click by using the Form tool, or you can control the number of fields you'd like to include on the form as well as the layout of the form by using the Form Wizard. You have the most flexibility with the amount and placement of fields on the form by using Layout or Design View, with Design View giving you the greatest control over field placement and properties. Finally, you can quickly apply a chosen theme to the form to modify its color and font scheme using the Themes command. In this section, you practice creating forms using a variety of these skills.

Creating a Simple Form

You can use the **Form tool** to create a form with a single mouse-click. When you use this tool, all the fields from the underlying data source are placed on the form. Access creates the form and displays it in Layout View. You can begin using the new form immediately, or you can modify it in Layout View or Design View to better suit your needs. In this exercise, you create a simple form by using the Form tool.

To use the Form tool to create a simple form, first click in the Navigation Pane on the table that contains the data you want to see on the form. On the Create tab, in the Forms group, click Form.

To save your form design, click the File tab and click Save. Key a name in the Form Name box and click OK. After you save your form design, you can run the form as often as you want. The design stays the same, but you see current data every time you view the form. If your needs change, you can modify the form design or create a new form that is based on the original.

STEP BY STEP   **Create a Simple Form**

GET READY. Before you begin these steps, be sure to **LAUNCH** Microsoft Access.

@ The *Graphic Art* file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** the *Graphic Art* database from the data files for this lesson.
2. **SAVE** the database as *Graphic Art XXX* (where *XXX* is your initials).
3. In the Navigation Pane, click the **Photo Exhibit** table. This is the table for which you will create a form.
4. On the Create tab, in the Forms group, click the **Form** button. Access creates the form and displays it in Layout View, as shown in Figure 5-2. Your form may be slightly different.
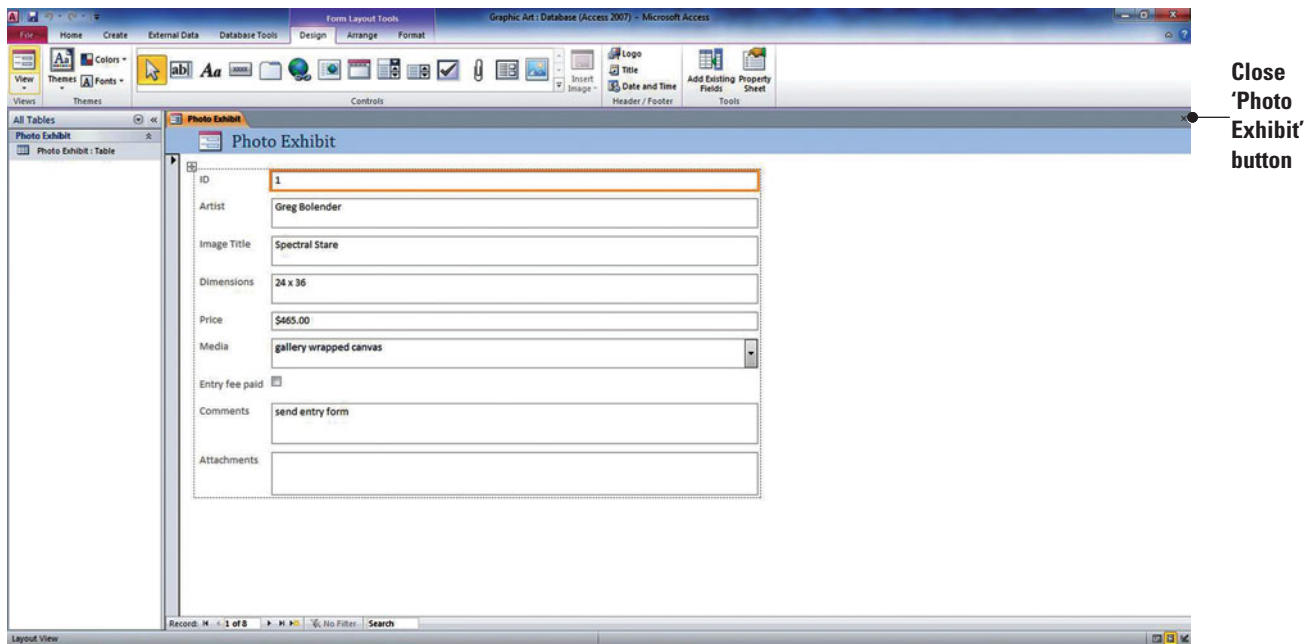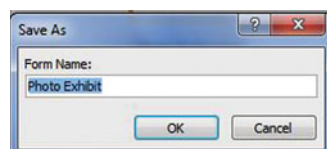

Figure 5-2

Simple form

5. Click the **File** tab and click **Save**. The Save As dialog box appears, as shown in Figure 5-3.

Figure 5-3

Save As dialog box

Take Note   You can use the record navigation buttons at the bottom of a form to navigate among the form's records, just as you used them to navigate among records in a table in Lesson 3.

6. Click **OK** to accept the Photo Exhibit form name suggested by Access. The form name appears in the Navigation Pane.

7. Click the **Close** button on Photo Exhibit to close the form.

8. **LEAVE** the database open.

PAUSE. LEAVE Access open to use in the next exercise.

Creating a Form in Design View

When you click the **Form Design button**, a new blank form is created in Design View. Design View gives you a more detailed view of the structure of your form than Layout View. The form is not actually running when it is shown in Design View, so you cannot see the underlying data while you are making design changes. In this exercise, you create a new blank form in Design View and manually add fields to it.

You can fine-tune your form's design by working in Design View. To switch to Design View, right-click the form name in the Navigation Pane and then click Design View. You can also use the View button on the Home tab on the Ribbon. You can add new controls—used to enter, edit, and find information—and fields to the form by adding them to the design grid. Plus, the property sheet gives you access to a large number of properties that you can set to customize your form.
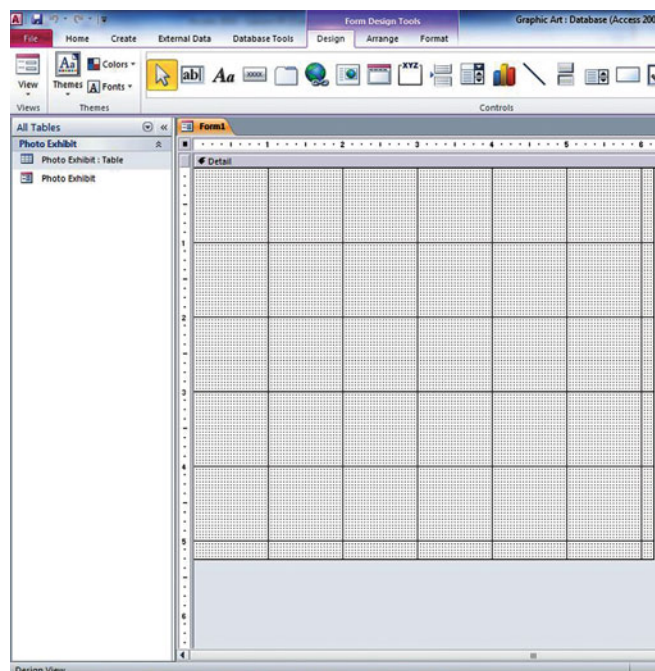
STEP BY STEP   **Create a Form in Design View**

USE the database that is open from the previous exercise.

1. On the Create tab, in the Forms group, click the **Form Design** button. A new blank form is created in Design View, as shown in Figure 5-4.
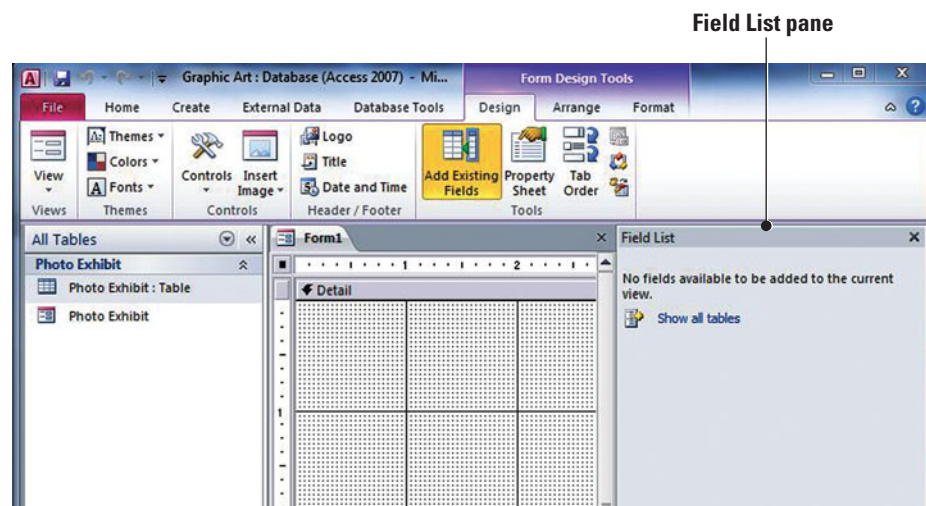
Figure 5-4

New blank form in Design View

2. On the Form Design Tools Design contextual tab, in the Tools group, click the **Add Existing Fields** button. The Field List pane appears, as shown in Figure 5-5.

Figure 5-5

Field List pane

Another Way
You can also display the Field List pane by clicking Alt+F8.

3. Click the **Show all tables** link, then the **expand button** to the left of the table name, as shown in Figure 5-6. The available fields display from the Photo Exhibit table, as shown in Figure 5-7.

Figure 5-6

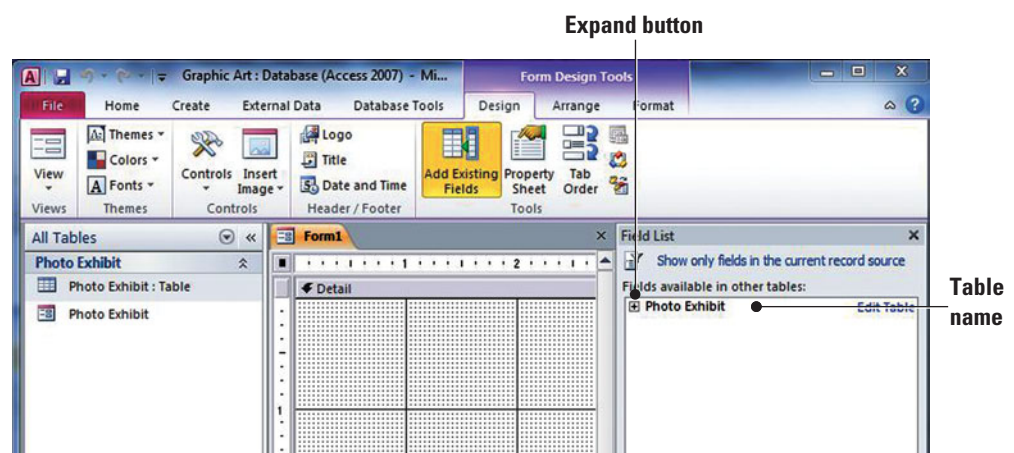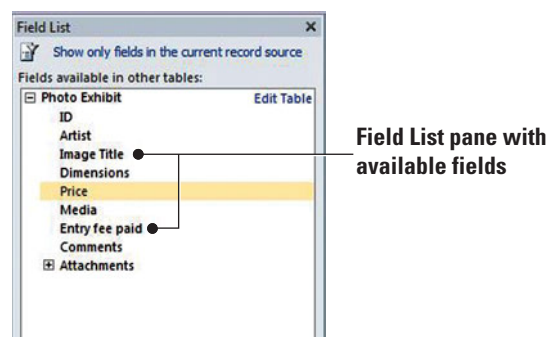Field List pane with Show all tables link and expand button
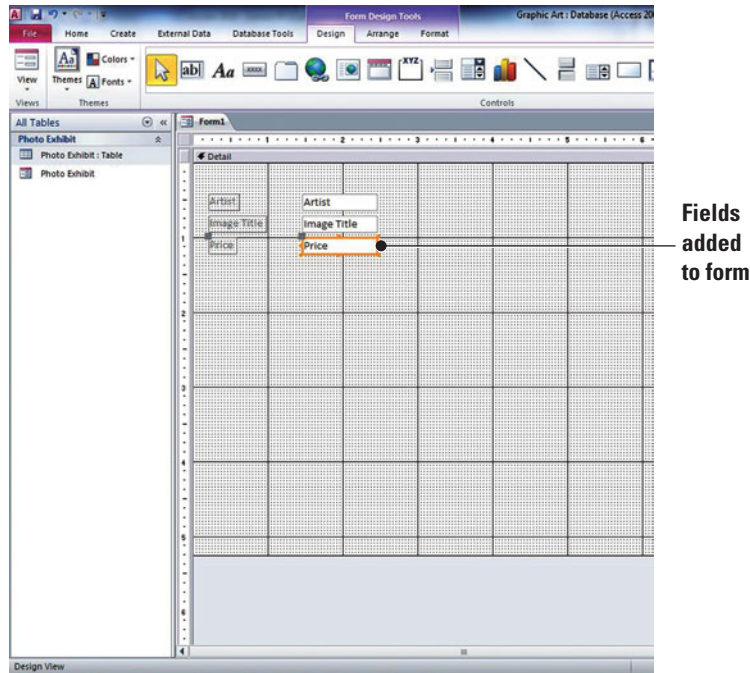

Figure 5-7

Field List pane with available fields

4. In the list of fields, double-click **Artist** to add it to the form.

5. Double-click **Image Title** to add it to the form.

6. Double-click **Price** to add it to the form. Your form should look similar to Figure 5-8.

Figure 5-8

Fields inserted in Design View
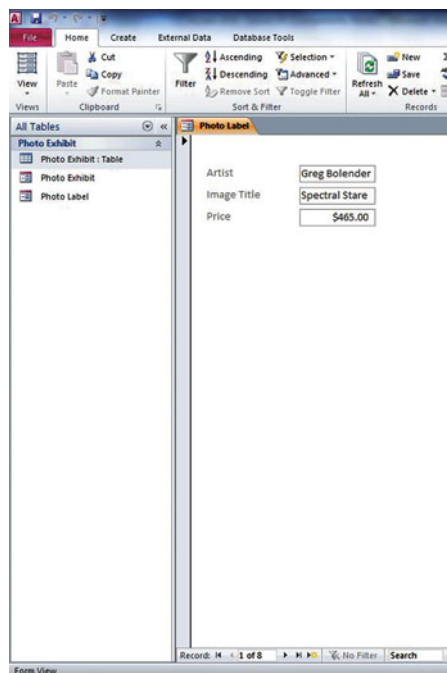

Fields added to form

Another Way
You can also click the field name and drag it onto the form to add a field.

7. Click the **File** tab and click **Save**.

8. In the Save As dialog box, key **Photo Label**, and click **OK**.

9. On the Design menu, in the Views group, click the lower half of the **View** button and click **Form View** to display the form in Form View, as shown in Figure 5-9.

Figure 5-9

Form View

CERTIFICATION
READY   **3.1.3**

How do you use form design tools?

10. Click the **Close** button on Photo Label to close the form.

11. LEAVE the database open.

PAUSE. LEAVE the database open to use in the next exercise.

Ref

You learn how to use the commands in the Controls group and a greater variety of form design tools in Lessons 7 and 10.

Creating a Form in Layout View

If other form-building tools do not fit your needs, you can use the Blank Form tool to create a form. The **Blank Form tool** creates a new form in Layout View. This can be a very quick way to build a form, especially if you plan to put only a few fields on your form. Click the Blank Form button to quickly create a new blank form in Layout View; you can make design changes to the form while viewing the underlying data. In this exercise, you use the Blank Form tool to create a form in Layout View.

On the Create tab, in the Forms group, click the Blank Form button. Access opens a blank form in Layout View and displays the Field List pane. To add a field to the form, double-click it or drag it onto the form. In Layout View, you can make design changes to the form while it is displaying data.
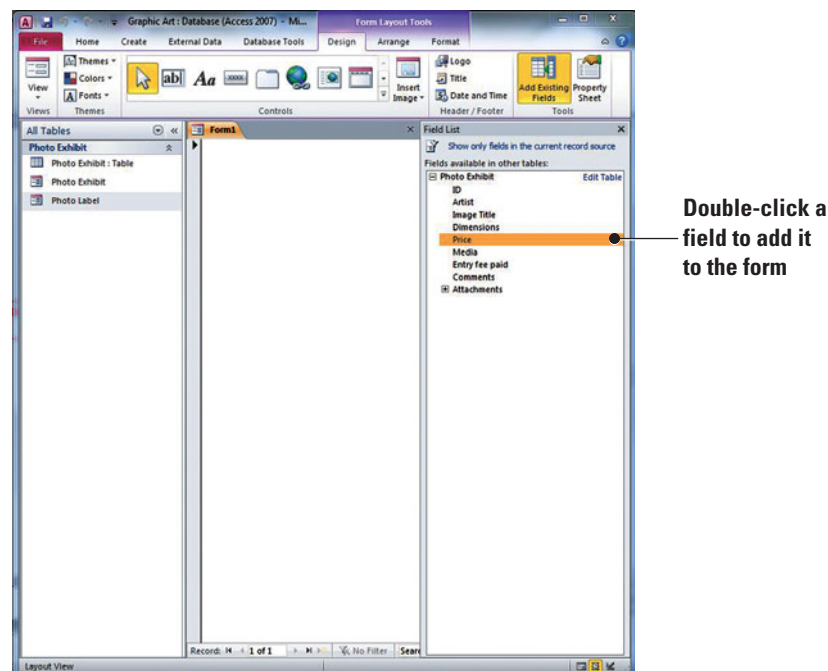
STEP BY STEP   **Create a Form in Layout View**

USE the database that is open from the previous exercise.

1. On the Create tab, in the Forms group, click the **Blank Form** button. A new blank form is created in Layout View, with the Field List displayed, as shown in Figure 5-10.

Figure 5-10

New blank form in Layout View

Double-click a field to add it to the form

2. In the list of fields, double-click **Image Title** to add it to the form.
3. Double-click **Dimensions** to add it to the form.
4. Double-click **Media** to add it to the form. Your form should look similar to Figure 5-11.
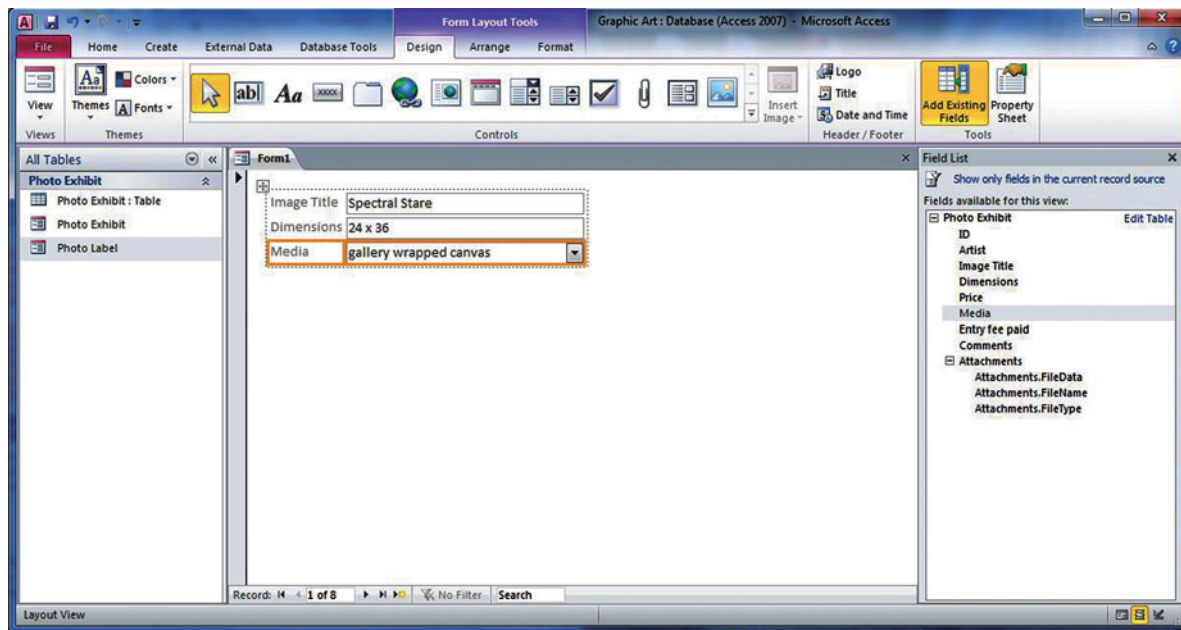
Figure 5-11

Fields inserted in Layout View

5. Click the **File** tab and click **Save**.
6. In the Save As dialog box, key **Image Info**, and click **OK**.
7. Click the **Close** button to close the Field List.
8. Click the **Close** button on Image Info to close the form.
9. **LEAVE** the database open.

PAUSE. **LEAVE** the database open to use in the next exercise.

Take Note   To add more than one field at a time, press Ctrl and click several fields; then, drag them all onto the form at once.

Using the Form Wizard

Another method of building a form is to use the **Form Wizard** tool. The Form Wizard allows you to select the fields that will appear on the form, choose the form layout (which determines the positioning of controls, objects, and data on a form), and also choose a predefined style, if desired. In this exercise, you use the Form Wizard to create a datasheet form. A datasheet form looks very similar to the table upon which it is based and provides a way to enter data using columns and rows.

STEP BY STEP   **Use the Form Wizard**

USE the database that is open from the previous exercise.

1. On the Create tab, in the Forms group, click the **Form Wizard** button, shown in Figure 5-12.
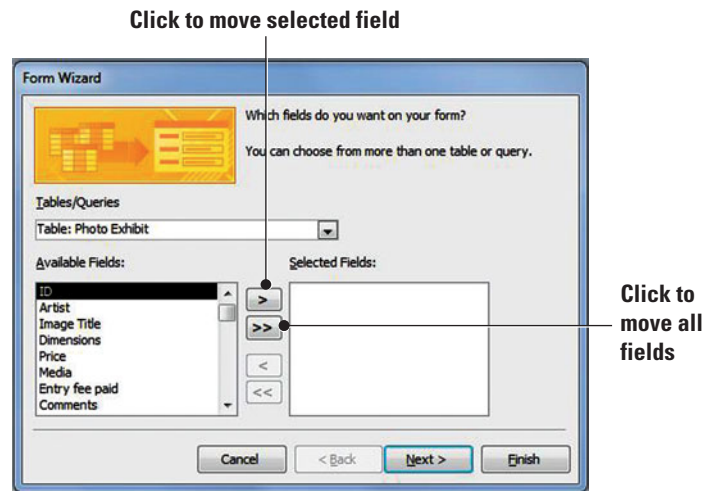
Figure 5-12

Form Wizard button in Forms group

Form Wizard button

2. The Form Wizard displays, as shown in Figure 5-13.

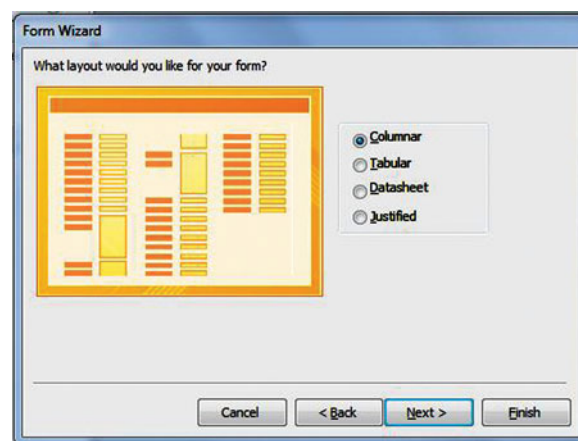**Click to move selected field**

Click to move all fields

3. Click the **>>** button to move all the fields from the Available Fields box to the Selected Fields box.

4. Click the **Next >** button to move to the next screen in the Form Wizard, shown in Figure 5-14.
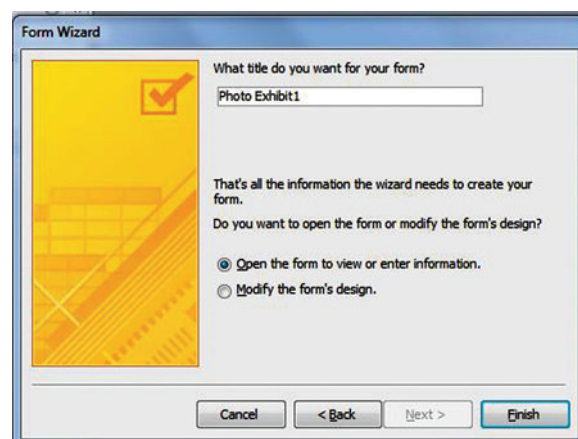
Figure 5-14

Form Wizard, next screen

5. Click **Datasheet** as the layout for the form. Form layouts help determine the positioning of controls, objects, and data on a form.

6. Click the **Next >** button to move to the final screen in the Form Wizard, as shown in Figure 5-15.

Figure 5-15

Form Wizard, final screen

7. Key **Photo Details** as the title of the form.

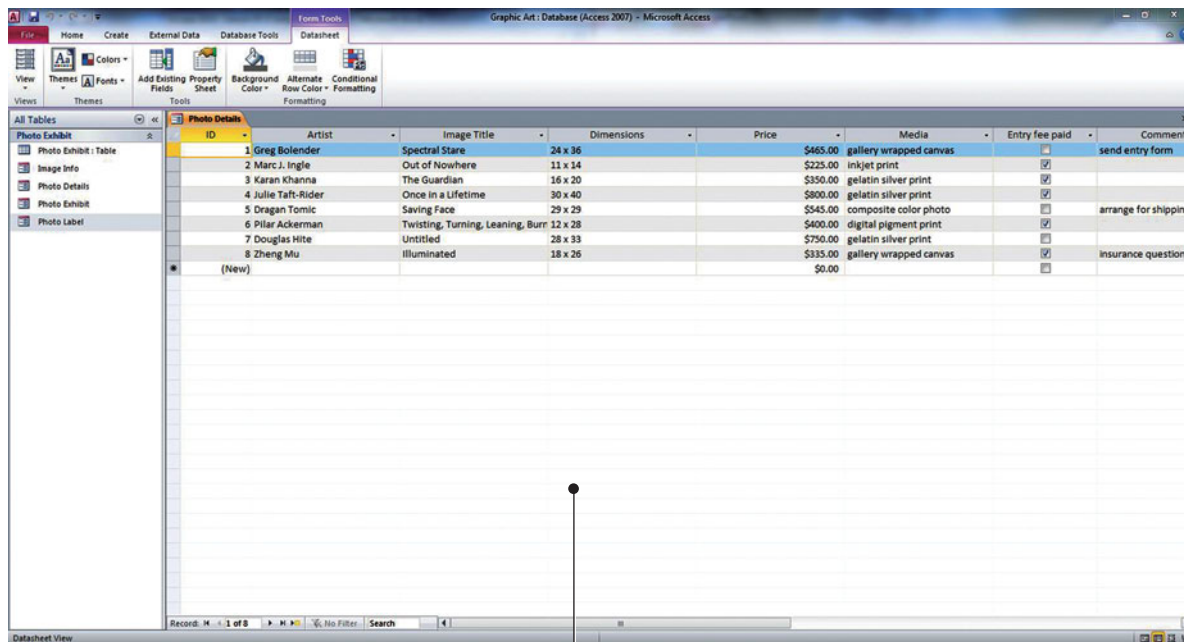**8.** Click the **Finish** button. A datasheet form appears, as shown in Figure 5-16.

Figure 5-16

Datasheet form

Blank Database pane

9. Click the **Close** button on Photo Details to close the form.

PAUSE. LEAVE the database open to use in the next exercise.

How do you use the Form Wizard to create a form with a predefined layout and style?

Take Note   To include fields from more than one table on your form, do not click Next or Finish after you select the fields from the first table on the first screen of the Form Wizard. Instead, repeat the steps to select another table, and click any additional fields that you want to include on the form before continuing.

Applying a Theme

The **Themes** command applies a predefined color and font scheme to a form or report. A theme modifies a form by controlling the color and fonts of its text. In this exercise, you apply a Theme to a form.

To apply a theme, first switch to Layout View. On the Form Layout Tools Design contextual tab, in the Themes group, click the Themes button to view a gallery of theme styles from which to choose. You can point to each option to see the name of that format and a live preview before it's applied to the form.

STEP BY STEP   **Apply a Theme**

USE the database that is open from the previous exercise.

1. Double-click the **Image Info** form in the Navigation Pane to open it.

2. On the Home tab, in the Views group, click the lower half of the **View** button, and click **Layout View** on the View menu.

3. On the Form Layout Tools Design contextual tab, in the Themes group, click the **Themes** button, shown in Figure 5-17.
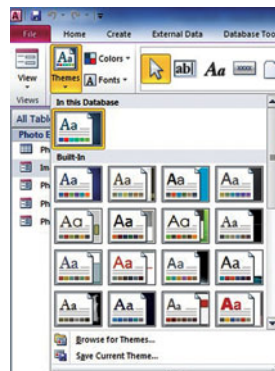
Figure 5-17

Themes button

Themes button accesses Themes gallery

4. A gallery of themes appears, as shown in Figure 5-18.

Figure 5-18

Themes gallery

5. Click the **Couture theme** (fourth row, first column) to apply it to the form. Notice how the form's text has changed, shown in Figure 5-19.

Figure 5-19

Form in Layout View with Couture theme applied
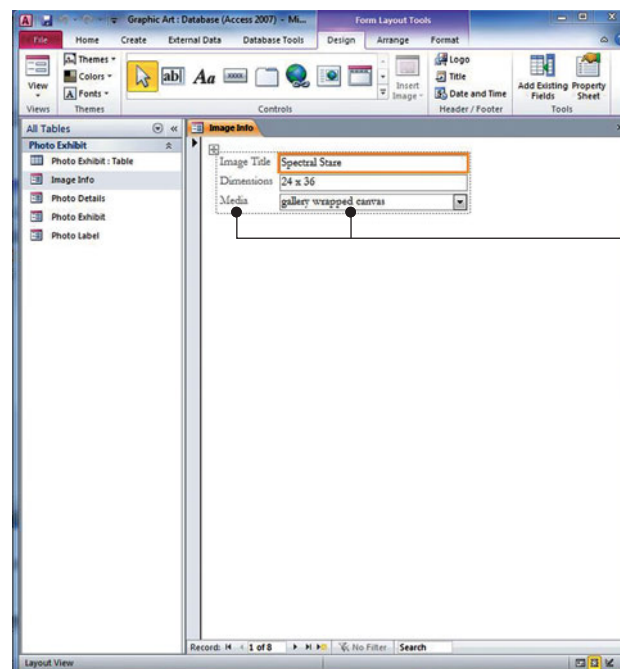
Theme modified labels and record data

CERTIFICATION
R E A D Y   **3.2.1**

How do you apply a theme to a form?

6. Click the **Close** button on Image Info to close the form.

PAUSE. LEAVE the database open to use in the next exercise.

SORTING AND FILTERING DATA WITHIN A FORM

The Bottom Line

Sorting data in a form can help make it much more effective and easy to use. Sorting helps users review and locate the records they want without having to browse the data. To find one or more specific records in a form, you can use a filter. A **filter** limits a view of data to specific records without requiring you to alter the design of the form. You also can use a tool called filter by form to filter on several fields in a form or to find a specific record.

Sorting Data within a Form

Data can be sorted in the Form View of a form. The order that is chosen when a form is designed becomes that object's default sort order. But when viewing the form, users can sort the records in whatever way is most useful. You can sort the records in a form on one or more fields. In this exercise, you sort data in a form in ascending order.
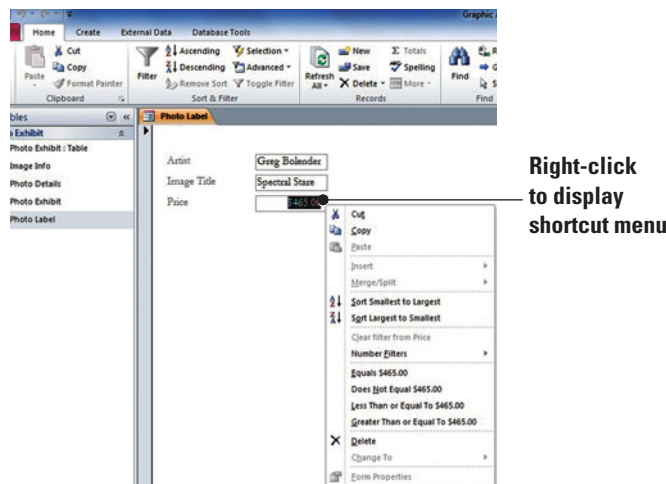
STEP BY STEP   **Sort Data within a Form**

USE the database that is open from the previous exercise.

1. Double-click the **Photo Label** form in the Navigation Pane to open it in Form View.
2. Right-click the **Price** field to display the shortcut menu shown in Figure 5-20.

Figure 5-20

Price field shortcut menu

Right-click
to display
shortcut menu

3. Click **Sort Smallest to Largest**. The form is sorted by price from smallest to largest. The record with the smallest price is displayed first, as shown in Figure 5-21.
4. Click the **Next record** button on the record navigator at the bottom of the form. Continue clicking through all the records to see the records in order according to price.
5. On the Home tab, in the Sort & Filter group, click the **Remove Sort** button.
6. Click the **Close** button on Photo Label to close the form.

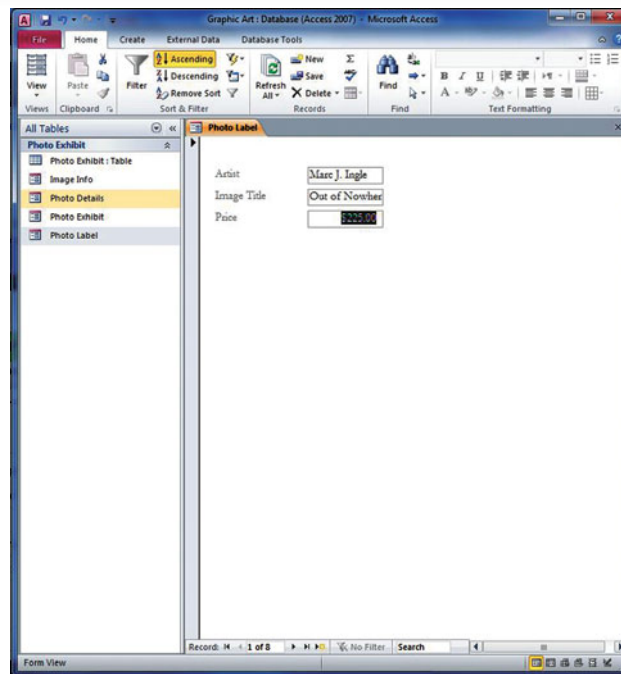**PAUSE. LEAVE** the database open to use in the next exercise.

Another Way
You can also sort on a field by selecting it and clicking the Ascending or Descending button on the Home tab in the Sort & Filter group.

Figure 5-21

Form sorted by price

Take Note   You cannot sort on a field that contains attachments. When sorting on a field with the Yes/No data type, a value of "Yes," "True," or "On" is considered "Selected"; a value of "No," "False," or "Off" is considered "Cleared."

You must identify the fields on which you want to sort. To sort on two or more fields, identify the fields that will act as the innermost and outermost sort fields. Right-click anywhere in the column corresponding to the innermost field, and click one of the sort commands. The commands vary based on the type of data that is in the selected field. Repeat the process for each sort field, ending with the outermost sort field. The records are rearranged to match the sort order.

X Ref   You already learned how to sort data within a table in Lesson 3. Sorting in a form is very similar.

The last-applied sort order is automatically saved with the form. If you want it automatically applied the next time you open the form, make sure the Order By On Load property of the form is set to Yes. Remember that you cannot remove a sort order from just a single field. To remove sorting from all sort fields, on the Home tab, in the Sort & Filter group, click Remove Sort.

Filtering Data within a Form

Common filters are built into every view that displays data. The filters available depend on the type and values of the field. When you apply the filter, only records that contain the values that you are interested in are included in the view. The rest are hidden until you remove the filter. In this exercise, you filter form data using common filters.

Filters are easy to apply and remove. Filter settings remain in effect until you close the form, even if you switch to another view. If you save the form while the filter is applied, it will be available the next time you open the form. To permanently remove a filter, on the Home tab, in the Sort & Filter group, click the Advanced button and click Clear All Filters.
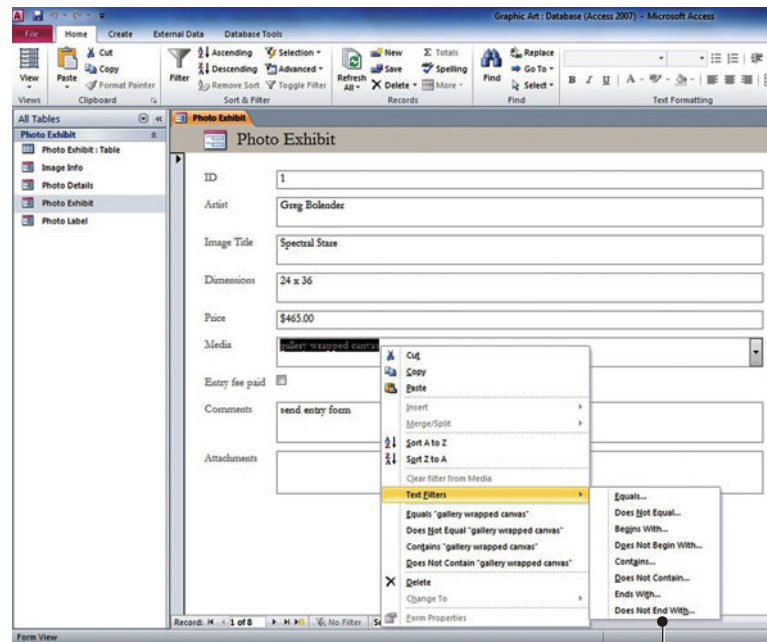

Filter Data with Common Filters

USE the database that is open from the previous exercise.

1. Double-click the **Photo Exhibit** form in the Navigation Pane to open it in Form View.

2. Right-click the **Media** field to display the shortcut menu and click **Text Filters**, as shown in Figure 5-22.
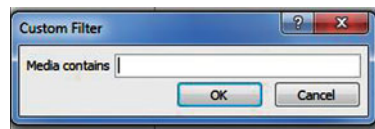
Figure 5-22

Media field text filters

Common filters for a text field

3. Click **Contains . . .** to display the Custom Filter dialog box, as shown in Figure 5-23.

Figure 5-23
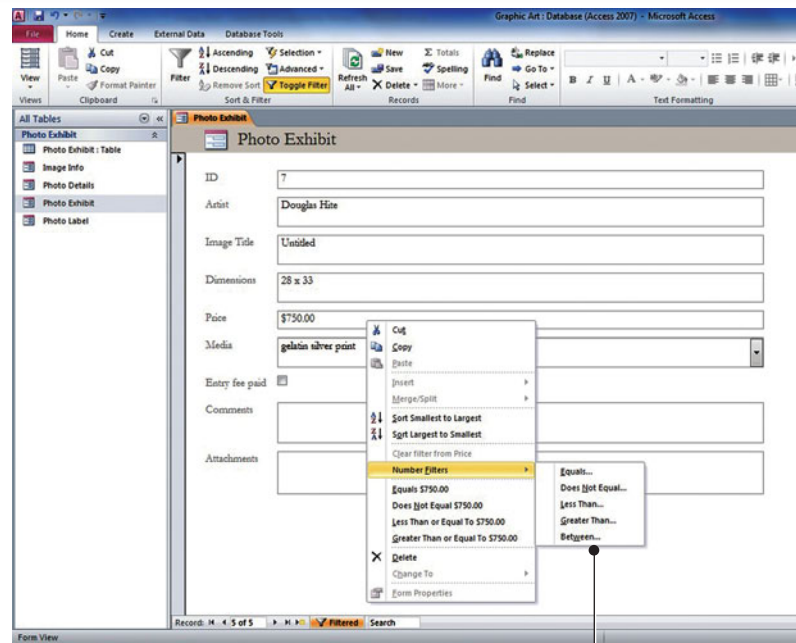
Custom Filter dialog box

4. In the *Media contains* box, key **print**, and click **OK**.

5. Click the **Next record** button on the record navigator at the bottom of the form. Continue clicking to see the five records that contain the word "print" in the *Media* field.

6. Right-click the **Price** field to display the shortcut menu and click **Number Filters**, as shown in Figure 5-24.
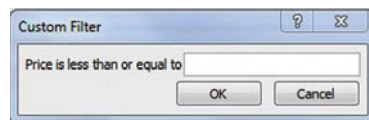
Figure 5-24

Price field number filters

Common filters for a number field

7. Click **Less Than . . .** to display the Custom Filter dialog box shown in Figure 5-25.

Figure 5-25

Custom Filter dialog box

8. In the *Price is less than or equal to* box, key **500**, and click **OK**.

9. Click the **Next record** button on the record navigator at the bottom of the form. Continue clicking to see the three photos that use print media and are less than $500.

10. On the Home tab, in the Sort & Filter group, click the **Advanced Filter Options** button to display the menu shown in Figure 5-26.

Figure 5-26

Advanced Filter Options button menu
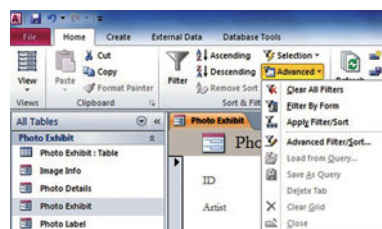
11. Click **Clear All Filters**.

PAUSE. LEAVE the database open to use in the next exercise.

Ⓧ Ref

You already learned how to filter data within a table in Lesson 3. Filtering in a form using common filters is very similar.

Using Filter by Form

Although only a single filter can be in effect for any one field at any one time, you can specify a different filter for each field that is present in the view. In addition to the ready-to-use filters for each data type, you can also filter a form by completing an action called filter by form. **Filter by form** is useful when you want to filter several fields in a form or if you are trying to find a specific record. Access creates a blank form that is similar to the original form, you then complete as many of the fields as you want. When you are done, Access finds the records that contain the specified values. In this exercise, you filter by form.

To use filter by form, open the form in Form View and make sure the view is not already filtered by verifying that either the Unfiltered or the dimmed No Filter icon is present on the record selector bar. On the Home tab, in the Sort & Filter group, click Advanced, and then click Filter by Form. Click the down arrow in a field to display the available values.

Enter the first set of values on the Look for tab, then click the Or tab and enter the next set of values. Each time you click the Or tab, Access creates another Or tab so you can continue to add additional filter values. Click the Toggle Filter button to apply the filter. The filter returns any record that contains all of the values specified on the Look for tab, or all of the values specified on the first Or tab, or all of the values specified on the second Or tab, and so on.

STEP BY STEP   **Use Filter by Form**

USE the database that is open from the previous exercise.

1. On the Home tab, in the Sort & Filter group, click the **Advanced Filter Options** button and click **Filter by Form**. A form filter appears, as shown in Figure 5-27.
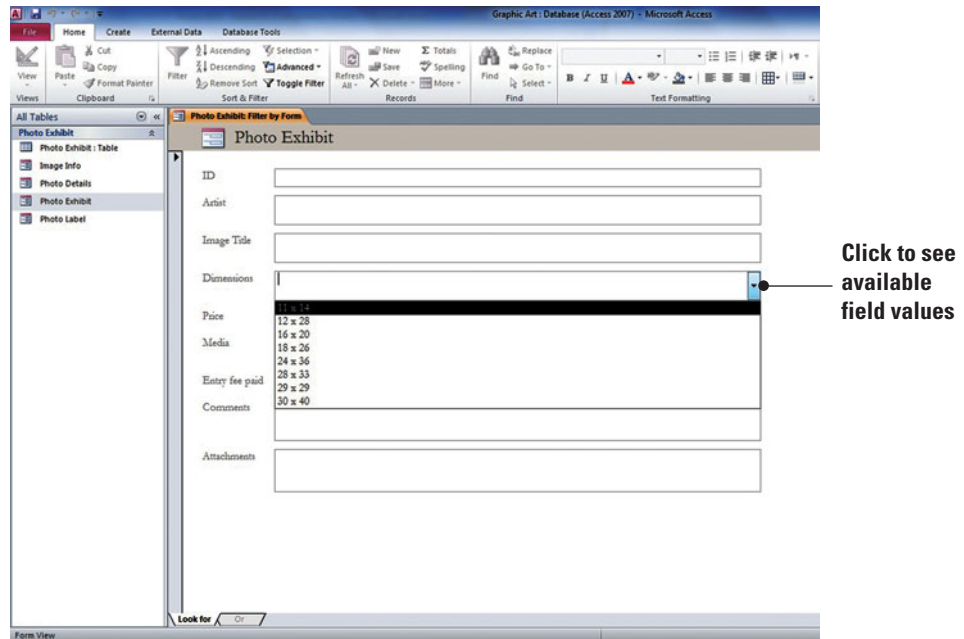
Figure 5-27

Form filter

Click or tab to add additional filter values

2. Place the insertion point in the Dimensions box and click the **down arrow** on the right to display the list of options shown in Figure 5-28.

Click to see available field values

3. Click **30 × 40**.

4. Click the **Or** tab at the bottom of the form.

5. Place the insertion point in the Dimensions box, click the **down arrow**, and then click **12 × 28**.

6. On the Home tab, in the Sort & Filter group, click the **Toggle Filter** button to apply the filter. The records containing either the dimensions 30 × 40 or 12 × 28 are displayed, as shown in Figure 5-29.
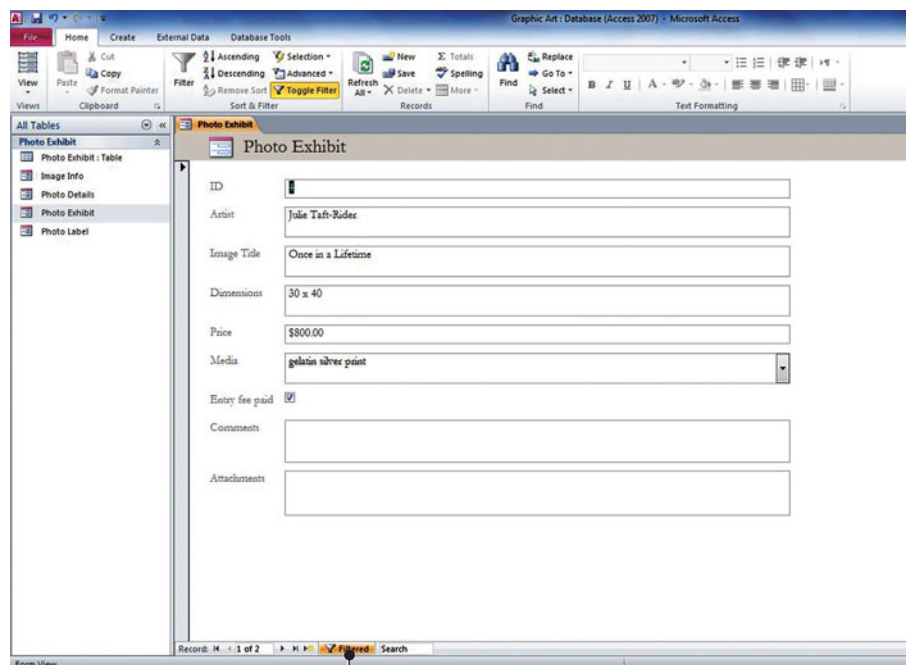
Indicates the form is filtered

7. Click the **Next record** button on the record navigator at the bottom of the form to see the second record in the form filter results.

8. On the Home tab, in the Sort & Filter group, click the **Toggle Filter** button again to remove the filter.

9. On the Home tab, in the Sort & Filter group, click the **Advanced** button and click **Clear All Filters**.

10. Click the **File** tab and click **Close Database**.

STOP. LEAVE Access open for use in the projects.

Take Note If you want a field value to operate as a filter that is independent of other field values, you must enter that value on the Look for tab and each Or tab. In other words, the Look for tab and each Or tab represents an alternate set of filter values.

Knowledge Assessment

Matching

Match the term in Column 1 to its description in Column 2.

Column 1	Column 2
1. Form Wizard	**a.** useful when you want to filter on several fields in a form or if you are trying to find a specific record
2. Form Design button	**b.** creates a simple form with a single mouse-click
3. Theme command	**c.** applies a predefined combination of colors and fonts that you select for a form or report
4. Blank Form button	**d.** quickly creates a new blank form in Design View
5. form	**e.** allows you to select fields for the form, choose the form layout, and also choose a predefined style
6. filter by form	**f.** limits a view of data to specific records without requiring you to alter the design of the form
7. sorting	**g.** built into every view that displays data
8. Form tool	**h.** database object that you can use to enter, edit, or display data from a table or a query
9. common filters	**i.** helps users review and locate records without having to browse the data
10. filter	**j.** quickly creates a new blank form in Layout View

True/False

Circle T if the statement is true or F if the statement is false.

T   F   1. The Forms group is located on the Home tab in the Ribbon.

T   F   2. Forms can be used to control access to data, such as which fields or rows of data are displayed.

T   F   3. After you save your form design, you can run the form as often as you want.

T   F   4. Layout View gives you a more detailed view of the structure of your form than Design View.

T   F   5. Using the Blank Form tool is a very quick way to build a form, especially if you plan to put only a few fields on your form.

T   F   6. To access the Theme options, first switch to Form View.

T   F   7. You cannot remove a sort order from just a single field.

T   F   8. The filters available depend on the field's data type and values.

T   F   9. To filter by form, first switch to Design View.

T   F   10. When using the Form Wizard, you can only include fields from one table.

Competency Assessment

Project 5-1: Form Wizard

As a travel agent at Erin's Travel, you need an easy way to input data about events into the database. You decide to use the Form Wizard to create a datasheet form that has a preformatted style.

GET READY. LAUNCH Access if it is not already running.

The **Travel Events** file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** *Travel Events* from the data files for this lesson.
2. **SAVE** the database as *Travel Events XXX* (where *XXX* is your initials).
3. On the Create tab, in the Forms group, click the **Form Wizard** button.
4. Click the **>>** button to move all the fields from the Available Fields box to the Selected Fields box.
5. Click the **Next >** button to move to the next page in the Form Wizard.
6. Click **Datasheet** as the layout for the form.
7. Click the **Next >** button to move to the final page in the Form Wizard.
8. Key **Event Details** as the title of the form.
9. Click the **Finish** button to create a datasheet form.
10. On the Home tab, in the Views group, click the lower half of the **View button**, and click **Form View**.
11. Click the **Close** button on Event Details to close the form.
12. **CLOSE** the database.

LEAVE Access open for the next project.

Project 5-2: Used Games Forms

You are the manager at Southridge Video. To expand the store, you have recently started taking used games in trade. You store information about each title in an Access database. You decide to create some forms to help you use the database more efficiently.

GET READY. LAUNCH Access if it is not already running.

The **Games inventory** file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** *Games inventory* from the data files for this lesson.
2. **SAVE** the database as *Games inventory XXX* (where *XXX* is your initials).
3. In the Navigation Pane, double-click **Games: Table** to open the table.
4. On the Create tab, in the Forms group, click the **Form** button to create a simple form and display it in Layout View.

5. Click the **File** tab and click **Save**.

6. In the Save As dialog box, click **OK** to accept the Games form name suggested by Access.

7. Click the **Close** button for Games to close the form.

8. On the Create tab, in the Forms group, click the **Form Design** button to create a new blank form in Design View.

9. On the Form Design Tools Design contextual tab, in the Tools group, click the **Add Existing Fields** button to display the Field List pane.

10. Click the **Show all tables link** in the Field List pane.

11. Click the **+** next to Games to list the available fields.

12. Double-click **Title** to add it to the form.

13. Double-click **Rating** to add it to the form.

14. Double-click **Platform** to add it to the form.

15. Click the **File** tab and click **Save**.

16. In the Save As dialog box, key **Game Rating**, and click **OK**.

17. Click the **Close** button to close the Field List.

18. On the Design contextual tab, in the Views group, click the lower half of the **View** button and click **Form View** to display form in Form View.

19. Click the **Close** button for Game Rating to close the form.

20. **LEAVE** the database open for the next project.

LEAVE Access open for the next project.

Proficiency Assessment

Project 5-3: Sort and Filter Games

A customer comes into Southridge Video and asks about game publishers and the availability of a particular game. Sort and filter data in the forms you created to get the information that you need.

USE the database that is open from the previous project.

1. In the Navigation Pane, double-click the **Games** form to open it.

2. Right-click the **Publisher** field to display the shortcut menu.

3. Click **Sort A to Z** to sort the form by publisher name in alphabetic order.

4. Navigate to **record 3**, titled Marvel: Ultimate Alliance.

5. Right-click the **Title** field and click **Contains "Marvel: Ultimate Alliance."**

6. Click the **Next record** button on the record navigator at the bottom of the form to see all the versions of the game with that name.

7. On the Home tab, in the Sort & Filter group, click the **Remove Sort** button.

8. **CLOSE** the database.

LEAVE Access open for the next project.

Project 5-4: Toy Inventory

Your brother owns Wingtip Toys and recently started keeping a list of the store inventory in an Access database. He wants to add a form to the database and asks for your help. Add a simple form and then show him how to sort and apply filters.

GET READY. LAUNCH Access if it is not already running.

The ***Toy Inventory*** file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** *Toy inventory* from the data files for this lesson.

2. Save the database as ***Toy inventory XXX*** (where *XXX* is your initials).

3. Open **Inventory: Table**.

4. Use the Form tool to create a simple form.

5. Format it using the Trek theme option (last row, first column).

6. Save the form as **Inventory**.

7. Sort the form's *In Stock* field from **Largest to Smallest**.

8. Sort the *Description* field from **A to Z**.

9. Run a filter that finds all the records where the *Price* field is between $50 and $100.

10. Clear all sorts and filters.

11. Create a filter by form to find all the records that have two items in stock.

12. Close the form and **CLOSE** the database.

LEAVE Access open for the next project.

Mastery Assessment

Project 5-5: Red Wines

The Coho Vineyard has started a monthly wine club. Each month features a red wine hand picked for its unique label and diverse style. Information about the monthly club selections is stored in an Access database; you will create forms so that you can retrieve the data in a useful way.
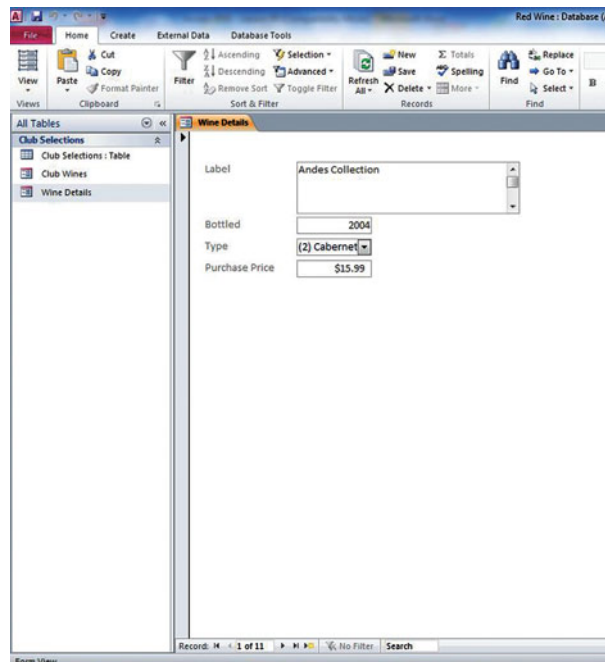
GET READY. LAUNCH Access if it is not already running.

@ The **Red Wine** file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** the **Red Wine** database from the data files for this lesson.

2. Save the database as **Red Wine XXX** (where *XXX* is your initials).

3. Create a simple form that contains all the fields in the Club Selections table and name it **Club Wines**.

4. Use the Form Design button to create a form named **Wine Details** that looks like the one shown in Figure 5-30 when displayed in Form View.

Figure 5-30

Wine Details form

5. **CLOSE** the database.

LEAVE Access open for the next project.

Project 5-6: Personal Contacts

Your address book is becoming outdated, and you decide to transfer all the current information about friends and family to an Access database. Input the data and then create forms to manage it efficiently.

GET READY. LAUNCH Access if it is not already running.

The ***Personal Contacts*** file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** *Personal Contacts* from the data files for this lesson.
2. **SAVE** the database as *Personal Contacts XXX* (where *XXX* is your initials).
3. Input as much contact information as you have about at least five friends or family members.
4. Create a simple form named Friends/Family using the Form tool. Apply the Black Tie theme.
5. Create a form named Birthday Contacts using the Form Wizard. Include the following fields: First Name, Last Name, E-mail Address, Home Phone, Mobile Phone, and Birthday. Use the Columnar layout. Keep all other default settings.
6. **CLOSE** the database.

STOP. CLOSE Access.

INTERNET READY

Microsoft has numerous online resources available to provide solutions, services, and support for whatever business needs you may have. If you are a small or midsized business, a helpful site is the Microsoft Business for Small & Midsize Companies. Here, you can find advice, products, tools, and information tailored to small and midsized businesses. Search the Microsoft site for Small & Midsize Companies, shown in Figure 5-31. Explore the resources offered on the site. In the Latest Editions section, choose a topic about which you would like to know more, and read an article that interests you.

Figure 5-31

Microsoft Business for Small & Midsize Companies
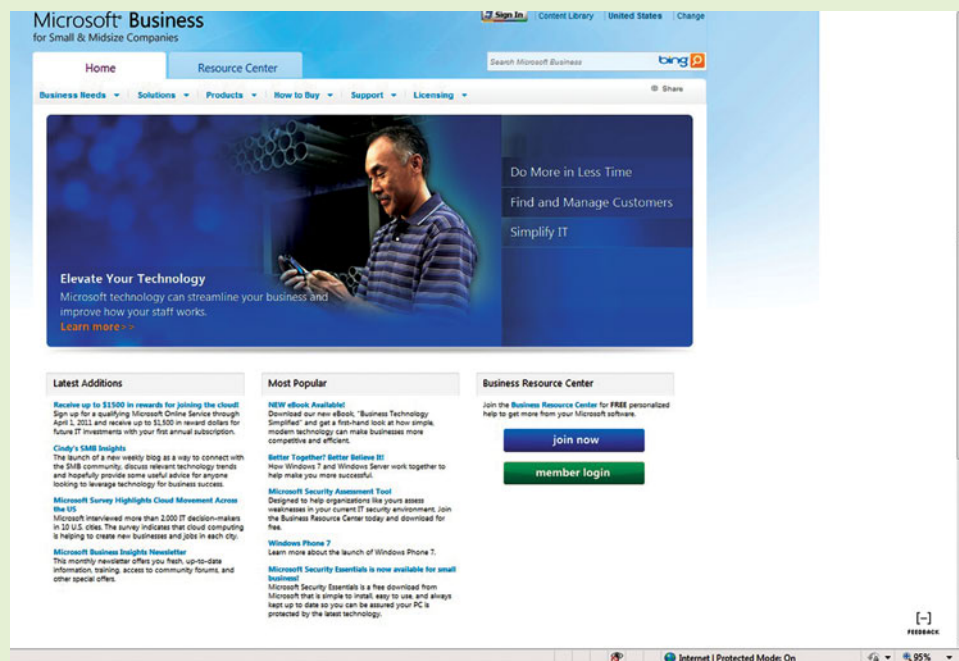
Circling Back 1

You are a real estate agent and have recently opened your own office—Woodgrove Real Estate—with several other licensed agents. Because you are the one who is most knowledgeable about computers, you will be responsible for keeping track of the listings and other relevant information. You will use Access to begin developing the database that will be used by everyone in the office.

Project 1: Create a Database and Tables

After sketching out a plan on paper, you are ready to begin creating the database and tables.

GET READY. LAUNCH Access if it is not already running.

1. In the Available Templates section, click the blank database icon if it's not already selected.
2. In the File Name box, key **Woodgrove XXX** (where *XXX* is your initials).
3. Click the folder icon and browse to the location where you want to store the file.
4. Click the **Create** button to create a new blank database.
5. Click **Click to Add** and click **Text** on the shortcut menu.
6. Key **Address** as the column name and press **Enter**.
7. Add new Text columns named **Bedrooms**, **Bathrooms**, **Square Feet**, and **Price**.
8. Click the **File** tab and click **Save**.
9. In the Save As dialog box, key **Listings** as the table name and click **OK**.
10. On the Create tab, in the Templates group, click the **Application Parts** button, and click **Contacts** to create a new table. Click **OK**, if necessary, to close and save the Listings table, then click **Cancel** in the Create Relationship dialog box that appears.
11. Open the **Contacts** table.
12. Right-click the **Company** field header and click **Delete Field** on the shortcut menu. Click **OK** if you receive a dialog box warning you about the deletion.
13. Delete the Job Title, Business Phone, Fax Number, Address, City, State/Province, ZIP/Postal Code, Country/Region, Web Page, Notes, and Attachment columns. (If you get a message asking if you want to delete all indexes for the ZIP column, click **Yes**.)
14. Save the table as **Agents**.
15. Delete all the objects in your database except the Agents and Listings tables.

PAUSE. LEAVE the database open to use in the next project.

Project 2: Modify Tables and Fields

Now that you have created the tables for your database, you need to modify them to suit your needs.

USE the database that is open from the previous project. The Agents table should be displayed.

1. On the Home tab, in the Views group, click **Design** View.
2. On the Table Tools Design contextual tab, in the Show/Hide group, click **Property Sheet**.
3. In the Property Sheet's Description property box, key **Agent contact information**.
4. Click **Close** to close the property sheet.

5. In the upper portion of the table design grid, click the **E-mail Address field**. In the field properties on the bottom, click in the Required property box and set it to **Yes**.

6. Save the table and switch back to Datasheet View.

7. Open the **Listings** table. Place the insertion point in the Price column.

8. On the Table Tools Fields contextual tab, in the Formatting group, click the **down arrow** in the Data Type box and click **Number**.

9. In the Format box, click the **down arrow** and choose **Currency**.

10. Change the data type/format on the Bedrooms, Bathrooms, and Square Feet fields to **Number/General Number**.

11. Click the **Click to Add** column. Choose **Attachment** as the data type to create an attachment column.

12. Save the table.

PAUSE. **LEAVE** the database open for the next project.

Project 3: Create Forms and Enter Data

Now it is time to enter data into your database. First you create a form to make this task easier.

USE the database that is open from the previous project. The Listings table should be displayed.

1. On the Create tab, in the Forms group, click the **More Forms** button.

2. Click **Datasheet** to create a datasheet form.

3. Click the **File** tab and click **Save**.

4. In the Save As dialog box, key **Listings** as the form name and click **OK**.

5. Use the form to enter data into the Listings table, as shown in Figure 1.

ID	Address	Bedrooms	Bathrooms	Square Feet	Price	
1	214 Main Street	4	2	3150	$352,800.00	(0)
2	3328 Broadway	3	2	2125	$265,625.00	(0)
3	89 Ridge Road	3	1	1550	$201,500.00	(0)
4	677 West Avenue	3	3	2892	$303,660.00	(0)
5	40 Upper Grant	5	3	4984	$697,760.00	(0)
6	2002 Sundown Lane	2	2	1880	$253,800.00	(0)
7	2828 Green Briar	2	1	1060	$185,500.00	(0)
8	685 South Grand	4	3	3535	$530,250.00	(0)
9	13811 Crown Bluff	3	2	2248	$319,216.00	(0)
10	1505 Pinehurst	4	3	2670	$400,500.00	(0)
* (New)						(0)

Record: 1 of 10   No Filter   Search

Figure 1

Listings data

6. Display the **Agents** table.
7. On the Create tab, in the Forms group, click the **Form** button.
8. Save the form as **Agents**.
9. Switch to Form View and use the form to enter the data shown in Figure 2.

Figure 2

Agents data, record 1

10. Click the **Next record** button on the record navigator.
11. Enter the data shown in Figure 3 as the second record.

Figure 3

Agents data, record 2

12. Enter the data shown in Figure 4 as the third record.

13. Close the Agents form and the Listings form.

PAUSE. LEAVE the database open for the next project.

Project 4: Add Attachments and Create a Lookup Field

You have begun to use the database and realize it would be helpful for the Listings table to include the listing agent. Create a lookup field with this information and attach photos for some of the houses.

USE the database that is open from the previous project.

1. In the Listings table, double-click the **Attachment** field for the fourth record (677 West Avenue).

2. In the Attachments dialog box, click **Add**.

3. Navigate to the data files for this lesson, select *677_West_Avenue*, and click **Open**.

4. In the Attachments dialog box, click **OK**.

5. Attach the photo named *2002_Sundown_Lane* to the sixth record.

6. Close the Listings form.

7. Display the Listings table and place the insertion point in the cell under the Click to Add column.

8. On the Table Tools Fields contextual tab in the Add & Delete group, click the **More Fields** button. Click the **Lookup & Relationship** command.

9. Click **Next >** twice.

10. Click **Last Name** and then click the **>** button to move it to the Selected Fields box.

11. Click **Next >** three times.

12. Key **Listing Agent** as the title for your lookup column.

13. Click **Finish**.

14. Save the Listings table.

PAUSE. LEAVE the database open for the next project.

@ The *677_West_Avenue* file is available for download on the companion website.

@ The *2002_Sundown_Lane* file is available for download on the companion website.

Project 5: Modify a Form

Now that you have a lookup field, you want to add it to your form and use it to enter additional information.

USE the database that is open from the previous project.

1. Display the Listings form and switch to Design View.
2. Click the **Field1** field on the design grid and press **Delete**.
3. On the Form Design Tools contextual tab, in the Tools group, click **Add Existing Fields**.
4. In the Fields available for this view box, click **Listing Agent** and drag it to the form below the Price field.
5. Close the Field List and switch to Datasheet View.
6. In the Listing Agent column click the **down arrow** and select the last name for each record, as shown in Figure 5.

ID	Address	Bedrooms	Bathrooms	Square Feet	Price	Listing Agent
1	214 Main Street	4	2	3150	$352,800.00	Faeber
2	3328 Broadway	3	2	2125	$265,625.00	Faeber
3	89 Ridge Road	3	1	1550	$201,500.00	Poe
4	677 West Avenue	3	3	2892	$303,660.00	Mew
5	40 Upper Grant	5	3	4984	$697,760.00	Faeber
6	2002 Sundown Lane	2	2	1880	$253,800.00	Poe
7	2828 Green Briar	2	1	1060	$185,500.00	Poe
8	685 South Grand	4	3	3535	$530,250.00	Faeber
9	13811 Crown Bluff	3	2	2248	$319,216.00	Mew
10	1505 Pinehurst	4	3	2670	$400,500.00	Faeber
* (New)						

7. Close the form.

STOP. CLOSE the database.

6 Create Reports

KEY TERMS

- record source
- report

Alpine Ski House is a small mountain lodge that features cross-country skiing in the winter and hiking in the summer. As an administrative assistant for Alpine Ski House, you take care of many of the administrative duties for the innkeepers, including reservations, billing, and recordkeeping. You have recently started using Access to keep track of customers and reservations at the lodge. In this lesson, you learn three different ways to create reports for the lodge, how to apply auto formats to reports, and how to sort and filter report data.

SOFTWARE ORIENTATION

Reports Group

The Reports group (Figure 6-1) is located on the Create tab in the Ribbon. Use the Reports group of commands to create reports.
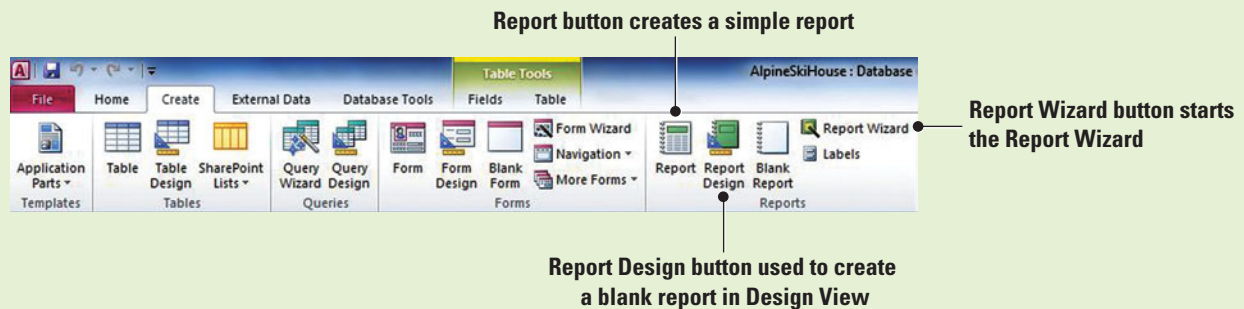
Report button creates a simple report

Report Wizard button starts the Report Wizard

Report Design button used to create a blank report in Design View

Figure 6-1

Reports group

CREATING REPORTS

The Bottom Line

A **report** is a database object that is used to organize and display data pulled from tables and queries. You can create a report using the Report button, the Report Wizard, or Design View, depending on the amount of customization desired. After creating a report, you can instantly apply a Theme to create a professional look. You can also sort and filter data in a report to display the records to suit your needs.

Creating a Simple Report

You can use Access 2010 to create simple or complex reports. When creating a complex report, you might spend quite a bit of time choosing which fields you want to include from various tables or queries. That is fine when you need such a report, but when you need a simple display of all the fields in a table or query, you can use the Report button to create a simple report. In this exercise, you use the Report button to create a simple report.

Reports are commonly used as formatted hard copies of table or query data. You can modify a report's design, but you cannot add or edit data in a report. The purpose of a report is to allow users to view data, not edit it. For example, a supervisor might ask you to create a sales report that is filtered to show only one region's sales. The supervisor does not need to edit the data, just view it.

A report's **record source** is the table or query that provides the data used to generate a report. Before you can create a report, you need to define the record source by clicking in the Navigation Pane on the table or query on which you want to base the report. Then, click the Report button and a report is generated based on the table or query you selected.

You can modify a report's design, print, or save and close a report. You should save a report's design if you are likely to use it again. To save a report, click the Save button on the File tab or in the Quick Access Toolbar. If you click the Close button without saving, Access will display a dialog box asking if you want to save it. Once it is saved, the report is listed in the Navigation Pane. You can open it and modify it in the future or create a new report based on the original. The next time you run the report, the design will be the same, but the data will be different if the data in the table or query has been updated.

STEP BY STEP **Create a Report**

@ The *Alpine Ski House* file for this lesson is available on the book companion website or in WileyPLUS.

WILEY PLUS EXTRA

WileyPLUS Extra! features an online tutorial of this task.

GET READY. Before you begin these steps, be sure to turn on and/or log on to your computer and start Access.

1. **OPEN** *Alpine Ski House* from the data files for this lesson.
2. Save the database as *Alpine Ski House XXX* (where *XXX* is your initials).
3. In the Navigation Pane, click the **Rooms** table to select it. This is your record source.
4. On the Create tab, in the Reports group, click the **Report** button. The report appears in Layout View, as shown in Figure 6-2. Notice the Report Layout tools that appear in the Ribbon.

Figure 6-2

Simple report

5. Click the **Room ID** header to select it. Position the pointer over the right border until you see a double-sided arrow. Click and drag to the left, resizing the column to remove excess white space.

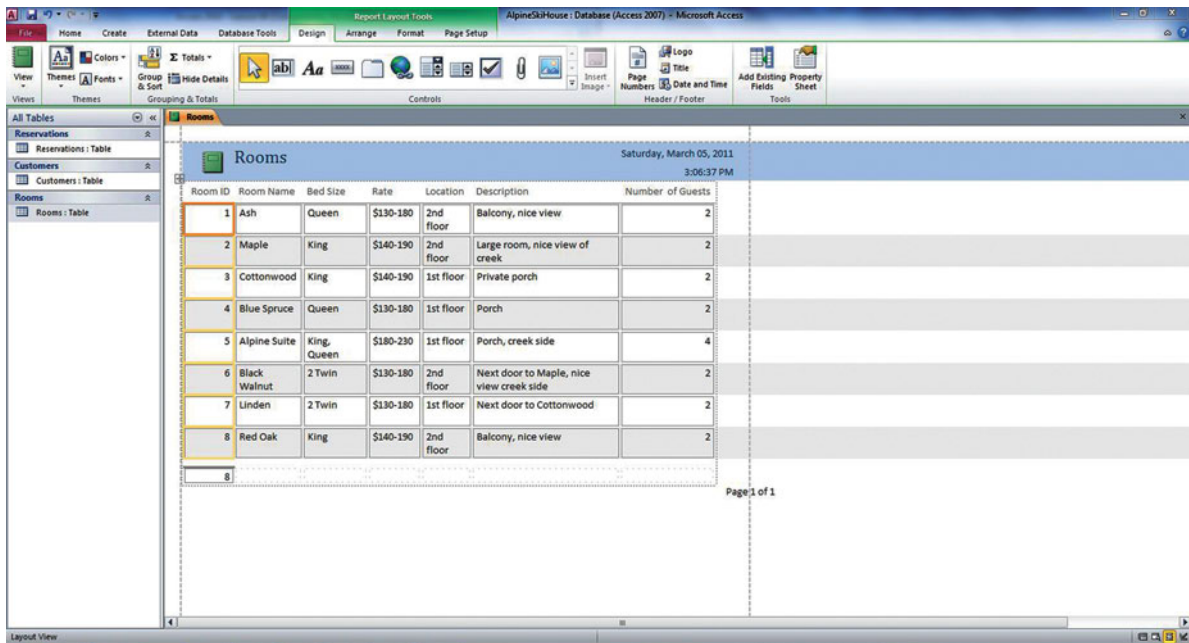6. Resize the other columns until your screen looks similar to Figure 6-3.

Figure 6-3

Report with resized columns

7. Click the **Save** button on the Quick Access Toolbar. The Save As dialog box appears with Rooms in the Report Name box. Click **OK**. Notice that the Rooms report is listed in the Navigation Pane.

8. Click the **Close** button to close the Rooms report.

PAUSE. LEAVE the database open to use in the next exercise.

Using the Report Wizard

You are probably already familiar with the way a "wizard" works. The Report Wizard displays a series of questions about the report you want and then it creates the report for you based on your answers. The Report Wizard knows what makes a good report, so the questions are designed to help you create a professional report with little effort. The Report Wizard is usually the easiest way to create a report when you want to choose which fields to include. It guides you through a series of questions and then generates a report based on your answers. If you want to skip steps such as Sorting or Grouping in the Report Wizard, click the Next button to go to the next screen. You can click the Finish button anytime it is available to create the report with the choices you have specified. In this exercise, you use the Report Wizard to create a report based on the Rooms table.

The Report Wizard allows you to include fields from more than one table or query. You can click the double right arrow button (>>) to include all the fields in the report or click the single right arrow button (>) to move them one at a time. Likewise, you can click the double left arrow button (<<) to move all the fields out of the report or the single left arrow button (<) to move them one at a time.

You can specify group levels, such as grouping all of the first-floor rooms together and all of the second-floor rooms together if creating a room report. You can also choose up to four fields on which to sort data in ascending or descending order. On the layout screen, you can choose from various layouts such as stepped, block, or outline, all of which indent fields and records in different ways to make the report clearer to read. You can also choose to display the report in portrait or landscape orientation. Access provides a wide variety of design styles from which to choose. On the last screen, you can key a name for the report and choose to preview or modify the report.

Ref

You learn more about grouping in Lesson 11.

STEP BY STEP	Use the Report Wizard

USE the database you used in the previous exercise.

1. On the Create tab, in the Reports group, click the **Report Wizard** button. The first screen of the Report Wizard appears.
2. Make sure the Rooms table is selected in the Tables/Queries menu.
3. Click the **>>** button to move all the fields into the Selected Fields list.
4. Click the **Room ID** field to select it and click the **<** button to move it back to the Available Fields list, as shown in Figure 6-4. Click the **Next >** button.
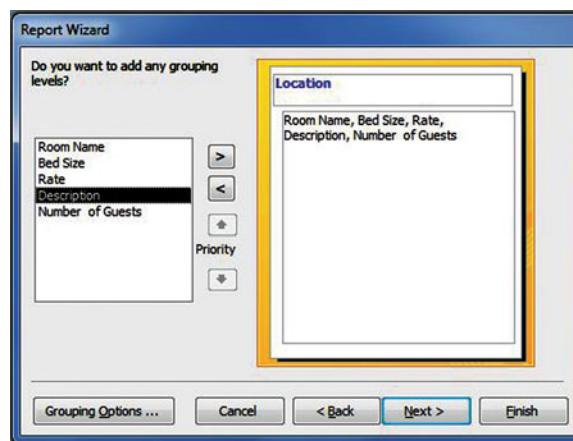
Figure 6-4

The Report Wizard Fields screen
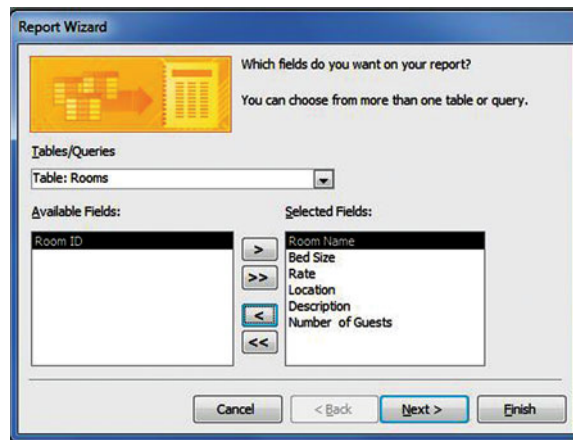
5. Click the **Location** field to select it and click the **>** button to add it as a grouping level, as shown in Figure 6-5.

Figure 6-5

The Report Wizard Grouping screen

6. Click the **Next >** button.
7. Select **Room Name** from the fields menu to sort in ascending order, as shown in Figure 6-6, and click the **Next >** button.
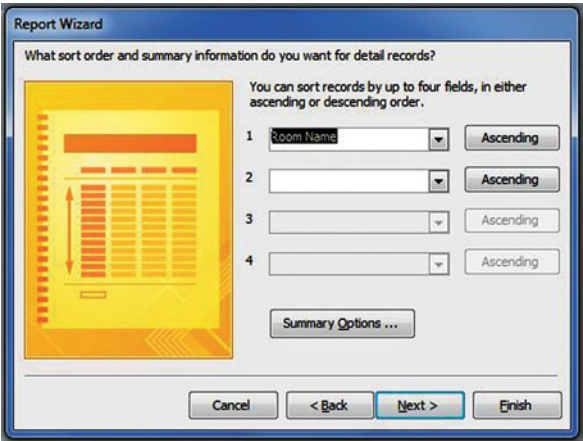
8. In the Layout section, click the **Outline** button. In the Orientation section, click the **Landscape** button, as shown in Figure 6-7. Click **Next >**.

Figure 6-7

The Report Wizard Layout screen

9. Key **Rooms Wizard** as the title of the report, as shown in Figure 6-8.

Figure 6-8

The Report Wizard Title screen

10. Click **Finish**. The Rooms Wizard report appears on the screen, as shown in Figure 6-9.

11. Close the report. Notice that the new report is listed in the Navigation Pane.

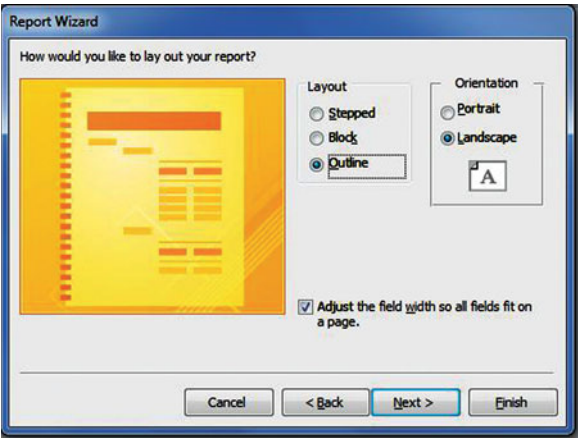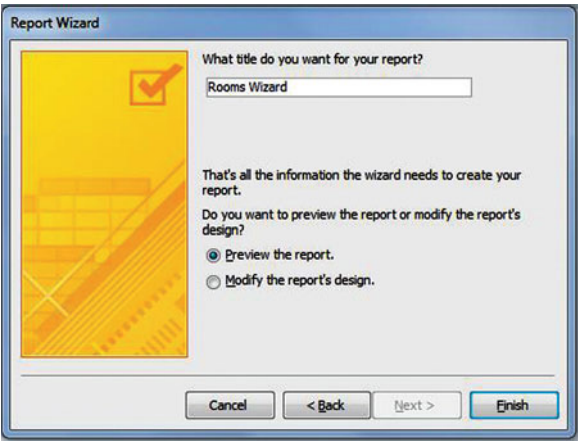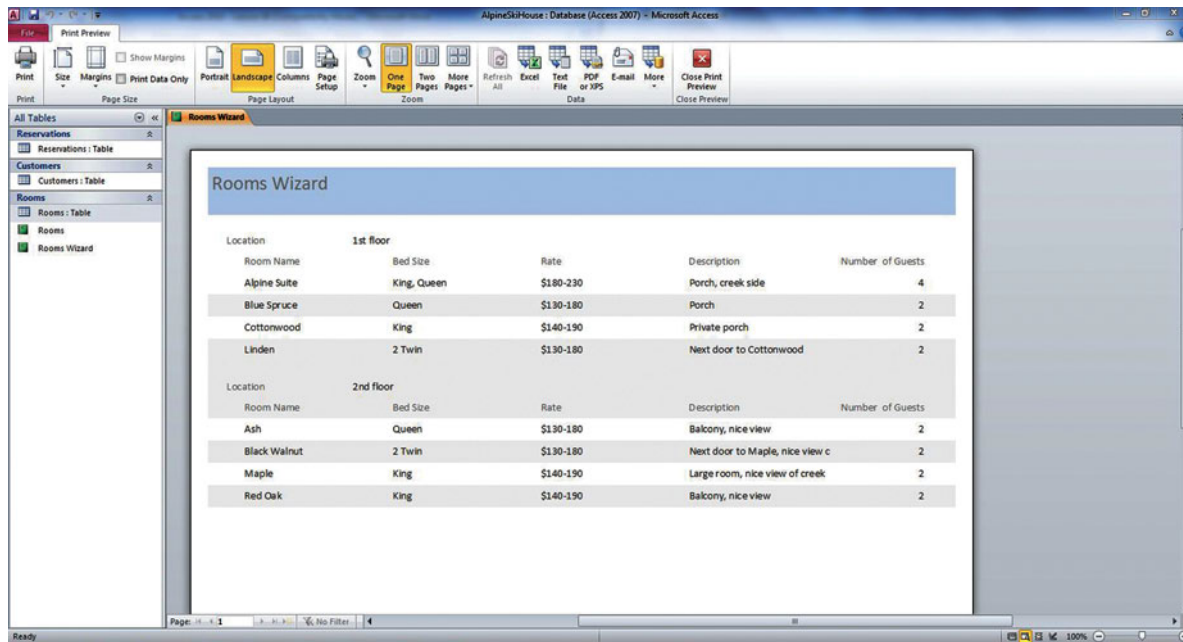**PAUSE. LEAVE** the database open to use in the next exercise.

Creating a Report in Design View

When you want a customized report, you can create it in Design View, which offers you many options for creating the report exactly the way you want it. Design View gives you the most options for creating a report, because it shows you the underlying structure of the report. It also provides you with more design tools and capabilities. In this exercise, you create a report in Design View by adding and moving fields.

In the previous exercise, you created a very basic report in Design View. In Lesson 8, you will learn how to add more functionality to a report.

In Design View, a report is displayed on a design grid with sections. Table 6-1 lists the sections.

Table 6-1

Design View Sections

Section Name	Description
Report header	This section is printed once at the beginning of every report. This is a good place to include a logo, a date, or information that might normally appear on a cover page.
Page header	This section is printed at the top of every page of a report, so it would be good place to include the report title.
Group header	This section is printed at the beginning of a group. It is a good place to include the group name.
Detail	This section includes the body of the report. It is printed once for every row in a record source.
Group footer	This section is printed at the end of a group. It may include summary information for the group.
Page footer	This section is printed at the bottom of every page of a report, so it would be a good place to include information such as a page number.
Report footer	This section is printed once at the end of every report. This is a good place for report totals.

To add fields to the report design, you can display the Field List pane by clicking the Add Existing Fields button. Double-click a field in the Field List to add it to the design grid, or you can drag the field to a location on the grid. If you need to move a field on the grid, click the field to select it and then position the pointer on the border until you see a four-sided arrow. Then, drag to the new location. To change the size of a field, click and drag a selection handle.

To see what your report will look like, click the View button on the Views group and select Report from the menu.

STEP BY STEP   **Create a Report in Design View**

USE the database you used in the previous exercise.

1. If necessary, click the **Rooms** table in the Navigation Pane to select it.
2. On the Create tab, in the Reports group, click the **Report Design** button. A new blank report is displayed in Design View, as shown in Figure 6-10.

View button   Page header section   Add Existing Fields button

Detail section
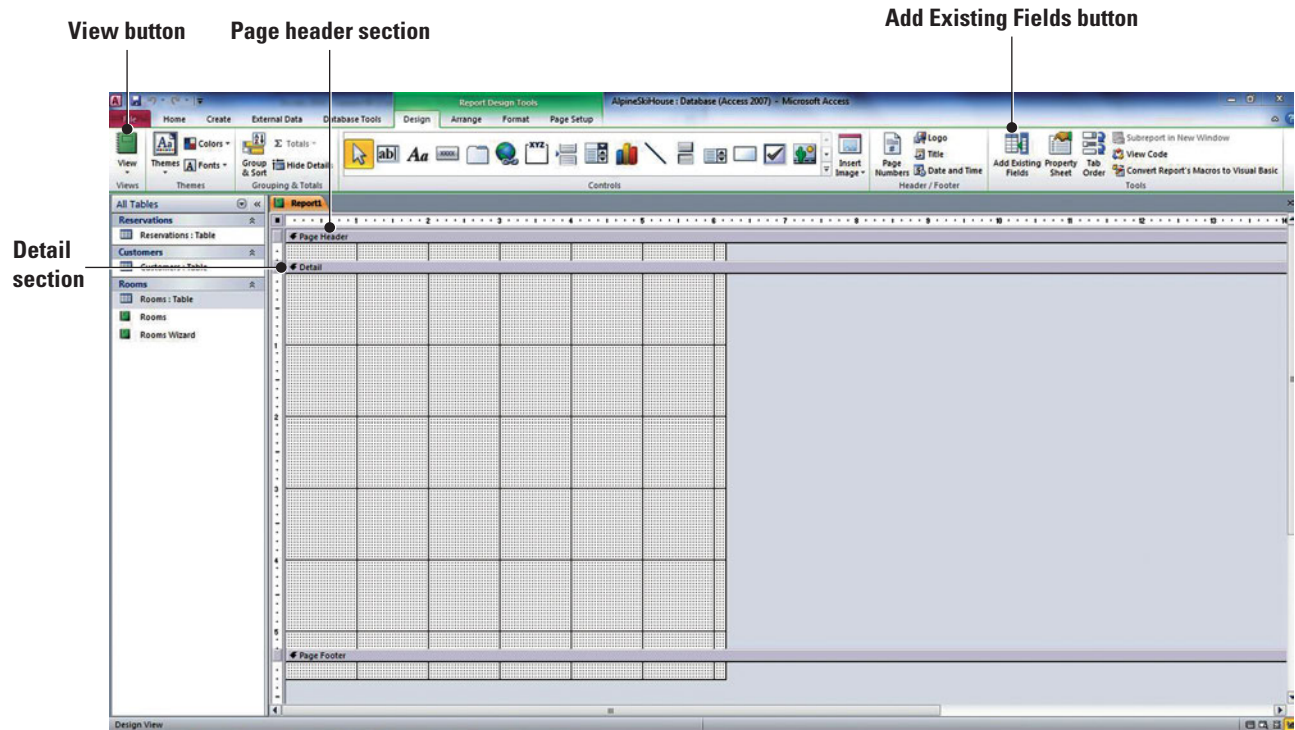
Figure 6-10

New blank report in Design View

3. If the Fields List is not already displayed, on the Design tab, in the Tools group, click the **Add Existing Fields** button. The Show all tables link appears.
4. Click the **Show all tables link** then the **plus (+)** box beside Rooms to display the fields in the table, as shown in Figure 6-11.

5. Double-click **Room ID**. The field is inserted onto the design grid.

6. Double-click **Room Name**, **Bed Size**, and **Rate**.

7. Click the **Close** button on the Field List pane.

8. Click the **Bed Size** label. The border around the label changes to orange, indicating it is selected. Position the insertion point over the top of the border, as shown in Figure 6-12, until the pointer changes to a four-sided arrow. ⊕

Field

Selection handle
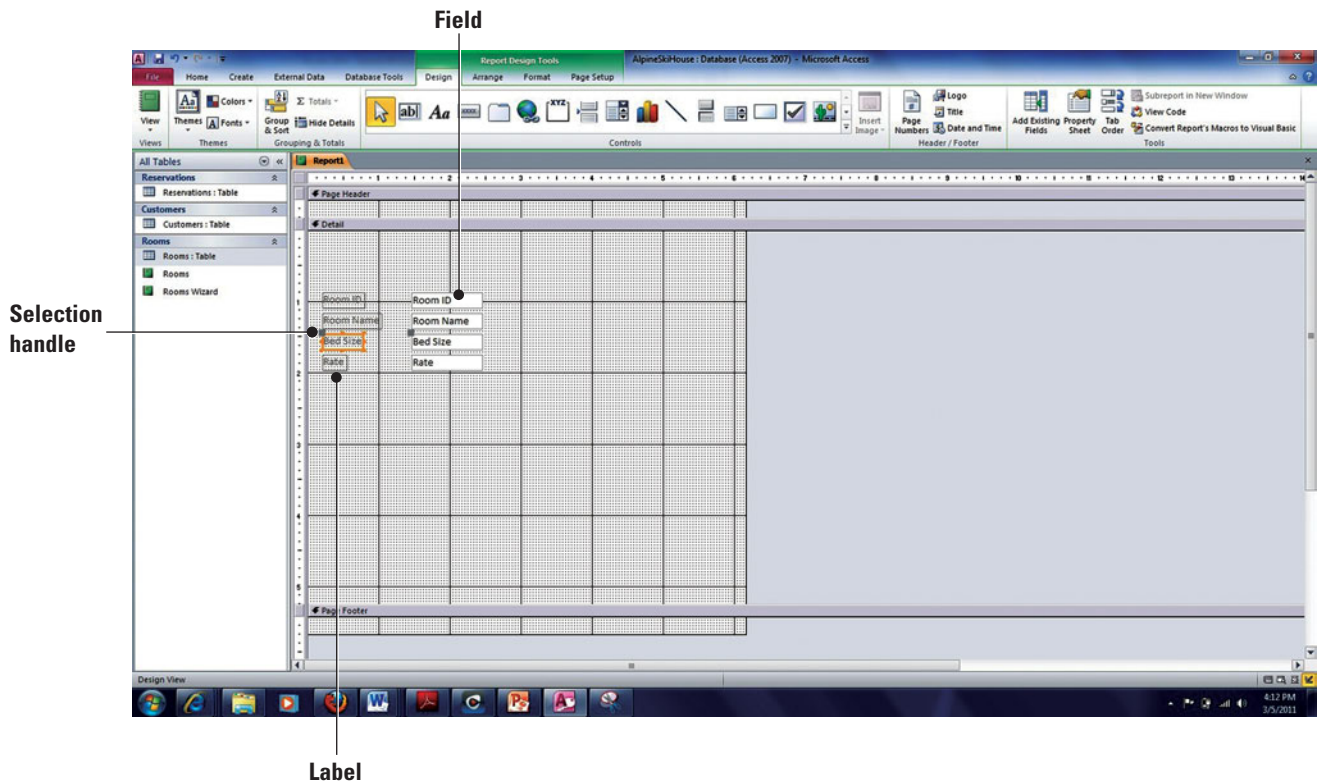
Label

9. Click and drag the label to position it about one-half inch to the right of the *Room ID* field and release the mouse button. The field is moved along with the label.

10. In the same manner, move the Rate label and field to position it below the *Bed Size* field, as shown in Figure 6-13.
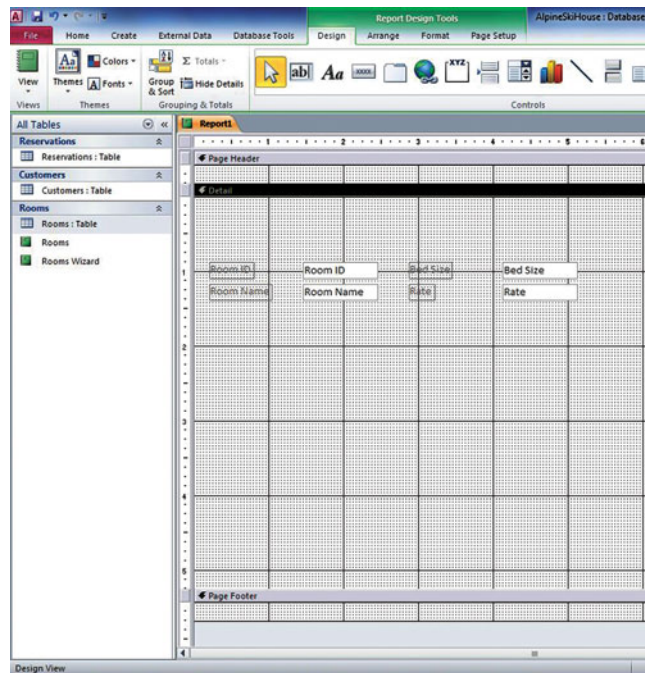
Figure 6-13

Moved fields

11. Click the **Room ID** field to select it. Position the mouse pointer on the square handle in the middle of the right-side border. Click and drag the field to the left to decrease the size by about one-quarter inch.

12. On the Ribbon, in the Views group, click the bottom-half of the **View** button and select **Report View** from the menu. The report is shown in Report View. Scroll down to see all the records.

CERTIFICATION
READY   **5.1.2**

How do you create a report in Design View?

13. Click the **Save** button on the Quick Access Toolbar.

14. Key **Report Design** in the Report Name box and click **OK**.

15. Close the report.

PAUSE. LEAVE the table open to use in the next exercise.

Take Note   You can add more than one field to a report design at once. Hold down the Ctrl key and click the fields you want, and then drag the selected fields onto the report.

Ref   In Lesson 8, you learn how to add controls to reports in Design View.

APPLYING A THEME

The Bottom Line

A theme applies a set of predefined fonts, colors, and design to a report. You can apply a theme to any report in Layout View. The Themes gallery displays a variety of designs. After you click the design you want, it is applied to the report. This instant formatting can quickly give your report the professional look you want.

Applying a Theme

To apply a theme, on the Report Layout Tools Design contextual tab, in the Themes group, click the Themes button to display the Themes gallery. You can select a design from the list displayed, or browse for saved themes. You can also customize and then save a theme based on the current report. You can click the Colors button and choose a color scheme from the menu to update the currently applied theme's colors, and even create new theme colors. You can also click the

Fonts button and choose a font scheme to update the currently applied theme's fonts and create new theme fonts. In this exercise, you apply a theme to the Rooms report, and modify the fonts.

Apply a Theme

USE the database open from the previous exercise.

1. Open the **Rooms** report.
2. On the Ribbon, in the Views group, click the bottom-half of the **View** button. Select **Layout View** from the menu.
3. On the Report Layout Tools Design contextual tab, in the Themes group, click the **Themes** button. The Themes gallery of predefined report themes appears.
4. In the sixth row, fourth column, click the **Metro** design, as shown in Figure 6-14. The format is applied to the report.
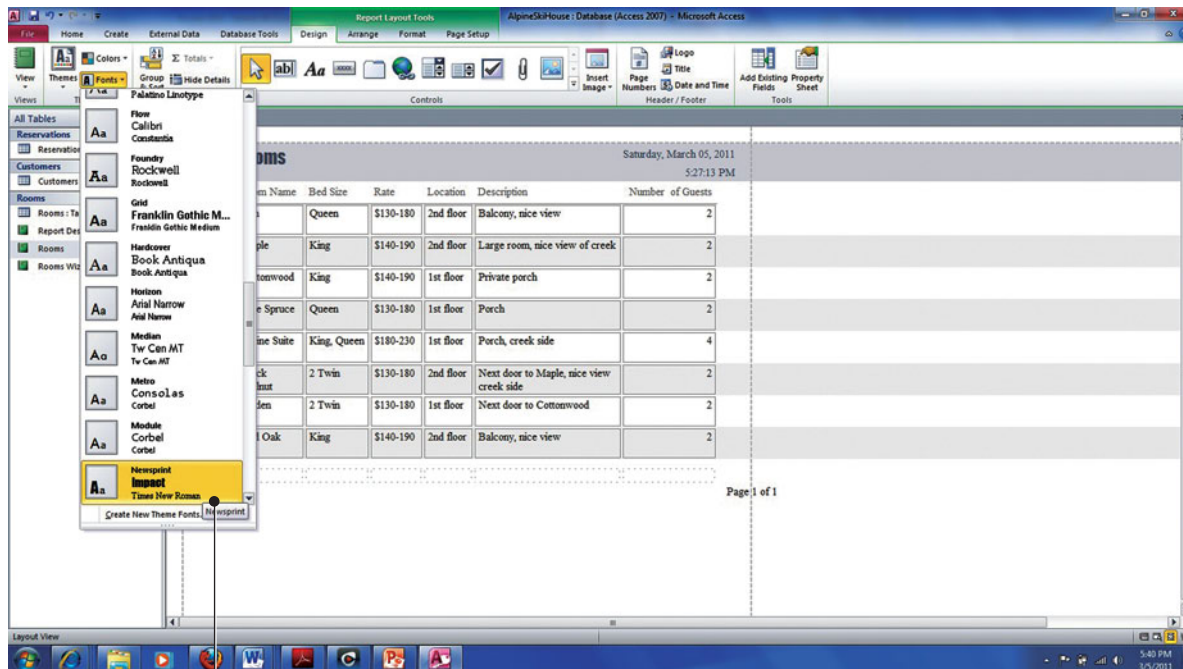
Figure 6-14

Themes gallery with Metro theme chosen
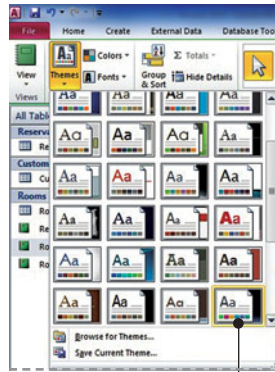
Metro theme chosen

5. In the Themes group, click the **Fonts** button. Select **Newsprint** from the menu, as shown in Figure 6-15, and click OK. The new Font theme is applied.

Newsprint font chosen

Figure 6-15

Fonts menu with Newsprint font chosen

The Bottom Line

6. SAVE the report.

PAUSE. LEAVE the report open to use in the next exercise.

WORKING WITH REPORTS

Reports help group and summarize data in different ways. However, after a report is created, you can use Layout View as well as Report View to help locate data. For example, you can use Layout View to easily sort field data one at a time, or perform more complex sorts using the Group, Sort, and Total pane. You can also use Layout View to filter data and view only those records based on the criteria you specify, and use Report or Layout View to find data based on any term you specify.

Sorting Data within a Report

Sorting organizes data into a particular sequence, such as alphabetic order or from smallest to largest numbers. For example, you can sort a customer list in alphabetic order by last name or by customer ID number. You can sort data by clicking the buttons on the Ribbon, right-clicking and choosing commands from the shortcut menu, or by using the Group, Sort, and Total pane. In this exercise, you sort data within a report by using the Ribbon, shortcut menu, and the Group, Sort, and Total pane.

Sorting data in a report is similar to sorting in a table. In Layout View, select the field you want to sort and click the Ascending or Descending button on the Home tab, in the Sort & Filter group. Click the Remove Sort button to remove the sort orders. You can sort as many fields as you like one at a time.

X Ref   Lesson 3 has more information about sorting in a table.

You can also easily sort data by right-clicking in a field and choosing the type of sort you want from the shortcut menu. The sort commands in the shortcut menu vary depending on the type of data in the field. For text, you will choose Sort A to Z or Sort Z to A; for numbers, you will choose Sort Smallest to Largest or Sort Largest to Smallest; and for dates, you will choose Sort Oldest to Newest or Sort Newest to Oldest.

X Ref   Lesson 5 has more information about sorting in a form.

The Group, Sort, and Total pane gives you more sorting options. You can use the pane to specify the sort order or to view the results of sorting using the shortcut menu. To specify a sort, click the Add a Sort button and select a field from the pop-up menu. Click the drop-down menu to specify the type of sort you want. Click the More Options button to display additional commands for creating detailed sorts. Click the Less Options button to return to the basic sorting options.

To delete a sort in the Group, Sort, and Total pane, click the Delete button at the end of the sort line.

X Ref   Lesson 7 has more information about sorting in a query.

STEP BY STEP   **Sort Data within a Report**

USE the report open from the previous exercise.

1. On the Home tab in the Views group, click the bottom-half of the **View** button. Select **Layout View** from the menu.
2. Click the **Room Name** header.
3. On the Home tab, in the Sort & Filter group, click the **Ascending** button. The column is sorted in ascending alphabetic order.
4. On the Home tab, in the Sort & Filter group, click the **Remove Sort** button. The Sort is removed.

5. Right-click the **Room Name** header. The shortcut menu appears.

6. Select **Sort Z to A**, as shown in Figure 6-16. The column is sorted.
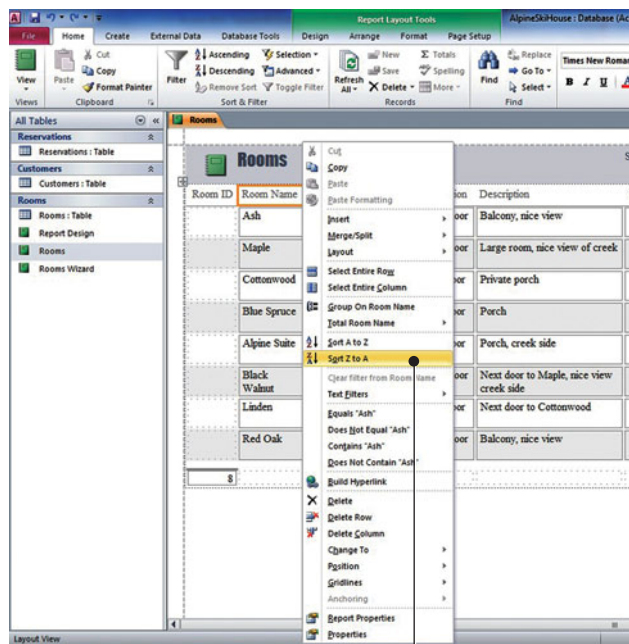
**Click Sort Z to A to sort
in descending order**

7. On the Home tab, in the Sort & Filter group, click the **Remove Sort** button. The Sort is cleared.

8. On the Report Layout Tools Design contextual tab, in the Grouping & Totals group, click the **Group & Sort** button. The *Group, Sort, and Total* pane appears at the bottom of the screen, as shown in Figure 6-17.
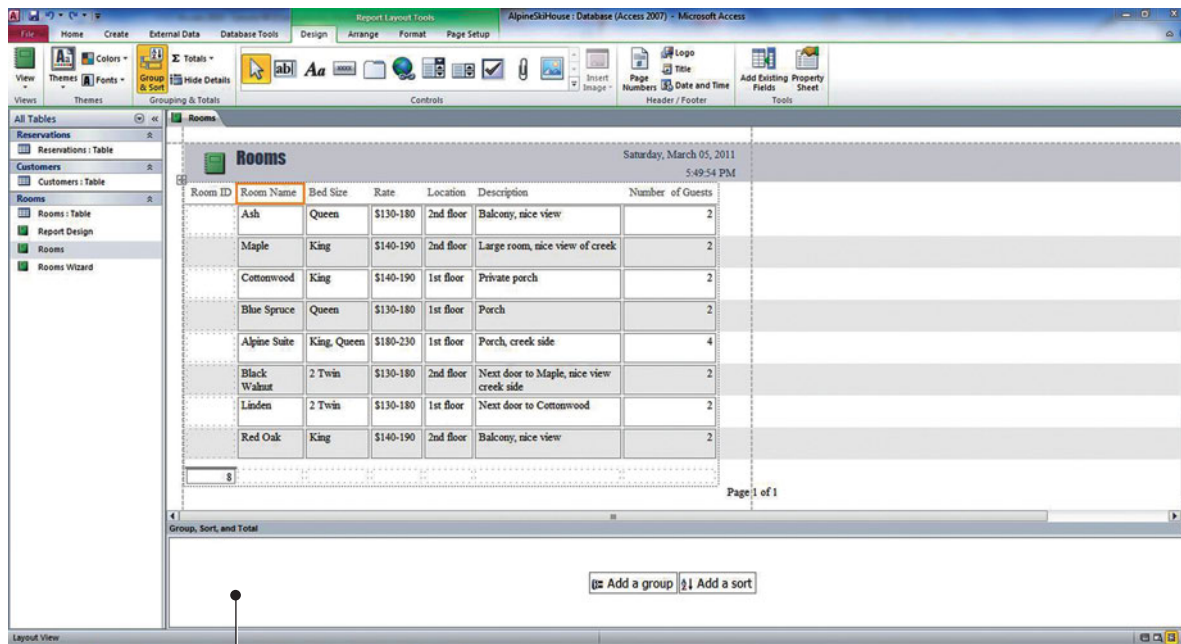
Group, Sort, and Total pane

Figure 6-17

Group, Sort, and Total pane

9. Click the **Add a Sort** button in the *Group, Sort, and Total* pane.

10. Click the **Room Name** field in the fields list. Notice that the field was sorted in ascending order by default and a line was added describing the sort.

11. Click the **down arrow** beside *with A on top* and select **with Z on top** from the menu, as shown in Figure 6-18. The field is sorted in descending order.
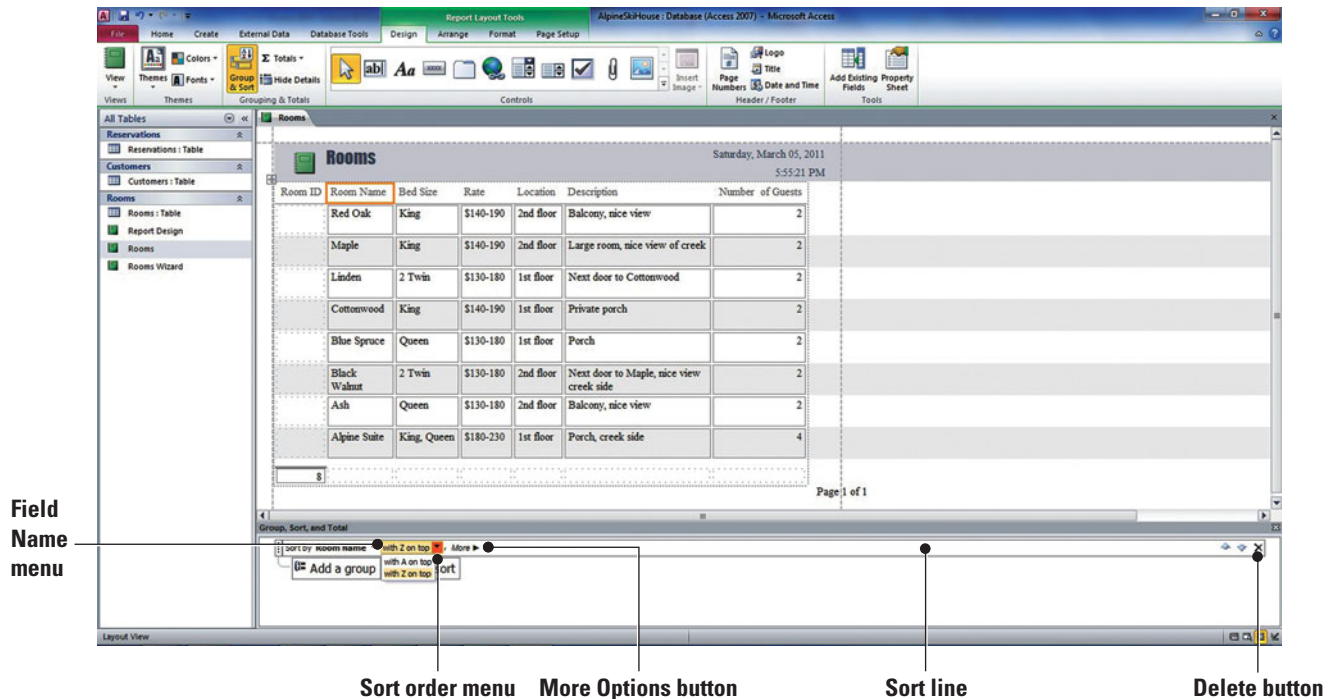
Field Name menu

Sort order menu   **More Options button**   **Sort line**   **Delete button**

Figure 6-18

Sort displayed in the Group, Sort, and Total pane

12. Click the **More Options** button in the Sort line. Notice the options available for customizing a sort.

13. Click the **Delete** button. The sort is cleared.

14. On the Formatting tab, in the Grouping & Totals group, click the **Group & Sort** button. The *Group, Total, and Sort* pane is removed.

15. **SAVE** the report.

PAUSE. LEAVE the database open to use in the next exercise.

CERTIFICATION READY   5.6.2

How do you sort data within a report?

Filtering Data within a Report

A filter displays only data that meet the criteria you have specified and hides the rest. It does not modify the table data or the design of the report. After you remove a filter, all the records are displayed again. Filtering data in Layout View of a report is very similar to filtering data in a table. You can apply common filters using the commands on the Sort & Filter group or by right-clicking a field and choosing a filter from the shortcut menu. The filters available on the shortcut menu vary depending on the type of data in the field. Only one filter can be applied to a field at a time. However, you can specify a different filter for each field. In this exercise, you filter a report using a custom filter, and filter by selection.

You can toggle between filtered and unfiltered views using the Toggle Filter button. To remove a filter from a field, right-click in the field and select the Clear filter from field name command. To remove all filters permanently, select the Clear All Filters command on the Advanced menu in the Sort & Filter group.

Take Note   If you save a report (or other object) while a filter is applied, it will be available the next time you open the report. If you want to open the report and see the filter already applied, set the Filter On Load property setting to Yes.

You can also filter by selection in a report. If you want to view only the reservations for 12/13/11, select that date in the *Check-in* field and click the Selection button. That date will appear in the menu, so that you can choose Equals 12/13/11, Does Not Equal 12/13/11, and so on. You can also access these commands on the shortcut menu by right-clicking the value.

Take Note   If you need to apply a filter that is not in the common filters list, you can write an advanced filter using the Advanced Filter/Sort command on the Advanced menu. You need to be familiar with writing expressions, which are similar to formulas, and be familiar with the criteria that you specify when designing a query.

(X) **Ref**   Lesson 3 has more information about filtering records in a table.

(X) **Ref**   Lesson 5 has more information about filtering data within a form.

(X) **Ref**   Lesson 7 has more information about filtering data within a query.
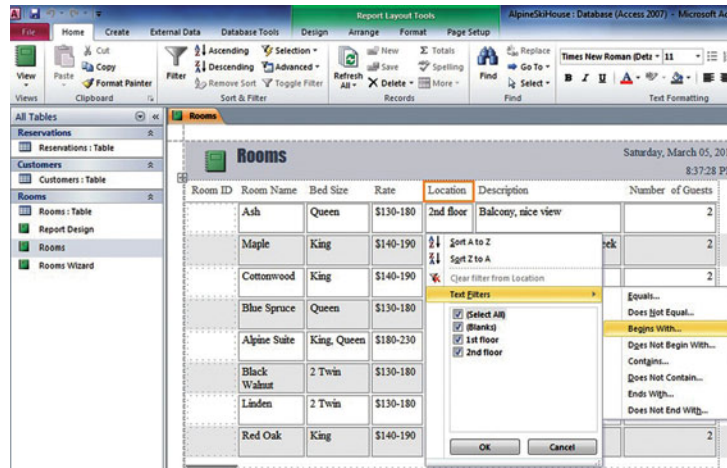
STEP BY STEP   **Filter Data within a Report**

USE the database you used in the previous exercise.

1. Click the **Location** header to select it.
2. On the Home tab, in the Sort & Filter group, click the **Filter** button. A menu appears.
3. Point to Text Filters. A second menu appears. Select **Begins with . . .** as shown in Figure 6-19. The Custom Filter box appears.

Figure 6-19

Text Filters menu

4. Key **1** into the Custom Filter box and click **OK**. The data is filtered to show only the rooms on the first floor.
5. Click the **Remove Filter** button. The report returns to its unfiltered state.
6. In the *Bed Size* field, click **King** in the second row.
7. On the Home tab, in the Sort & Filter group, click the **Selection** button. Select **Equals "King"** from the menu. The data is filtered to show only the rooms with King-sized beds.

8. Right-click the **Bed Size** header. A shortcut menu appears. Notice that the Equals "King" filter and the other filters from the Selection menu are also available in the shortcut menu, shown in Figure 6-20.
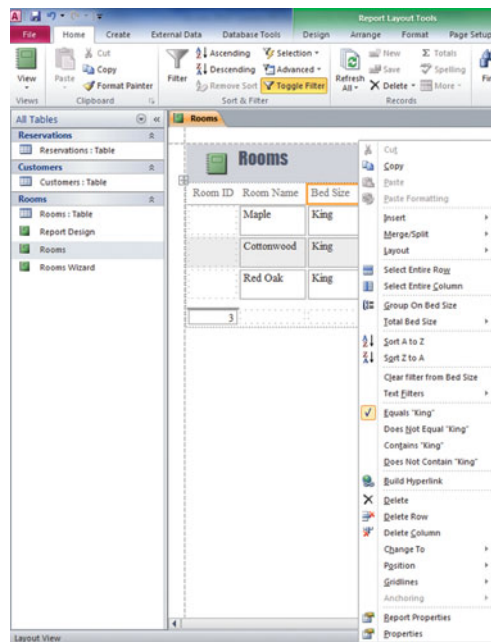
9. Select **Clear filter from Bed Size** from the menu. The filter is cleared.
10. **SAVE** and close the table.

PAUSE. LEAVE the database open to use in the next exercise.

Finding Data within a Report

When you want to quickly locate records in a report, you can use the Find command, which searches all the records of the report for any term you specify. Sometimes you may need to quickly find records within a report while in Report View or Report Layout View. To accomplish this, you can use the Find command in the Find group on the Home tab. In this exercise, you locate data in Report View by using the Find command.

X | Ref   Lesson 3 has more information about the Find command.

The Find command was overviewed for tables in Lesson 3, Like the Find command in table Datasheet View, once clicked, the Find dialog box appears where you can enter search criteria, set options for where you'd like Access to look for the data, and set data matching and other search options. You can quickly locate records that match your search term and view multiple occurrences; however, remember that you cannot modify record data from within a report, so you cannot replace the record data that is found.

Another Way
You can also access the Find command by pressing Ctrl+F on the keyboard.

Take Note   You cannot use the Find command when you're in Report Design View.

Take Note   You can also use the Find command in tables, forms, and queries.
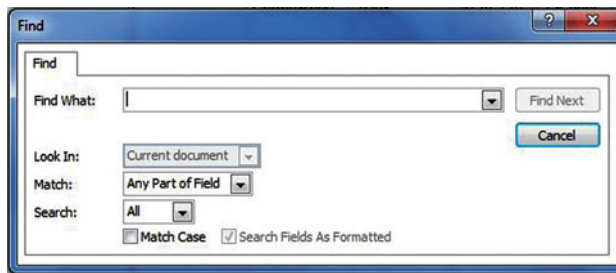
STEP BY STEP   **Find Data within a Report**

USE the database open from the previous exercise.

1. Open the **Rooms** report.
2. On the Ribbon, in the Views group, click the bottom-half of the **View** button. Select **Report View** from the menu.

3. On the Home tab, in the Find group, click the **Find** button. The Find dialog box appears, as shown in Figure 6-21.

Figure 6-21

Find dialog box

4. Key **King** in the Find What drop-down box and select **Current document** in the Look In drop-down box.

5. Click the **Find Next** button. Access highlights the first occurrence of 'King' in the report. Continue clicking the **Find Next** button until Access reports that it has finished searching the records.

6. Close the table. **CLOSE** the database.

STOP. CLOSE Access.

**CERTIFICATION
READY**   **5.6.1**

How do you use the Find command?

Knowledge Assessment

Matching

Match the term in Column 1 to its description in Column 2.

Column 1

1. report

2. record source

3. Report Wizard

4. Field List pane

5. Detail

6. theme

7. Sort

8. Filter

9. design grid

10. Find command

Column 2

a. organizes data in a particular order

b. displays data that meets the criteria you have specified and hides the rest

c. a list of available fields for adding to a report

d. a database object that is used to organize and display data from tables and queries

e. locates data in an open object like a table, query, or report

f. the table or query that provides the data used to generate a report

g. the way a report is displayed in Design View

h. guides you through a series of questions and then generates a report based on your answers

i. the section of a report that includes the body of the report

j. a predefined format that you can apply to any report in Layout View

True/False

Circle T if the statement is true or F if the statement is false.

T   F   1. A simple report contains all the records in a table or query.

T   F   2. You can edit the data in a report.

T   F   3. Click the Report button to define a record source.

T   F   4. In the Report Wizard, you can skip steps such as Sorting or Grouping by clicking the Next button.

T   F   5. You can drag a field from the Field List pane to the design grid to add it to the report.

T   F   6. Layout View gives you the most options for creating a report, because it shows you the underlying structure of the report.

T   F   7. Templates resize column widths for you.

T   F   8. You can save a filter with a report.

T   F   9. You can use the Group, Sort, and Total pane to specify sort order or view the results of sorting using the shortcut menu.

T   F   10. The Toggle Filter button removes a filter permanently.

Competency Assessment

Project 6-1: Soccer Team Report

You need a copy of the soccer team's roster that you can print and take with you to work. Create a simple report and apply a theme.

GET READY. LAUNCH Access if it is not already running.

@ The *SoccerTeam* file for this lesson is available on the book companion website or in WileyPLUS.

 1. OPEN the *SoccerTeam* database.
 2. Save the database as *SoccerTeamXXX* (where *XXX* is your initials).
 3. Click the **Roster** table to select it.
 4. On the Create tab, in the Reports group, click the **Report** button. A new report is created.
 5. Resize each field so that all fields fit on one page.
 6. On the Report Layout Tools Design contextual tab, in the Themes group, click the **Themes** button.
 7. Select the purple format in the seventh row, third column named **Opulent**.
 8. Click the **Save** button on the Quick Access Toolbar. The Save As dialog box appears with the name Roster in it. Click **OK** to accept that name for the report.
 9. Close the report.
10. CLOSE the database.

LEAVE Access open for the next project.

Project 6-2: Fourth Coffee Inventory Report

In your job at Fourth Coffee, you are responsible for maintaining the coffee inventory. Create a report to view the inventory and prepare for the next order.

GET READY. LAUNCH Access if it is not already running.

@ The *Coffee* file for this lesson is available on the book companion website or in WileyPLUS.

 1. OPEN *Coffee* from the data files for this lesson.
 2. SAVE the database as *CoffeeXXX* (where *XXX* is your initials).
 3. Click the **Coffee Inventory Table** in the Navigation Pane to select it.

4. On the Create tab, in the Reports group, click the **Report Wizard** button. The first Report Wizard screen appears.

5. Click the double arrow **>>** to move all the fields to the Selected Fields list and click **Next**.

6. On the grouping screen, click the **Scheduled Order Date** field, click the **>**, and click **Next**.

7. On the sorting screen, click the active **down arrow** on the menu, select **Pounds**, and click **Next**.

8. Keep the defaults as is on the layout screen and click **Next**.

9. Click **Finish**. The report is created.

10. Close the report.

11. **CLOSE** the database.

LEAVE Access open for the next project.

Proficiency Assessment

Project 6-3: Alpine Ski House Reservations Report

Every week is different at the Alpine Ski House. Sometimes the lodge is full of guests, and sometimes only a few rooms are occupied. Create a report to show the innkeepers what to expect in the coming weeks.

GET READY. LAUNCH Access if it is not already running.

The *Alpine House* file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** the *Alpine House* database.

2. **SAVE** it as *Alpine House XXX* (where *XXX* is your initials).

3. Use the Report Wizard to create a report using the *Room, Check-in Date,* and *Check-out Date* fields.

4. Group the report by Room and sort it in ascending order by Check-in Date.

5. Use stepped layout and portrait orientation.

6. Name the report **December Reservations** and finish the wizard.

7. Switch to Layout View and increase the width of the *Room* field.

8. Apply the **Foundry** theme.

9. Save and close the table.

10. **CLOSE** the database.

LEAVE Access open for the next project.

Project 6-4: Wingtip Toys Design View Report

The manufacturing department at Wingtip Toys needs summary information about each toy in inventory. Create a report in Design View that will display the requested information.

GET READY. LAUNCH Access if it is not already running.

The *Wingtip Toys* file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** *Wingtip Toys* and save it as *Wingtip Toys XXX* (where *XXX* is your initials).

2. Click the **Inventory** table in the Navigation Pane to select it.

3. On the Create tab, in the Reports group, click the **Report Design** button.

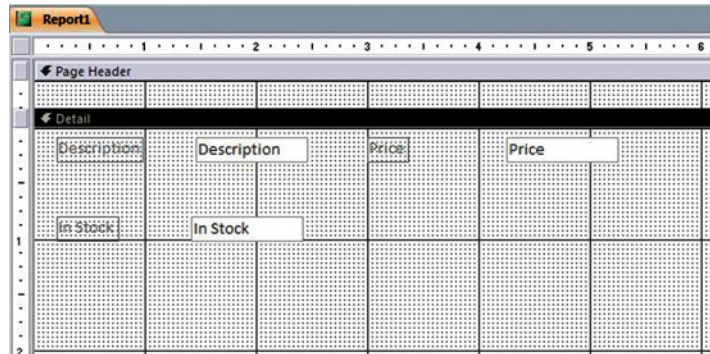**4.** On the Design tab, in the Tools group, click the **Add Existing Fields** button. The Field List pane appears.

5. Position the fields from the Inventory table onto the design grid, as shown in Figure 6-22. Adjust field widths as shown.

Figure 6-22

Wingtip Toys report in Design View

6. Save the report as **Toy Summary**.
7. Close the report.

LEAVE the database open for the next project.

Mastery Assessment

Project 6-5: Filter, Sort, and Find Records in a Wingtip Toys Report

A large order was recently filled, and now the inventory at Wingtip Toys is quite low on some items. Create a report that displays this information.

The **Wingtip Toys XXX** database should be open.

GET READY. LAUNCH Access if it is not already running.

1. Define the **Inventory** table as the record source for a new report.
2. Create a simple report.
3. Apply the **Equity** theme to the new report.
4. Sort the report in ascending order by the *Description* field.
5. Click the first row of the **In Stock** field, which contains the number 10.
6. Filter by selection to display the toys with 10 or fewer items in stock.
7. Click the **In Stock** field header and sort the field in ascending order.
8. Clear all sorts.
9. Clear all filters.
10. Find and cycle through all occurrences of the word **Car**.
11. Save the report as **Inventory**.
12. Close the report.
13. **CLOSE** the database.

LEAVE Access open for the next project.

Project 6-6: Angel Project Report

The school Angel Project has begun. Information for the boy angels needs to be distributed to the boys in the kindergarten classes, and the girl angels' information needs to be distributed to the girls. Create a report with filters that displays the boy and girl information separately.

GET READY. LAUNCH Access if it is not already running.

The *Angel Project* file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** the *Angel Project* database.
2. Save the database as *Angel Project XXX* (where *XXX* is your initials).
3. Define the List table as the record source for a new report.
4. Use the Report Wizard to create a report with all the fields.
5. Skip the grouping and sorting screens, and choose a tabular, portrait layout.
6. Name the report *Angel Needs and Wants*.
7. Switch to Layout View and adjust field widths as necessary so that all data fits on the screen and on one page, and apply the **Trek** theme.
8. Display the *Group, Sort, and Total* pane.
9. Sort the report in ascending order by Age.
10. Create a filter to show only the information for the males.
11. Toggle the filter and create a new filter to show only the information for the females.
12. Save and close the report.
13. **CLOSE** the database.

CLOSE Access.

INTERNET READY

Search the Internet for at least five dream vacation packages and create a database table that lists each hotel's location, name, cost, and favorite amenities or activities. After creating the table, use the Report Wizard to create a professional-looking report that displays your data.

KEY TERMS

- bound control
- calculated control
- conditional formatting
- control
- control layouts
- control tab order
- Control Wizard
- Expression Builder
- stacked layout
- tabular layout
- unbound control

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Wingtip Toys is a mom-and-pop operation with fewer than 25 employees, many of whom craft the heirloom-style wooden toys that the company has sold successfully for more than 20 years. As the newly hired marketing coordinator, you are learning every aspect of the business in order to market its products effectively. In this lesson, you learn to add, format, and arrange controls on forms and reports that you can use to evaluate sales and inventory for the company.

SOFTWARE ORIENTATION

Controls and Header/Footer Groups in Reports and Forms

When you view a report in Design View, the Report Design Tools are displayed in the Ribbon. The Controls and Header/Footer groups are located on the Design tab. When you position the mouse pointer over a tool, Access will display the tool's name in a ScreenTip. Use the Controls and Header/Footer groups on the Design tab (Figure 8-1) to add controls to a report.

Header/Footer group

Figure 8-1

Controls and Header/Footer groups on the Report Design Tools tab

Controls group   **Launches the Field List pane**

The Controls group located on the Design tab in the Form Design Tools on the Ribbon, shown in Figure 8-2, is very similar to the one for reports. The procedure for adding controls to a form and a report are similar as well. Use the Controls and Header/Footer groups on a form's Design tab to add controls to a form.
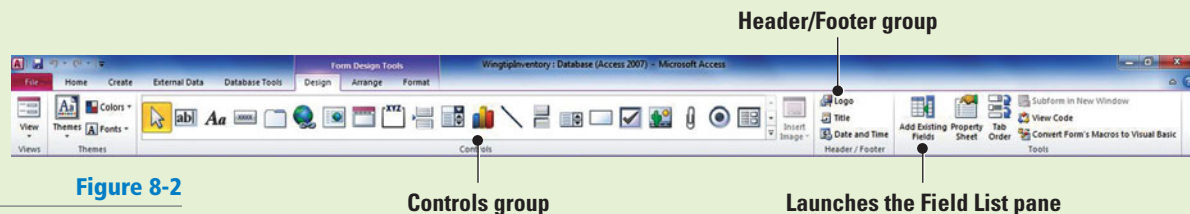

Header/Footer group

Figure 8-2

Controls and Header/Footer groups on the Form Design Tools tab

Controls group   **Launches the Field List pane**

ADDING BOUND AND UNBOUND CONTROLS

The Bottom Line

A **control** is an object that displays data, performs actions, and lets you improve the look and usability of a form or report. Access uses three different types of controls: bound, unbound, and calculated.

Controls add functionality to a report or form. For example, you can add a logo control to a report to enhance the look of the report or a list box control to allow users to choose from a list of items. You can insert bound, unbound, and calculated controls using the tools on the Controls and Header/Footer groups. The Control Wizard, located on the Controls group, is helpful when creating some of the more complicated controls.

Adding Unbound Controls

An **unbound control** does not have a data source; it displays information such as lines, shapes, or pictures. Unbound controls are not connected to a field, but they display information that is important for reports and forms, some of which will appear in report and form header and footer sections, such as titles, dates, and page numbers. You can add both bound and unbound controls using the tools on the Controls group, or add unbound controls to the header and footer sections of reports and forms by using the Header/Footer group. In this exercise, you use the tools on the Header/Footer group to add unbound controls to the Report Header section.

STEP BY STEP **Add Unbound Controls**

@ The *WingtipInventory* file for this lesson is available on the book companion website or in WileyPLUS.

WILEY PLUS EXTRA

WileyPLUS Extra! features an online tutorial of this task.

@ The *Chrysanthemum* file for this lesson is available on the book companion website or in WileyPLUS.

GET READY. Before you begin these steps, be sure to turn on and/or log on to your computer and **LAUNCH** Access.

1. **OPEN** *WingtipInventory* from the data files for this lesson.
2. Save the database as *WingtipInventoryXXX* (where *XXX* is your initials).
3. Double-click the **Toy Summary** report in the Navigation pane.
4. On the Home tab, in the Views group, click the **View** button and select **Design View** from the menu.
5. On the Design tab, in the Header/Footer group, click the **Logo** button. The Insert Picture dialog box appears.
6. Navigate to the student data files for this lesson and select *Chrysanthemum.jpg* and click **OK**. The picture is inserted in the Report Header section.
7. On the Design tab, in the Header/Footer group, click the **Title** button. The title control with the title Toy Summary is inserted in the Report Header section. The text in the title is selected.
8. Key **Inventory Summary by Toy** and press the **Enter** key.
9. On the Design tab, in the Header/Footer group, click the **Date and Time** button. The Date and Time dialog box appears, as shown in Figure 8-3.

Figure 8-3

Date and Time dialog box
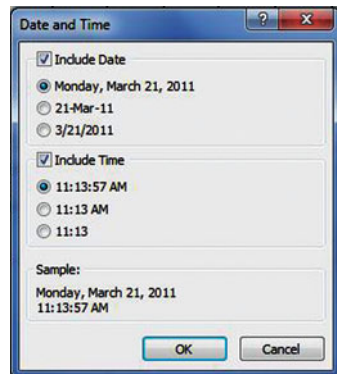
10. Click **OK** to accept the default date and time formats. The Date and Time controls are inserted in the Report Header section of the report, as shown in Figure 8-4.
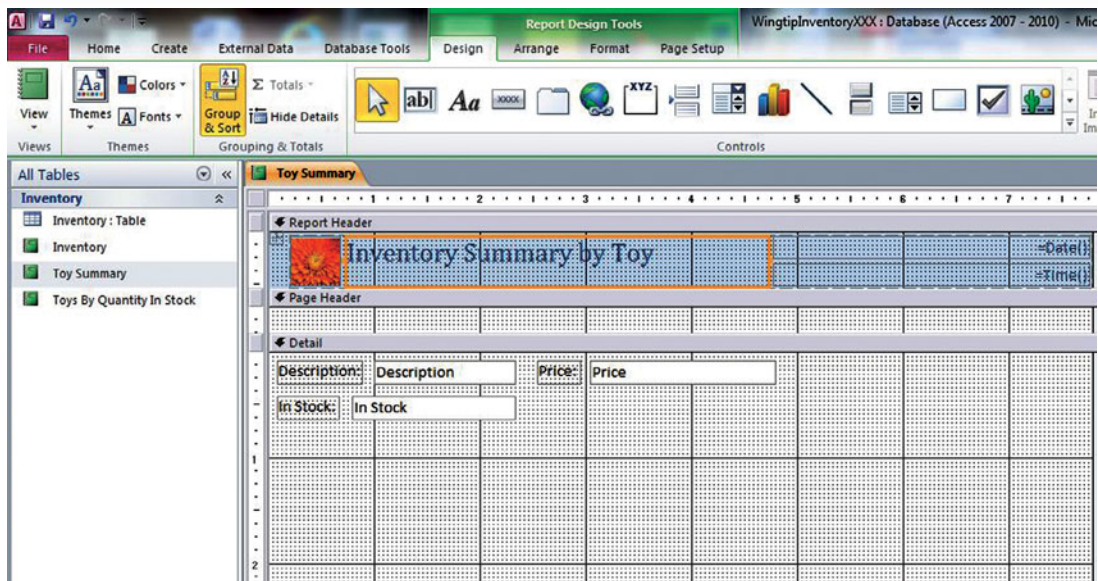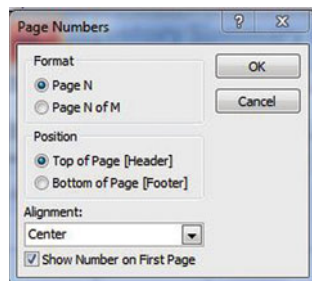
Report Header shown in Design View

11. On the Design tab, in the Header/Footer group, click the **Page Numbers** button. The Page Numbers dialog box appears, as shown in Figure 8-5.

Figure 8-5

Page Numbers dialog box

12. In the Position section of the Page Numbers dialog box, select the **Bottom of Page [Footer]** option then click **OK**. If necessary, scroll to the bottom of the report window. The page number is inserted in the Page Footer section near the bottom of the report, as shown in Figure 8-6.

Figure 8-6

Report shown in Design View
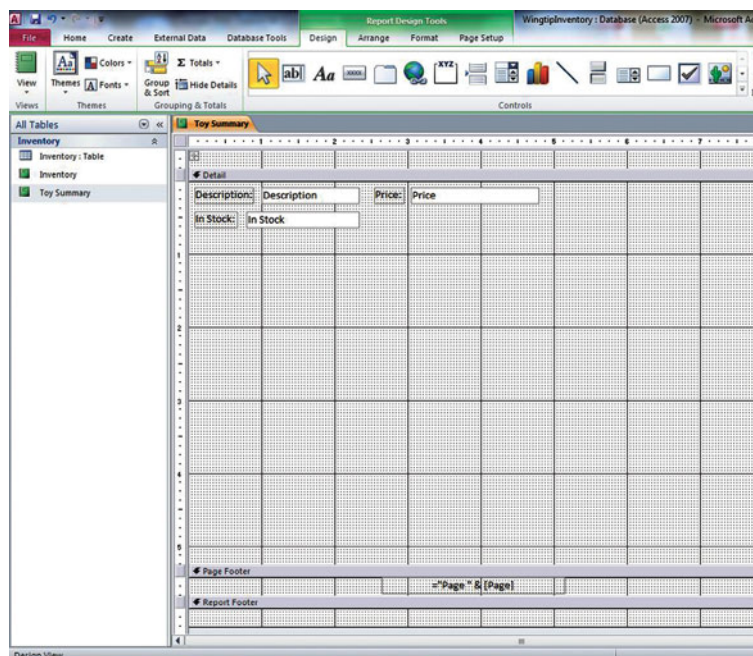
CERTIFICATION READY   **3.2.3**

How do you apply form design options by formatting a header and footer?

CERTIFICATION READY   **5.2.4**

How do you apply report design options to a header and footer by inserting a page number?

How do you apply report design options to a header and footer by inserting a logo?

Another Way
You can also display the Field List pane by pressing Alt+F8.

Another Way
You can also display the property sheet by clicking control and pressing F4.

13. Click the **Save** button on the Quick Access Toolbar.

PAUSE. LEAVE the report open to use in the next exercise.

Adding Bound Controls

A **bound control** uses a field in a table or query as the data source. Bound controls, such as text boxes, display information such as text, dates, numbers, pictures, or graphs from a field in a table or query.

You can bind a control to a field by moving it from the Field List pane or by using the Property Sheet. In this exercise, you practice adding a bound control to a report by using the Field List pane, and adding a bound control and unbound controls to a report by using the Controls group.

When you bind a control to a field, you connect it to that field. The easiest way to create a bound control is to double-click or drag a field from the Field List pane to the report. Access creates the appropriate control, binds the control to the field, and creates a label for the control.

You can display the Field List pane by clicking the Add Existing Fields button on the Tools group.

Another way to bind a control to a field is to first add an unbound text box to a report or form using the Controls group. Then, open its Property Sheet either by right-clicking and choosing Properties from the shortcut menu or by clicking the Property Sheet button on the Tools group in the Design tab. On the Property Sheet, in the Data tab, click the down arrow beside the Control Source property and select the field you want to display in the control.

Take Note The process for adding a control to a form and a report is the same. Once shown how to add a control to a report, you can add a similar control to a form in the same manner.

When you click any button on the Controls group (except the Hyperlink and Insert Image buttons) the pointer changes to the move pointer with a plus sign (+). Click where you want the upper-left portion of the control to start. Remember that a label will also be inserted, so leave enough space for the label. Click once to create a default-sized control, or click the tool and then drag it into the design grid to create the size you want.

When you click the Hyperlink and Insert Image buttons on the Controls group, a dialog box appears requesting additional information before these unbound controls are created. For example, the insert Hyperlink dialog box asks what file or location you'd like to link to, and the corresponding hyperlink text to display on the form or report; the Insert Image button displays a submenu with two selections, one of which allows you to browse your computer for images to add to the report or form, and the other allows you to view a gallery of images you've already included on your report or form so you may easily add them again.

You can use the Controls group to add other unbound controls like lines and page breaks to forms and reports. For example, you may want to use the line control to visually separate controls on a form to help it look more aesthetically pleasing, or the Insert Page Break control to create a report's title page by separating controls in the Report Header from the rest of the report.

To delete a control from the grid, select it, display the shortcut menu, and choose Delete.

STEP BY STEP   Add a Bound Control to a Report

USE the database open from the previous exercise.

1. On the Design tab, in the Tools group, click the **Add Existing Fields** button. The Field List pane appears. Click the **Show all tables** link. The fields for the Inventory table appear, as shown in Figure 8-7.
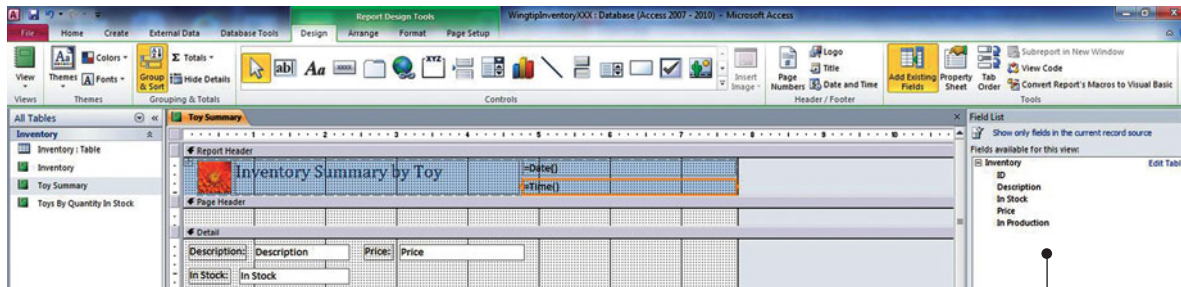
Figure 8-7
Field List pane

Fields in Field List pane

2. Click the **ID** field and drag it to the right of the *Price* field, as shown in Figure 8-8.

ID field dragged here
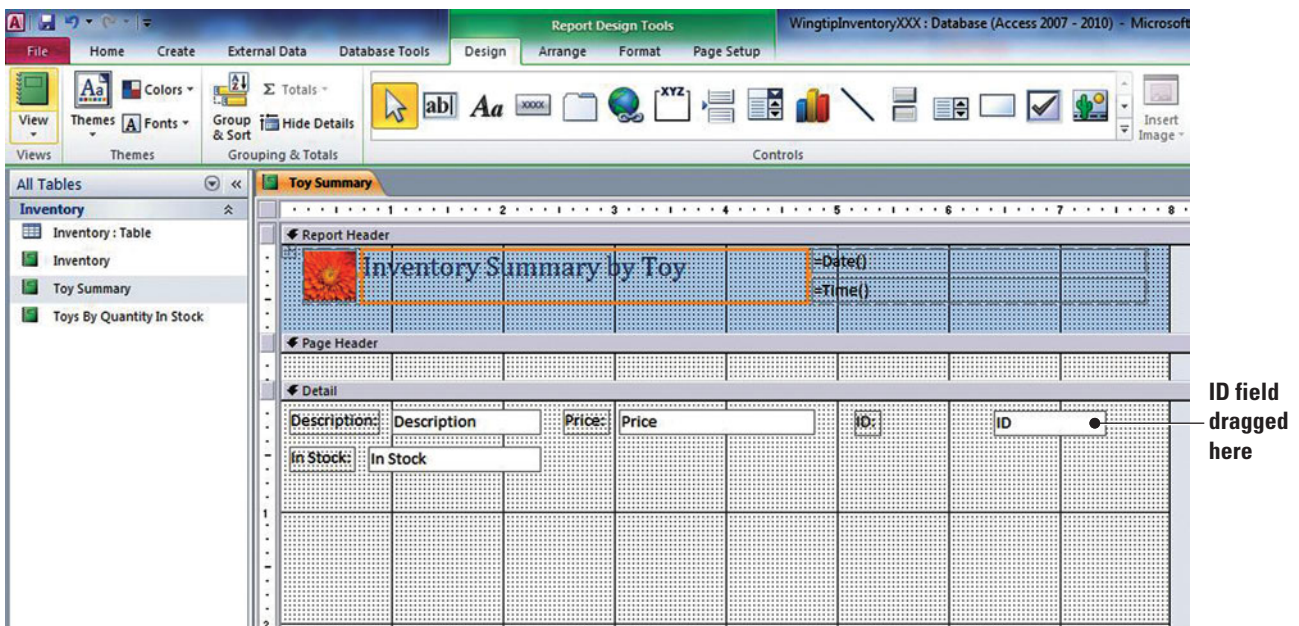
Figure 8-8
Bound control dragged from the Field List pane

3. Drag the *In Production* field to the design grid below the *ID* field.
4. Click **Close** on the Field List pane.
5. Click the **ID** field control until you see the orange border with selection handles on the borders and corners.
6. Right-click in the control to display the shortcut menu.

7. Select **Delete** from the menu, as shown in Figure 8-9. The control and label are removed from the design grid.
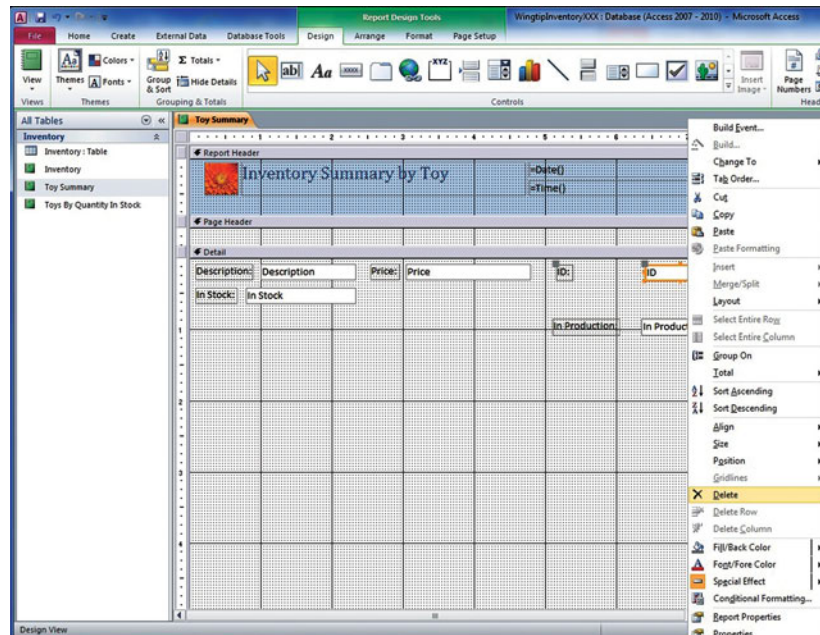
8. Select the **In Production** control, right-click and select **Delete** from the menu. If necessary, right-click the check box control that may still appear and select **Delete** from the menu.

9. On the Design tab, in the Controls group, click the **Text Box** button. The mouse pointer changes to a move pointer.

10. Position the pointer at approximately the same location as the deleted *ID* field control and click to create the text box control as shown in Figure 8-10. Notice that the word Unbound is shown in the control and the word Text and a number (depending on the number of controls you have created in this session) appear in the label.
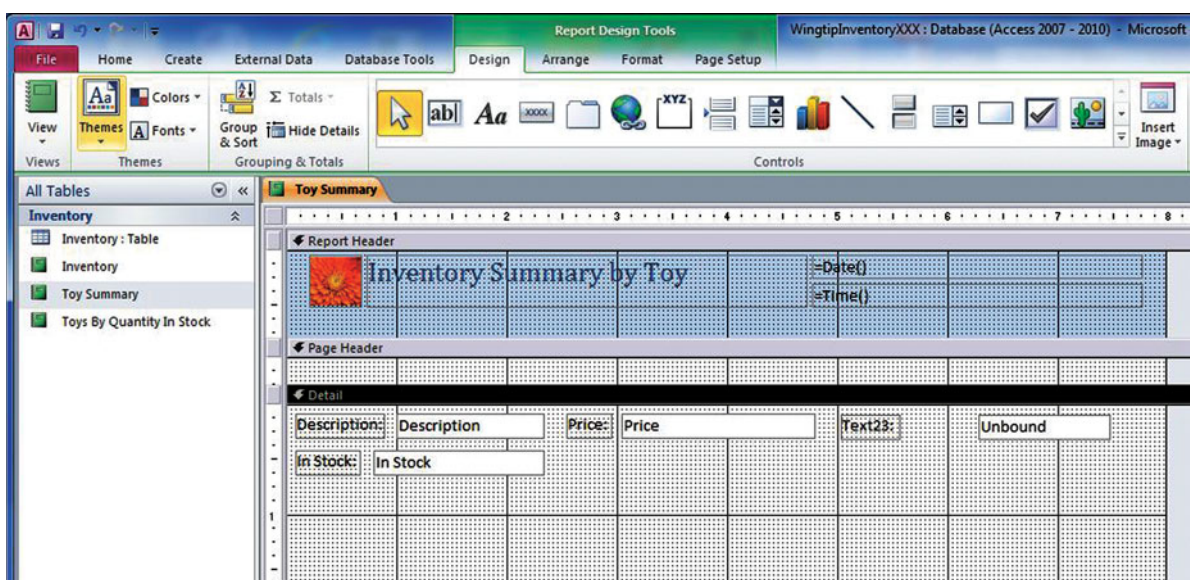
Figure 8-10

Unbound control

11. Select the control if it isn't selected already.

12. On the Design tab, in the Tools group, click the **Property Sheet** button. The Property Sheet appears.

13. In the Data tab, click the **down arrow** on the Control Source row, and click the **ID** field, as shown in Figure 8-11. Notice the control now displays the field name ID, which means that it is now bound to the control.
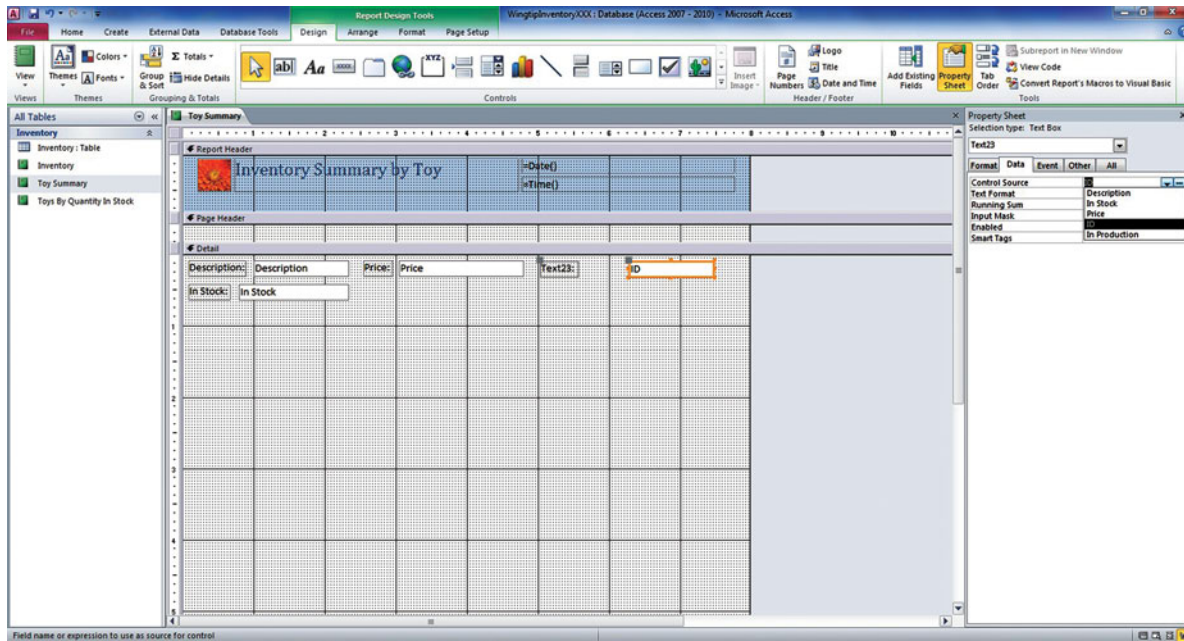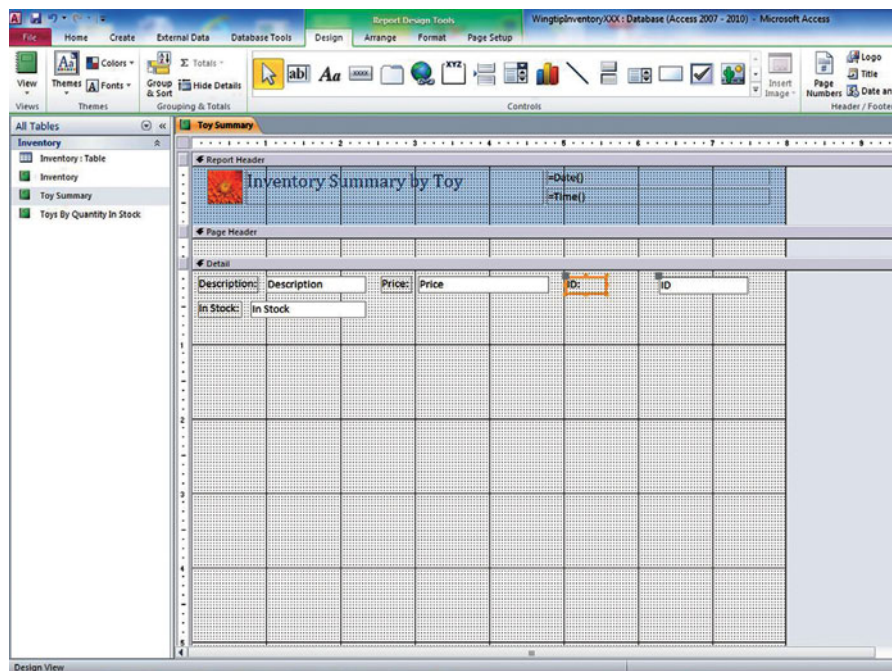

Figure 8-11

Property Sheet

14. Click **Close** on the Property Sheet.

15. Click the **ID** control label on the design grid and select the text in the label.

16. Key **ID** and then press **Enter**. Your screen should look similar to Figure 8-12.

Figure 8-12

Bound control

17. On the Design tab, in the Controls group, click the **Hyperlink** button The Insert Hyperlink dialog box appears, as shown in Figure 8-13.
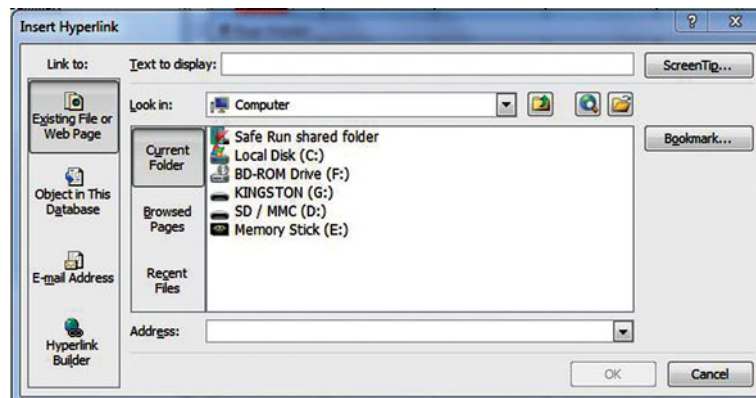
18. Key **Wingtip Toys Website** in the Text to display box and **www.wingtiptoys.com** in the Address box, then click **OK**. Your screen should look similar to Figure 8-14.
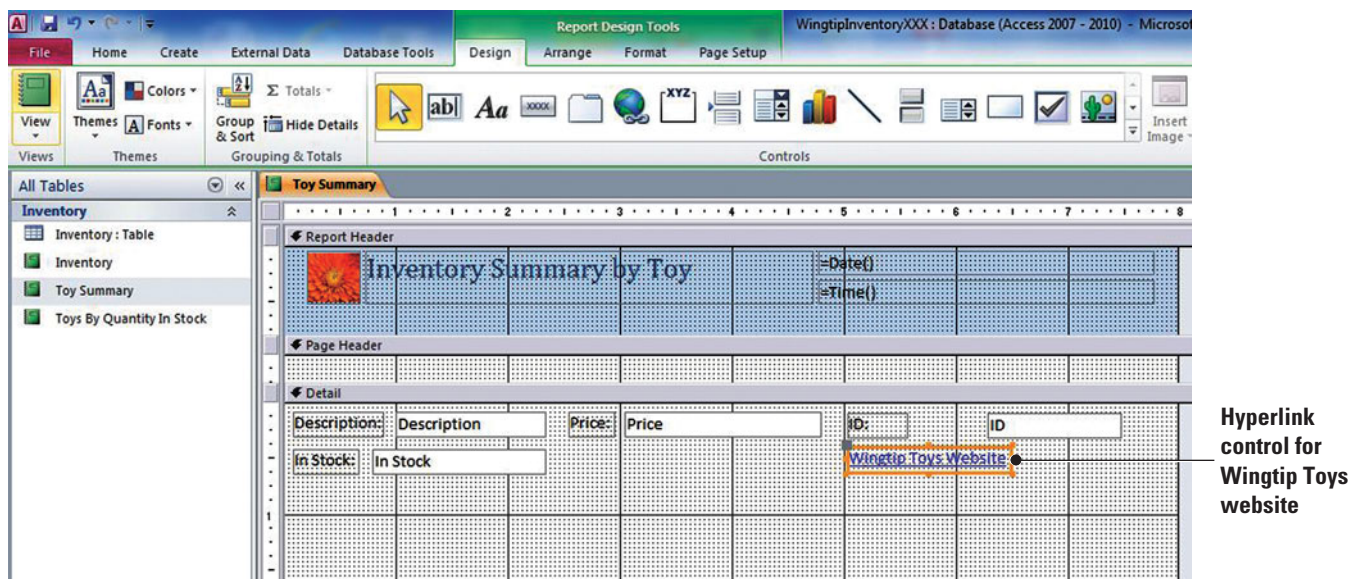

Hyperlink control for Wingtip Toys website

Figure 8-14

Hyperlink control for Wingtip Toys website

19. Click the Wingtip Toys website control until you see the orange border with selection handles on the borders and corners.

20. Position the pointer on the orange border until you see a four-sided arrow. Then, drag the control to the Report Header section and release it over the lower half of the Inventory Summary by Toy control. The Wingtip Toys website control should appear below the *Inventory Summary by Toy* control, as shown in Figure 8-15. You have just created a hyperlink to the Wingtip Toys website that is active in Report View.

**CERTIFICATION
READY   3.2.2**

How do you add a bound text box control to a form?

**CERTIFICATION
READY   5.2.3**

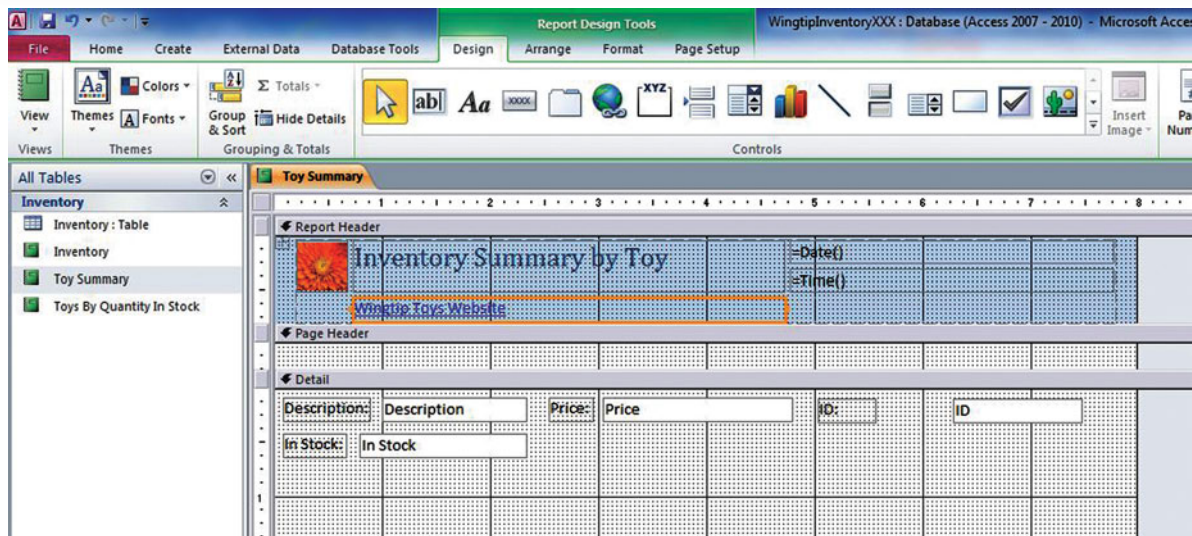How do you add an unbound hyperlink to a report?

Figure 8-15

Wingtip Toys website control in Report Header section

21. Switch to Report View to test the hyperlink. When finished, switch back to Report Design View.

22. Click the **Save** button on the Quick Access Toolbar.

PAUSE. LEAVE the report open to use in the next exercise.

Adding Calculated Controls

A **calculated control** is a control that displays the result of a calculation or expression. Calculated controls can display calculations that are vital to the usefulness of a report or form. For example, when your company needs to know the amount of sales dollars generated by each toy in a product line, you can multiply the number of toys sold by the price and display the value in a report or form. Text boxes are the most popular choice for a calculated control because they can display so many different types of data. However, any control that has a Control Source property can be used as a calculated control. In this exercise, you use the Expression Builder to add a calculated control to a report.

An expression is like a formula in Excel. An expression consists of the following elements used alone or in combination:

- **Identifiers**: The names or properties of fields or controls
- **Operators**: Such as + (plus), – (minus), or * (multiply)
- **Functions**: Such as SUM or AVG
- **Constants**: Values that do not change, such as numbers that are not calculated

NEW to Office 2010

To create a calculated control, you can either key an expression in the Control Source property box or use the **Expression Builder**, which is a feature that provides names of the fields and controls in a database, lists the operators available, and has built-in functions to help you create an expression. New to Access 2010 is a more intuitive Expression Builder, which reorganizes the layout of its dialog box and includes IntelliSense, which presents you with a drop-down box of potential values as you're typing an identifier or function name to create your expression.

STEP BY STEP   **Add a Calculated Control**

USE the database open from the previous exercise.

1. On the Design tab, in the Controls group, click the **Text Box** button.

2. Position the mouse pointer on the design grid and drag down and to the right to create a control the size of the one shown in Figure 8-16.
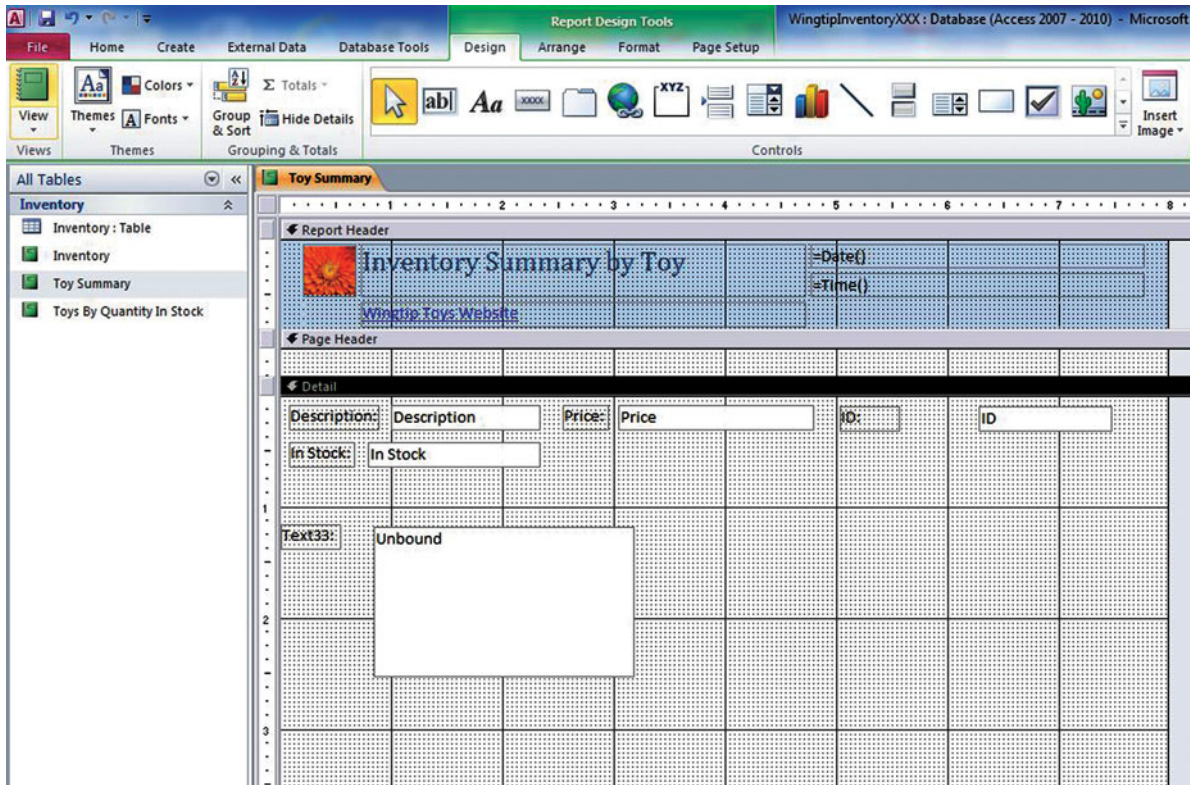
Figure 8-16

Text box control

3. With the control selected, right-click to display the shortcut menu.

4. Select **Properties** from the menu. The Property Sheet appears.

5. On the Data tab, in the Control Source row, click the **Build** button. The Expression Builder dialog box appears.

6. In the Expression Categories list, scroll down and double-click **In Stock**, as shown in Figure 8-17. All the list items in the Expression Categories on your screen may not match exactly to the figure. The *In Stock* field is inserted in the expression box.

Figure 8-17

Expression Builder
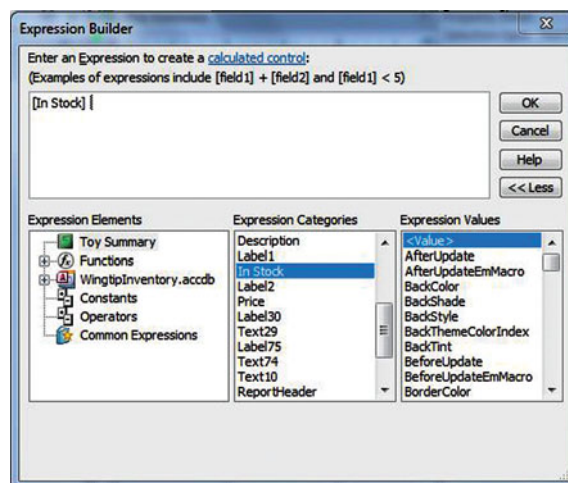
7. In the Expression Elements box, click the **Operators** item then double-click the *** asterisk** item in the Expression Values box to select the multiplication operator.

8. In the Expression Elements box, click the **Toy Summary** item, then find and double-click the **Price** field in the list that appears in the same box below.

9. Click **OK**. The expression appears in the Control Source row of the Property Sheet, as shown in Figure 8-18. Notice that Access added the equal sign (=) that starts an expression.
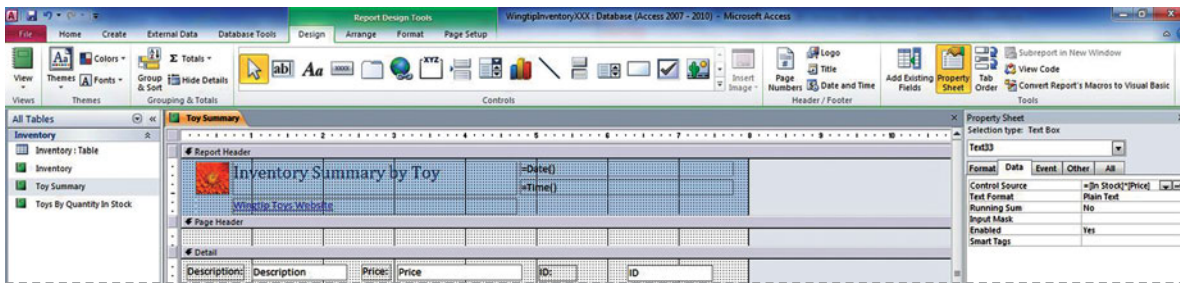

Expression in Control Source row of Property Sheet

Figure 8-18

Controls group on the Design tab for forms

CERTIFICATION READY   **5.2.2**

How do you add a calculated control to a report?

Take Note

10. Click **Close** on the Properties Sheet.
11. Select the text in the label and key **Investment**.
12. Switch to Report View and scroll through the records to view the calculated totals.
13. Click the **Save** button on the Quick Access Toolbar.
14. Close the report.

PAUSE. LEAVE the database open to use in the next exercise.

It is often easiest to add and arrange all the bound controls first, and then add the unbound and calculated controls to complete the design of the report.

Adding Controls Using a Wizard

It could take quite a bit of time to figure out how to set all the properties necessary to create option groups and combo and list boxes for a report or form. To speed up this task, Access 2010 includes wizards that help you create some of the more complicated controls, such as option groups and combo and list boxes. A **Control Wizard** can help you create controls such as command buttons, list boxes, combo boxes, and option groups. In this exercise, you add a combo box to a form using the Control Wizard.

Like other wizards you have used, a Control Wizard asks you questions about how you want the control to look and operate, and then it creates the control based on your answers. The Control Wizard's button is a toggle button that you can click to activate and deactivate wizards on controls that use them.

STEP BY STEP   **Use the Control Wizard**

USE the database open from the previous exercise.

1. Click the **Inventory** table in the Navigation pane to select it.
2. On the Create tab, in the Forms group, click the **Form Design** button. A new, blank form is created, and the Field List pane is displayed. (If it isn't, click the Add Existing Fields button.)
3. Double-click the **Description** field to add it to the form.
4. Double-click the **In Stock** field to add it to the form.
5. Double-click the **Price** field to add it to the form.
6. Double-click the **In Production** field to add it to the form.
7. On the Design tab, in the Controls group, locate the **Use Control Wizards** command and make sure it is turned on. The image next to the command should be displayed in orange.
8. On the Design tab, in the Controls group, click the **Combo box** button.

9. Position the mouse pointer and drag to draw a rectangle, as shown in Figure 8-19.
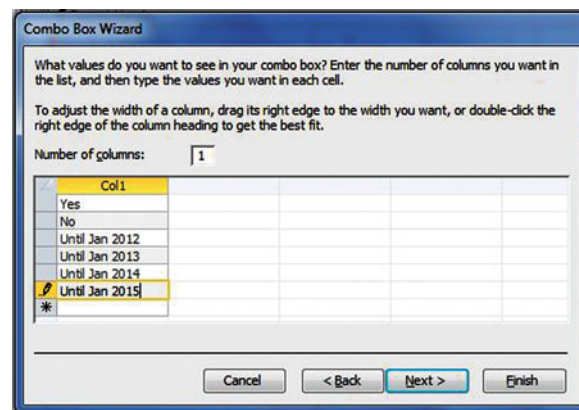
Combo box button

Draw rectangle here to create custom control
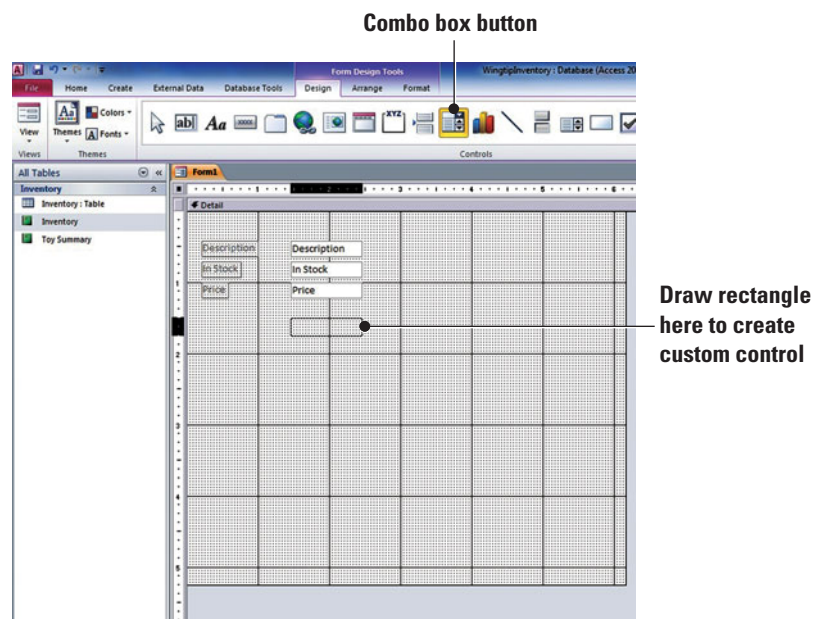
10. When you release the mouse button, the Combo Box Wizard appears. Click the button beside *I will type in the values that I want* and click **Next**. In the empty cell below the Col1 header, key **Yes**. Continue keying values in the column as shown in Figure 8-20.
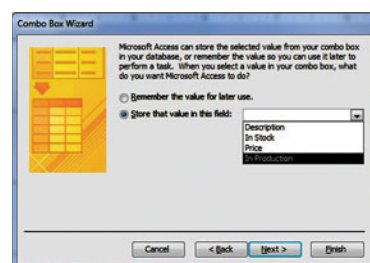
Figure 8-20

Combo Box Wizard

11. Click **Next >**.
12. Click the button beside *Store that value in this field* and click the **down arrow** to display the menu. Select **In Production** from the menu, as shown in Figure 8-21.
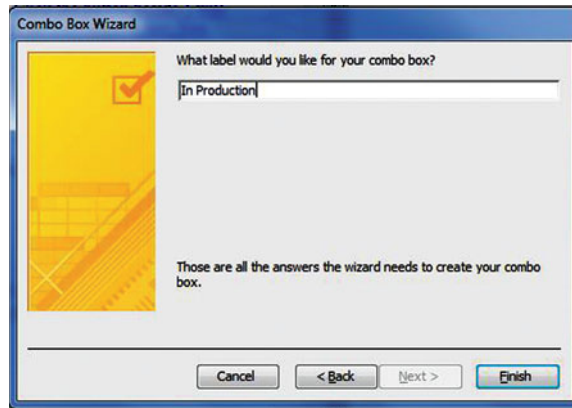
Figure 8-21

Combo Box Wizard store values screen

13. Click **Next >**.

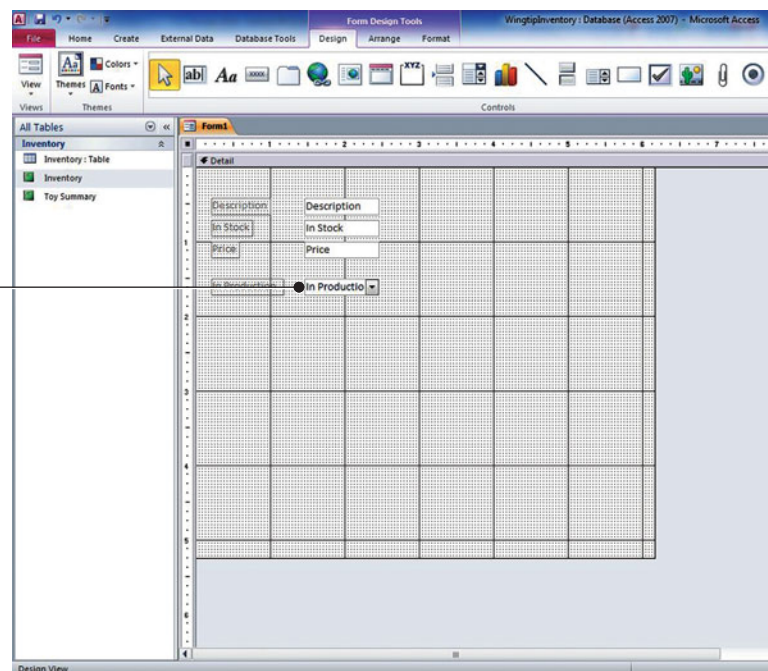**14.** Key **In Production** in the text box, as shown in Figure 8-22.

15. Click **Finish**. Your screen should look similar to Figure 8-23.

Figure 8-23

Form with combo box control

**Combo box
added to form**

Take Note   A combo box is also known as a drop-down control, because it is a combination of a text box
with a list box that is hidden until you select the arrow next to the text box and it *drops down.*

16. Delete the first In Production control and label you added to the form since the combo
box you added is a better control format to keep track of inventory.

17. Switch to Form View, scroll through the records, and modify the *In Production* field
based on the items in the combo box.

18. Click the **Save** button on the Quick Access Toolbar and save the form as Inventory.

PAUSE. LEAVE the form open to use in the next exercise.

Adding Button Controls Using the Wizard

You can also use Control Wizards to add Button controls to forms. Button controls can be
created by using the Command Button wizard and assigned certain tasks created by macros.
Macros are useful since they add additional functionality to a database by automating a series
of tasks to create an action. For example, Button controls can be created on a form to perform
many different actions, including moving to the next or previous record, or even to display the

Print dialog box or close the form. The code that enables this functionality is automatically created as a macro by the Command Button wizard. In this exercise, you create a Button control using the Command Button wizard and use the View Code button to open the Visual Basic for Applications program.

You can further customize the function of database controls and even objects by viewing and modifying their code using a programming language called Visual Basic for Applications (VBA). You can click the View code button in the Tools group of the Form Design Tools contextual tab to open the VBA program. The VBA program is built into Access and provides you with an interface to write and modify code associated with database controls and objects. You can really harness the power of Access 2010 by directly interacting with controls and objects via VBA.

**STEP BY STEP**   **Use the Control Wizard to Add Button Controls**

USE the form open from the previous exercise.

1. Switch to Design View, if necessary.
2. On the Design tab, in the Controls group, click the **Button** button.
3. Position the mouse pointer on the design grid and drag down and to the right to create a control the size of the one shown in Figure 8-24.
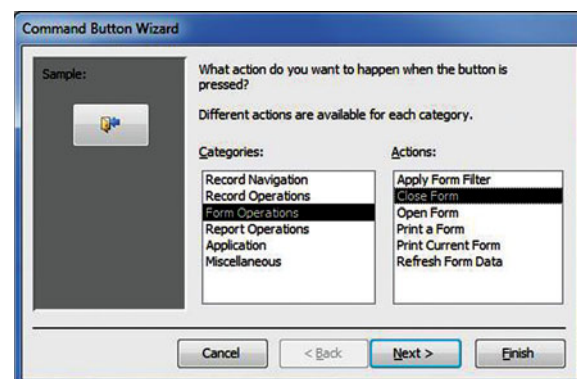
Figure 8-24

Button control

Draw rectangle here to create Button control
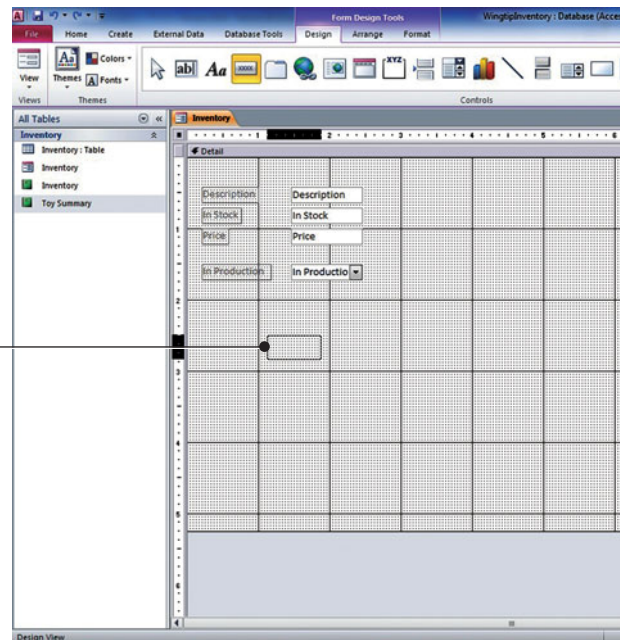
4. When you release the mouse button, the Command Button Wizard appears. In the Categories list box, click **Form Operations** and in the Actions list box click **Close Form**, as shown in Figure 8-25.
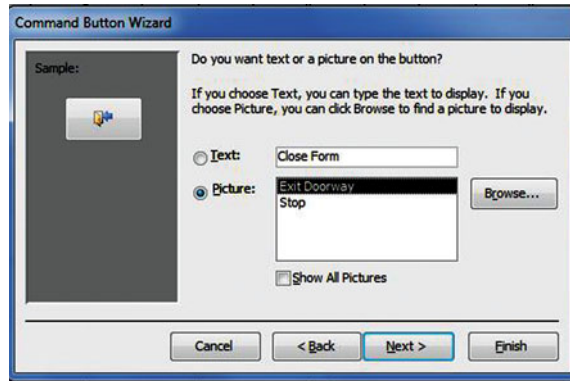
Figure 8-25

Command Button Wizard, screen 1

5. Click **Next >**.

6. On the next screen, keep the default settings to have the button contain the Exit Doorway picture displayed in the dialog box, as shown in Figure 8-26.
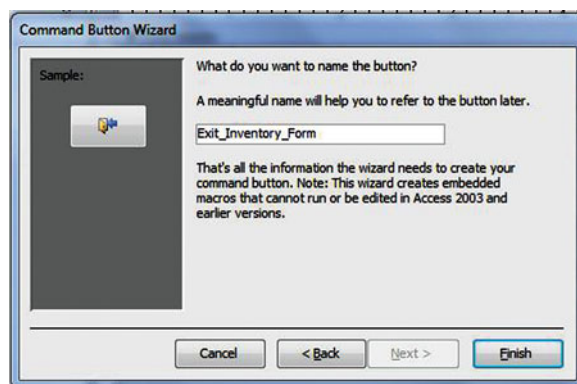
Figure 8-26

Command Button Wizard, screen 2

7. Click **Next >**.

8. On the final screen, key **Exit_Inventory_Form** as the default button name, as shown in Figure 8-27, and click **Finish**. (The button name indicated on your screen may differ depending on how many controls you've previously attempted to include.)

Figure 8-27

Command Button Wizard, final screen

9. Notice that the image on the Button control on the form has changed to the Exit Doorway picture.

10. Click the **Button** control on the form, on the Design tab, in the Tools group, click the **View Code** button, as shown in Figure 8-28. The Microsoft Visual Basic for Applications window appears, as shown in Figure 8-29.

View Code button
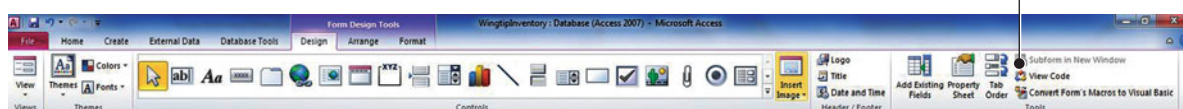
Figure 8-28
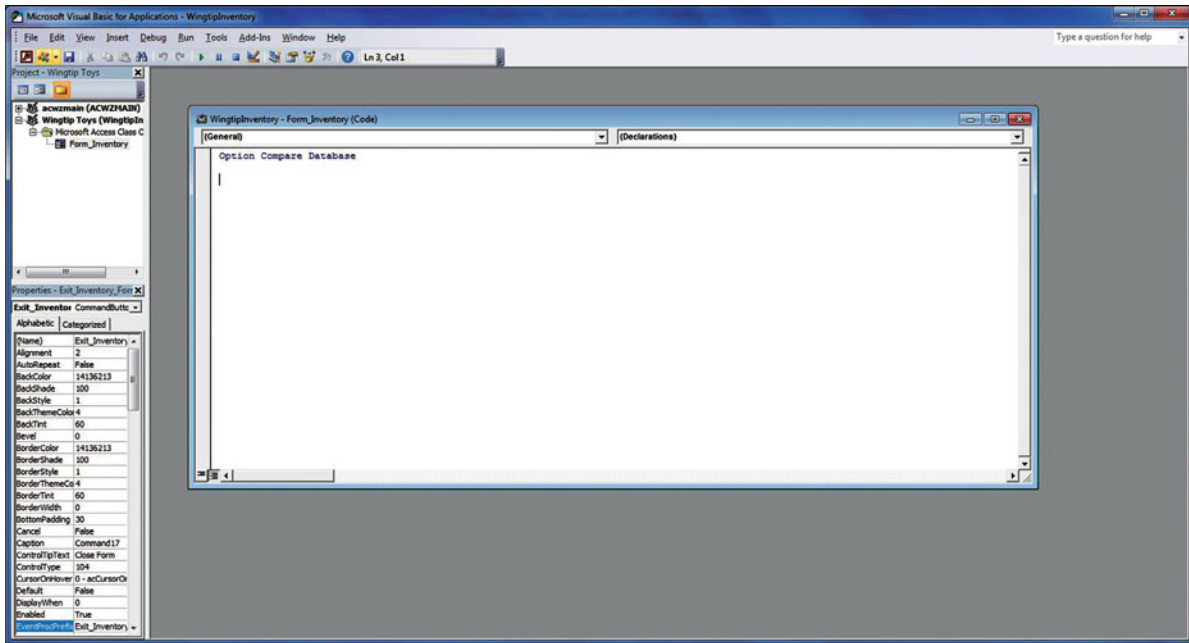
View Code button in Tools group

Figure 8-29

Microsoft Visual Basic for Applications window

11. Click the **Close** button on the Visual Basic for Applications window to return to Access.

12. Save and close the form.

PAUSE. LEAVE the database open to use in the next exercise.

The Bottom Line

DEFINING CONTROL TAB ORDER

When you are in Form or Report View, pressing the Tab key moves the selection, or focus, to the next field. **Control tab order** refers to the order in which the selection, or focus, moves from field to field in a form or report. When entering data in a form, it is helpful to set the control tab order to a sequence that matches the order of the data you are entering. It's also helpful to set the tab order of a report to a logical field sequence when reviewing report records. In this way, you can efficiently concentrate on meaningful data as you use the change of focus as a guide. In this exercise you define report control tab order.

Another Way
You can also right-click the design grid in Design View to access the Tab Order dialog box.

You can change the tab order using the Tab Order dialog box, which is located in the Tools group of the Report Design Tools Design contextual tab. The Tab Order dialog box lists each section of the report or form and the tab order of the fields in each section. Click the selection button to the left of each row in the Custom Order list to select the row. You can drag the rows into the tab order you want, from top to bottom. The AutoOrder button places the fields in the order that they appear on the form or report, from top to bottom, left to right.

**STEP BY STEP**   **Define Control Tab Order**

USE the database you used in the previous exercise.

1. Open the **Toys By Quantity In Stock** report in Report View.

2. Press the **Tab** key several times to see the order in which the controls are selected each time you press it. Notice that the tab order begins in the Report Header section with the Print Report control, and moves to the In Stock control (grouping field) then moves to the ID, Description, and Price controls. The tab order then continues in sequence through the controls in the In Stock grouping level, skipping the *In Stock* field until it reaches the next group.

3. Switch to Design View.

4. On the Design tab, in the Tools group, click the **Tab Order** button. The Tab Order dialog box appears. Click the **Detail** option in the Section list, as shown in Figure 8-30, displaying the tab order in the Custom Order list.

Figure 8-30

Tab Order dialog box
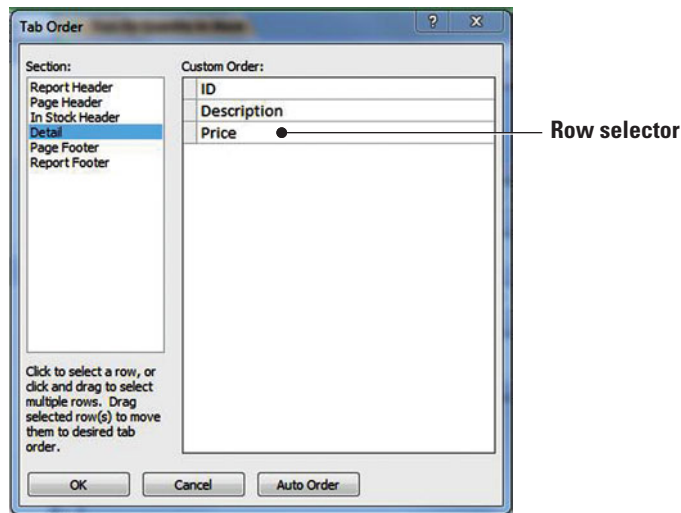
Row selector

5. Click the **Auto Order** button. Nothing changed. The order of the fields already has been automatically set based on the order that they appear on the form or report.

6. Click the **row selector** to the left of the *Price* field to select it.

7. Click and hold the **row selector**. The mouse pointer changes to a move pointer with an empty rectangle. Drag up a row and notice the black horizontal line moves with you. Drag up until the black horizontal line is in place at the bottom of the *ID* field; release the mouse button. The *Price* field should be second, right below the *ID* field, as shown in Figure 8-31.

Figure 8-31

New order on the Tab Order dialog box
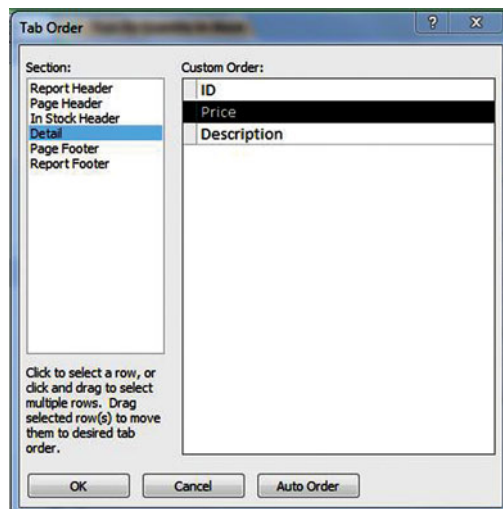
8. Click **OK**.

9. Save the report design.

10. Switch to Report View.

11. Press the **Tab** key several times to see the new tab order.

12. Close the report.

PAUSE. LEAVE the database open to use in the next exercise.

**CERTIFICATION
READY   5.2.5**

How do you define control tab order in a report?

SOFTWARE ORIENTATION

Report Design Tools Format Tab

When you are working with reports, the Format tab is located in the Report Design Tools and contains groups of commands used to format reports, as shown in Figure 8-32. Refer to this figure in the following section and throughout the book.
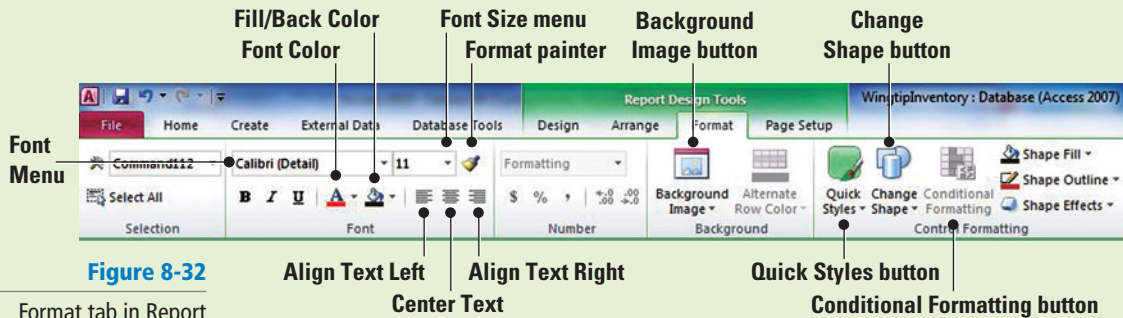

Figure 8-32

Format tab in Report Design Tools

When you are working with forms, the Format tab contains the same groups of commands and is available in the Form Layout Tools. Use these common formatting commands to change the display of controls and their labels in forms and reports.

FORMATTING CONTROLS

The Bottom Line

Formatting professional-looking reports and forms not only projects a high-quality image, but it also improves the form or report's readability. Display formatting allows you to refine the look of your reports and forms. You can change the font, font size, font color, alignment, and other attributes of text and numbers in controls and their associated labels. You can also change the background images of your reports and forms, as well as change the shapes of certain controls. You can even apply Quick Styles to controls to quickly change their appearance, or use conditional formatting to change the look of data when certain conditions are met.

Formatting Controls

To format the display of a control, you can use many of the formatting tools that you have probably used before to format text, numbers, and objects in other Office programs, such as Word. In this exercise, you format the display of controls on a report and increase the amount of space in the Report Header section to include an Insert Page Break unbound control.

You can resize controls and their labels by clicking the resize handles, which are tiny squares located on the borders and corners of a selected control or label. Position the mouse pointer over a handle to get a two-sided arrow, then drag to increase or decrease the width or height of a label. To move a control and its label, select the control and position the mouse pointer over the selection until you see a four-sided arrow, then drag to the new position.

As you remember from previous lessons, forms and reports are divided into sections, including the Report Header, Page Header, Detail, Page Footer, and Report Footer. You can change the amount of space between sections to eliminate extra space and to accommodate the controls in the report or form. To increase or decrease the height of the section, position the mouse pointer over the top edge of the section border until you see a double-sided resizing arrow and drag up or down.

Take Note *Double-click a section bar or any blank space within a section to display the Property Sheet for that section.*

Controls on forms and reports display the format applied to the source table. However, you can change the display formatting for each control and label on a form or report. Your changes will only affect each control and the way the data appears. It does not change how users enter data or how data is stored.

Take Note *You cannot apply visual formats to controls bound to Attachment and OLE Object fields. However, you can change the format of the label associated with the control.*

You can format a control in Design View or Layout View using the commands in the Font group. You can change the font as well as the size, color, alignment, and background color of text. You can also add bold, underline, and italics. The Format Painter button copies formats so that you can easily apply the same formatting to another control.

You can also format controls using the commands in the Control Formatting group. You can apply Quick Styles, change the shape, and apply shape effects to quickly change the appearance of certain controls like button controls, or change the fill and outline color of controls. You can even use conditional formatting to change the look of the data that appears in a control when certain conditions are met.

Take Note *By default, text does not automatically wrap when it reaches the edge of a field or box. It remains on a single line and extends beyond the edges of the control. To enable text wrapping in a form or report, set the height to a nondefault size and change the CanGrow and CanShrink properties for the control to Yes.*

STEP BY STEP **Format Controls on a Report**

USE the database open from the previous exercise.

1. Open the **Toy Summary** report and switch to Design View.
2. Click the **In Stock** control. Position the mouse pointer over the resize handle on the right border. The mouse pointer changes to a double-sided arrow. Drag to the left to resize the control. ↔
3. In the same manner, reduce the size of the Price and ID controls.
4. Click the **Description** control to select it.
5. On the Format tab, in the Font group, click the **Bold** button. The Description control displays bold.
6. Click the **arrow** on the Font Size menu and select **12** from the menu. The point size becomes 12.
7. Click the **In Stock** control to select it.
8. On the Design tab, in the Font group, click the **Left Align** button. The In Stock text aligns to the left of the control box. Your report should look similar to Figure 8-33.
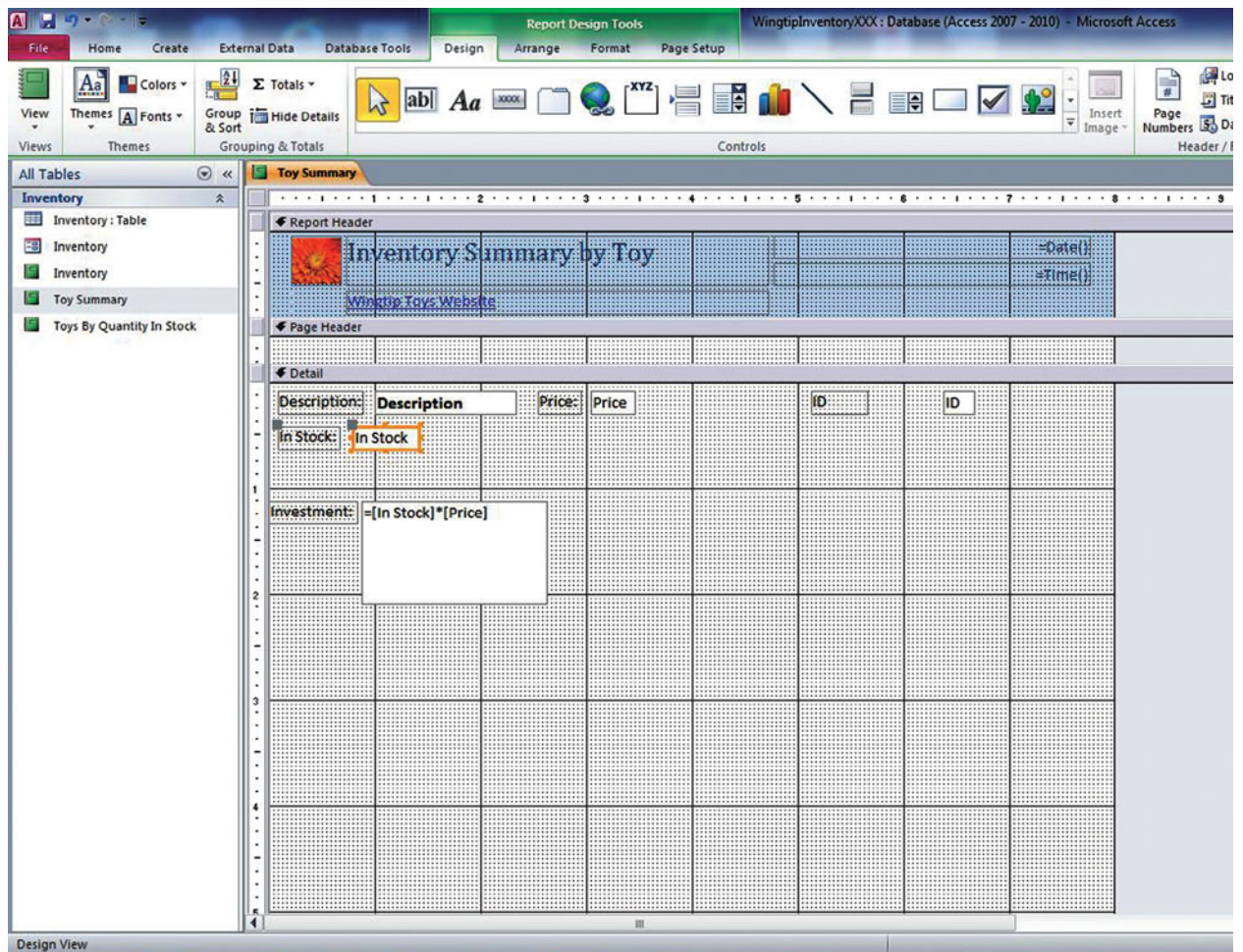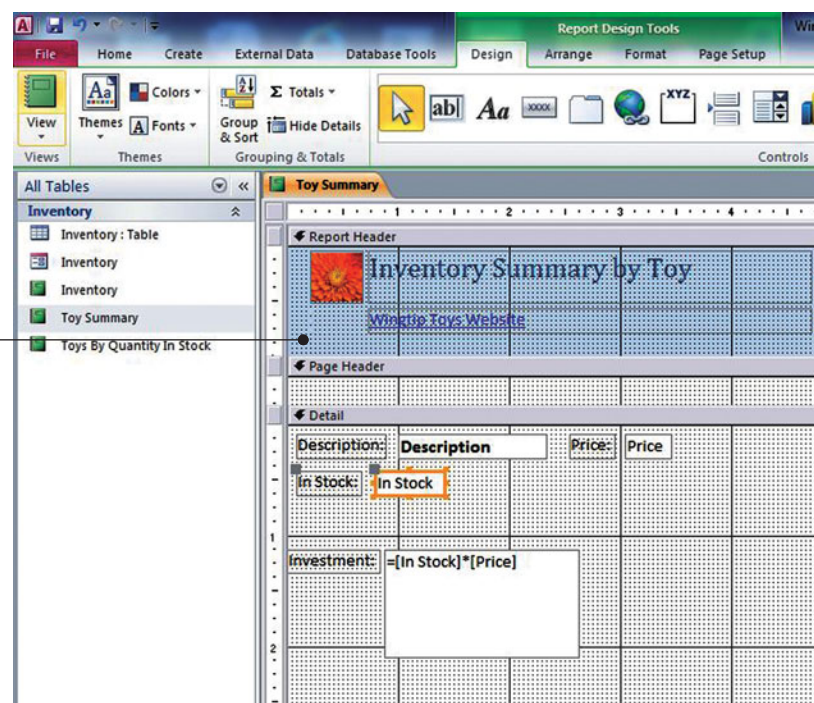
9. Position the mouse pointer over the top edge of the Page Header section border until you see a double-sided resizing arrow and drag down to increase the height of the Report Header section by approximately one-quarter of an inch, as shown in Figure 8-34.

Figure 8-34

Resize Report Header section

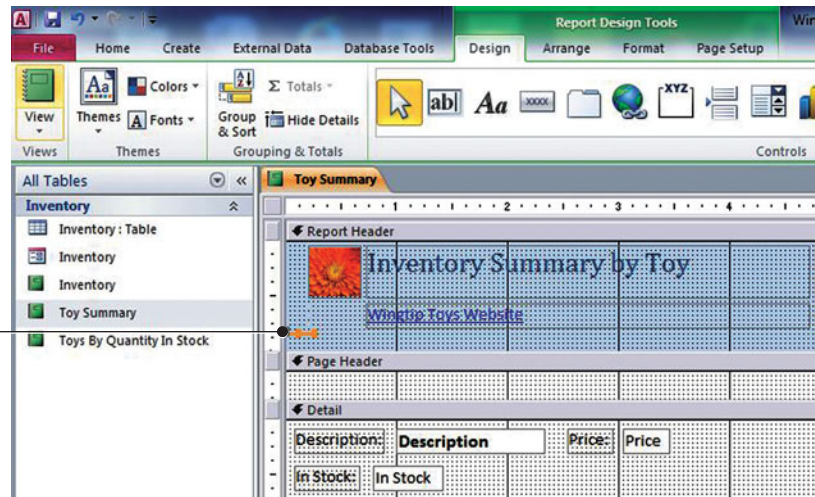Report
Header
section
increased
by ¼"

10. On the Design tab, in the Controls group, click the **Insert Page Break** button.

11. Position the mouse pointer on the design grid and under the Wingtip Toys Website Hyperlink control, drag down and to the right to create an Insert Page Break control, as shown in Figure 8-35. This will divide the Report Header section from the rest of the Report when printed, essentially creating a title page.

Insert Page Break control in Report Header section

12. Save the report.

13. Switch to Print Preview to see the changes you've made. Notice the Report Header section is on the first page by itself.

14. Open the **Toys By Quantity In Stock** report in Design View.

15. In the Report Header section, click the **Print Report** Button control to select it.

16. On the Format tab, in the Control Formatting group, click the **Change Shape** button to display the menu. Click the **Oval** option. The Button control's style changes to an oval.

17. Save and close the report.

PAUSE. LEAVE the database open to use in the next exercise.

Formatting Controls on a Form

In this exercise, you learn how to format the display of controls on a form and include a background image.

STEP BY STEP	**Format Controls on a Form**

USE the database open from the previous exercise.

1. Open the **Inventory Form** if it's not open already, and switch to Design View.

2. Click the **Button** control on the form. On the Format tab, in the Control Formatting group, click the **Quick Styles** button to display the Quick Styles gallery. Click the **Colored Outline – Aqua, Accent 5** Quick Style, as shown in Figure 8-36. The Button control's style changes to the chosen Quick Style.

Figure 8-36

Quick Styles gallery

Quick Styles button and gallery

Button control selected
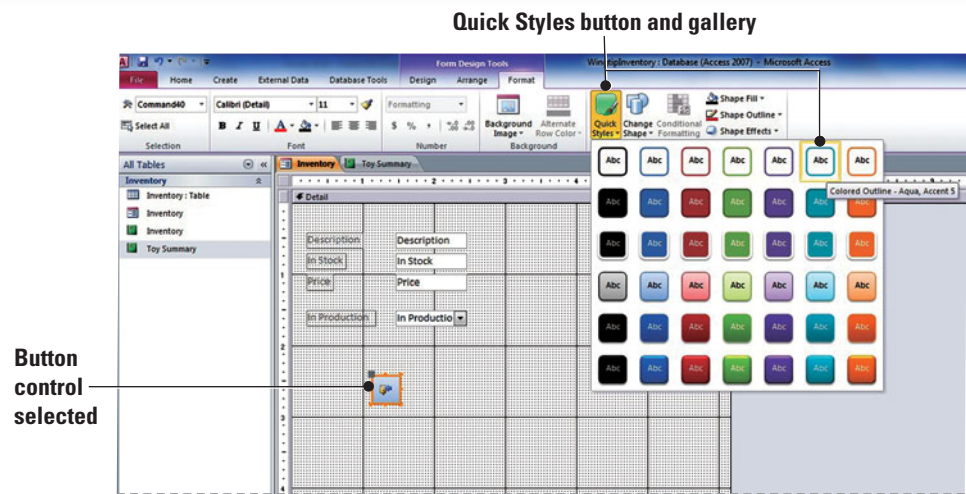
3. Click the **Description** label to select it.
4. On the Format tab, in the Font group, click the **Font Color** button and click **Black** from the Font Color menu. The Description label displays in black. Change the font color to black for the In Stock, Price, and In Production labels. Your screen should resemble Figure 8-37.

Figure 8-37

Color of labels changed to black

Label colors changed to black
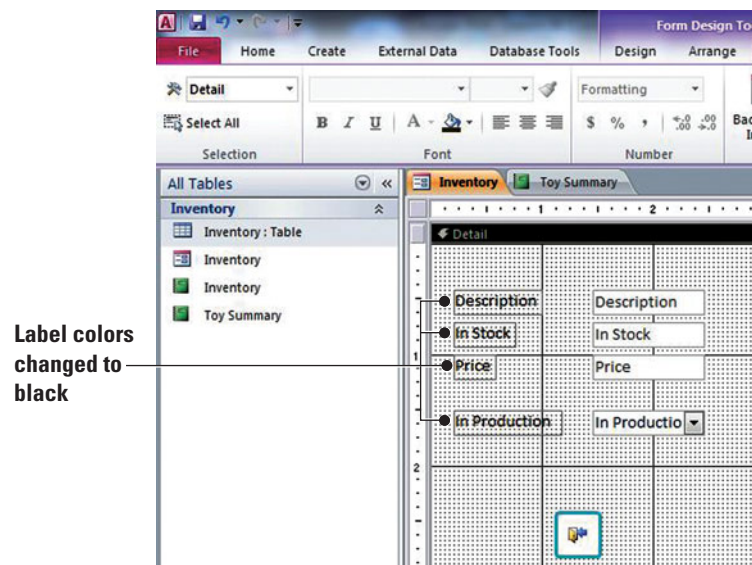
5. On the Format tab, in the Background group, click the **Background Image** button and select the **Chrysanthemum** thumbnail that displays in the gallery. (If the Chrysanthemum image doesn't appear, then use the Browse command under the gallery to access the data files for this lesson.) Notice the form's background image is now that of the chrysanthemum, as shown in Figure 8-38.
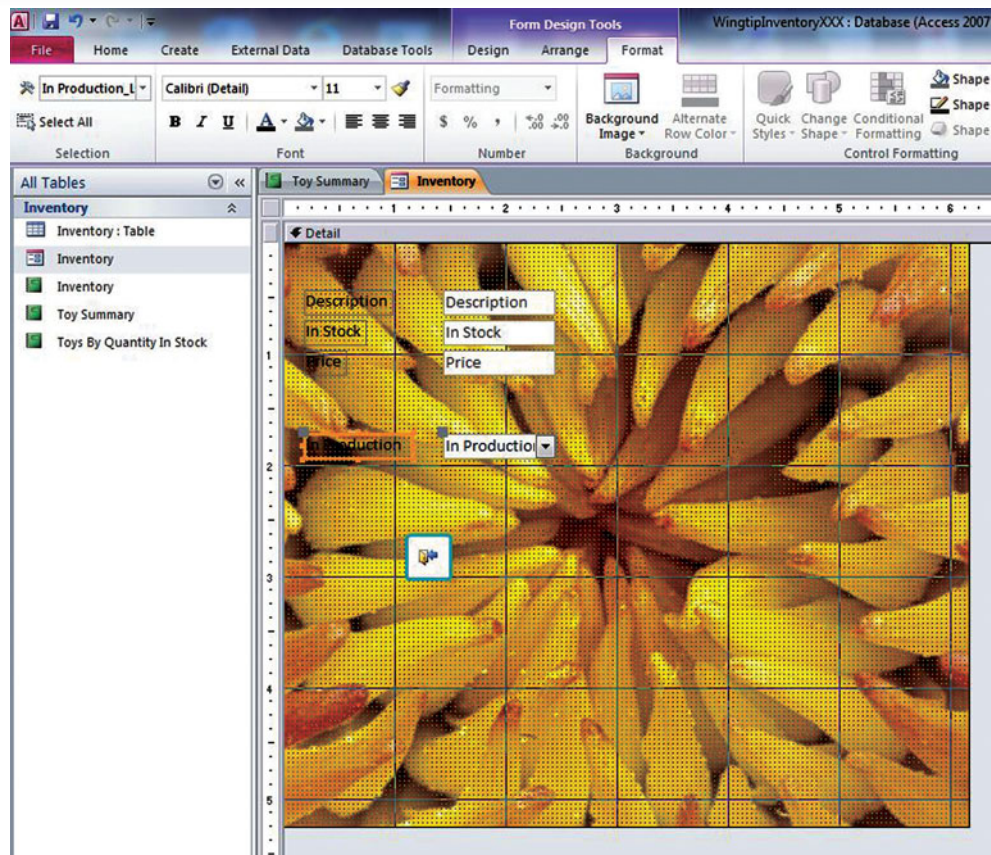
6. Switch to Form View to see the changes you made.
7. Save and close the form.

PAUSE. LEAVE the database open to use in the next exercise.

Creating Conditional Formatting on Controls

Sometimes employees need a little help recognizing when inventory is low or when sales are high. Conditional formatting in forms and reports helps alert users to text or numbers that need attention so that important data is not overlooked. **Conditional formatting** changes the appearance of a control or the value in a control when certain conditions are met. You can change the color of text or numbers in the control or the background color. In this exercise, you create conditional formatting for a report field.

You can create conditional formatting based on a value or expression. For example, when the number of products in an inventory falls below 10 for a single product, you can set the conditional formatting so that Access will display that number in red or with a red background so that you and others will notice the low inventory number.

The easiest way to add conditional formatting to a form or report is by using the Conditional Formatting Rules Manager dialog box, which displays a list of the existing formatting rules, if any. Here you can add new rules, and edit or delete existing rules.

**STEP BY STEP**   **Create Conditional Formatting**

USE the database you used in the previous exercise.

1. Open the **Toy Summary** report, if necessary, and switch to Design View.
2. Click the **In Stock** control to select it.

3. On the Format tab, in the Control Formatting group, click the **Conditional Formatting** button. The Conditional Formatting Rules Manager dialog box appears.

4. Click the **New Rule** button. The New Formatting Rule dialog box appears. You will create a new rule based on criteria you will enter.

5. In the *Edit the rule description* section, keep the Field Value Is in the first menu. Click the **drop-down arrow** next to *between* and scroll to the bottom of the list to select **less than or equal to**. Click in the empty text box and key **10**.

6. Click the **Bold** button in the Preview section.

7. Click the **down arrow** on the **Background Color** button. A menu of colors appears. Click **Red**, as shown in Figure 8-39.

Figure 8-39

Fill Color menu on New Formatting Rule dialog box
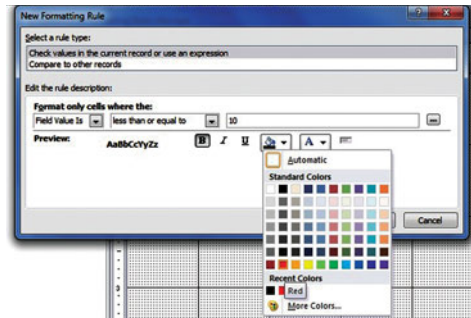
8. Click the **OK** button. A formatting rule for the *In Stock* field is added to the dialog box, as shown in Figure 8-40. Now, when the report is viewed in Report View, the value for the *In Stock* field will appear bold and the control background color will appear red if the formatting rule applies.

Figure 8-40

Formatting rule for the In Stock field
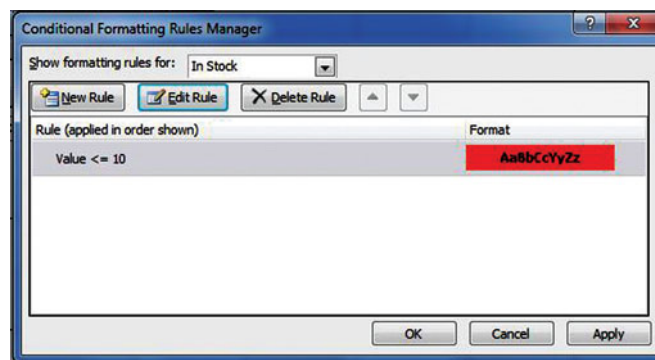
CERTIFICATION
READY   **3.4.4**

How do you apply conditional formatting to form controls?

CERTIFICATION
READY   **5.4.4**

How do you apply conditional formatting to report controls?

9. Click **OK**.

10. Save the report.

11. Switch to Report View and scroll through the records to see the conditional formatting at work.

12. Close the report.

**PAUSE. LEAVE** the database open to use in the next exercise.

SOFTWARE ORIENTATION

Arrange Tab

The Arrange tab, shown in Figure 8-41, is located in the Report Layout Tools as well as the Report Design Tools area of the Ribbon. It contains groups of commands for arranging the layout, alignment, size, and position of controls on a report. Use the commands in the Arrange tab to arrange controls on a report.
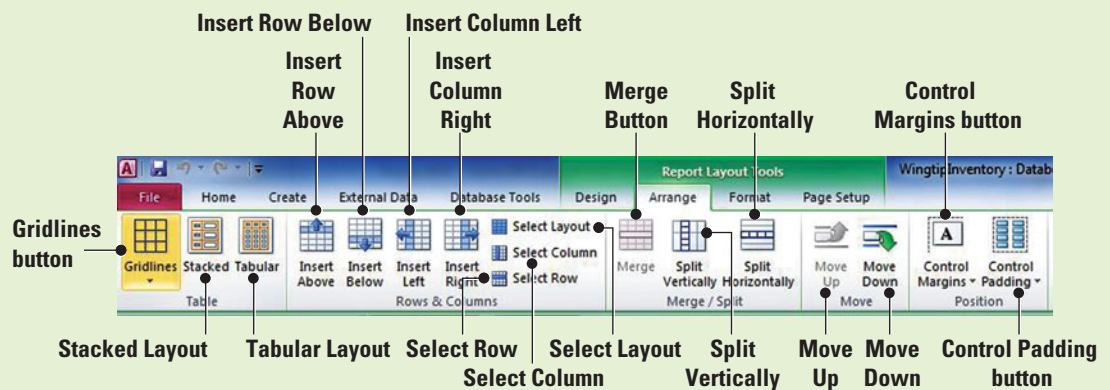
Similar to a report, the Arrange tab is displayed in both the Form Layout Tools and Form Design Tools area of the Ribbon. The buttons and commands on the Arrange tab are the same as the Arrange tab for reports, except for the Anchoring button located in the Position group. The Position group, shown in Figure 8-42, contains an Anchoring button that helps position controls on a form when the containing window is resized. Use the commands in the Arrange tab to arrange controls on a form.
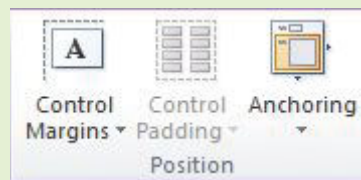
ARRANGING CONTROL LAYOUT

The Bottom Line

After you have created a form or report, you can arrange the controls on it to fit the data or to best display the data. Access provides commands for arranging the layout, alignment, position, and size of controls. **Control layouts** align your controls horizontally and vertically to give your report or form a uniform appearance. The two types of control layouts are tabular and stacked. Controls are arranged vertically in a **stacked layout**, with a label on the left and the control on the right. Stacked layouts are contained in one report or form section. In a **tabular layout**, the controls are arranged in rows and columns like a spreadsheet, with labels across the top. Tabular layouts use two sections of a report or form. The labels are displayed in one section and the fields are arranged in the section below. In this exercise, you arrange controls on a form using control layouts.

You can have more than one layout on a report. For example, you could have a tabular layout to create a row of data for each record, then a stacked layout underneath with more information about the same record.

Access automatically creates tabular control layouts when you create a new report using the Report button or the Blank Report button in the Create tab. When you create a new form using the Form button or the Blank Form button, Access creates stacked control layouts.

On an existing blank report, you can create a new control layout by holding down the Shift key and selecting the fields you want to include in the form or report from the Field List pane. On the Arrange tab, in the Table group, click the Tabular button or the Stacked button.

You can switch the entire layout of a report or form to the other by selecting all the cells in the layout and then clicking the layout button you want, either Stacked or Tabular.

You can split a control layout into two different layouts. Hold down the Shift key and click the controls you want to move to the new control layout and click the Tabular or Stacked button.

STEP BY STEP	Arrange Control Layout

USE the database open from the previous exercise.

1. Click the **Inventory** table in the Navigation pane to select it.
2. On the Create tab, in the Reports group, click the **Blank Report** button. A new, blank report is created and the Field List pane is displayed.
3. Close the Field List pane, and close the Blank Report. Notice Access didn't ask us if we wanted to save the report since we didn't add any fields to it. We want to create an interface to interact with the Inventory table to input, modify, and delete records, so a form would be necessary.
4. On the Create tab, in the Forms group, click the **Form Design** button. A new, blank form is created, and the Field List pane is displayed. (If it isn't, click the **Add Existing Fields** button.)
5. Double-click the **Description** field to add it to the form.
6. Double-click the **In Stock** field to add it to the form.
7. Double-click the **Price** field to add it to the form.
8. Press and hold the **Shift** key and click each of the three controls to select them all.
9. On the Arrange tab, in the Table group, click the **Stacked** button. The controls and labels are arranged in a stacked layout, as shown in Figure 8-43.
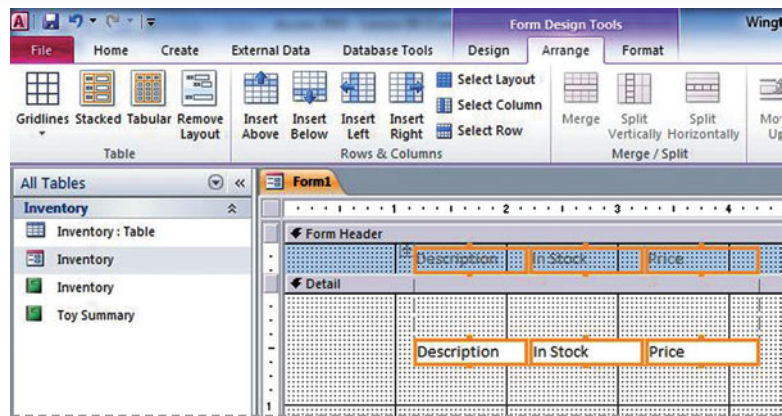
Figure 8-43

Stacked control layout
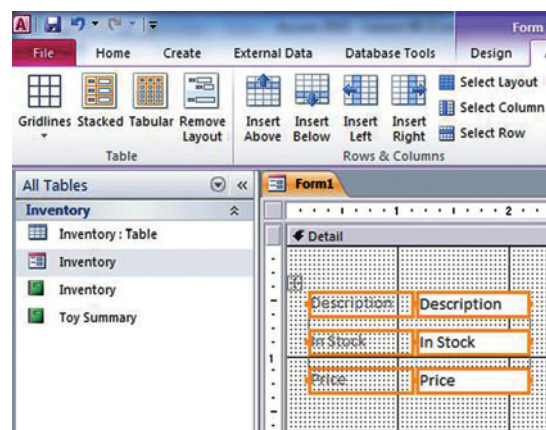
10. On the Arrange tab, in the Table group, click the **Tabular** button. The controls and labels are arranged in a tabular layout, as shown in Figure 8-44.

CERTIFICATION
R E A D Y   **5.1.1**

How do you create a
blank report?

11. On the Arrange tab, in the Table group, click the **Stacked** button to switch it back to a stacked layout.

12. Save the form as **Stacked Form** and leave it open for use in the next exercise.

PAUSE. LEAVE the database open to use in the next exercise.

You can adjust the location of information displayed in a control with the Control Margins button in the Position group. You can choose None, Narrow, Medium, or Wide settings in the Control Margins menu.

The Control Padding button adjusts the amount of space between a control and the gridlines of a layout. The Control Padding menu contains choices for None, Narrow, Medium, or Wide padding.

The Position group also contains the Anchoring button and menu, which ties a control to other controls so that they resize with the parent. The Anchoring button only appears in the Form Design Tools Arrange contextual tab in the Position group since the anchoring option is only available for forms and not reports. Anchoring is helpful when you want to control the position of the controls on a form when the form window is resized. For example, you can anchor the *Description* field control (the parent) to stretch down and to the right so you can see more text within the field control as the form becomes larger. The anchoring of the surrounding controls is set automatically based on the parent. You can only anchor one control in each control layout. You have nine anchoring options to choose from.

N E W
to Office 2010

By using the new tools in the Rows & Columns group, Merge/Split group, and Move group on the Arrange tab, Access 2010 gives you even greater flexibility over arranging and controlling the cells in control layouts.

By using the tools in the Rows & Columns group, you can add new rows and columns of cells above and below existing cell rows and to the left and right of existing cell columns. By using the tools in the Merge/Split group, you can merge two cells into one, as well as split them vertically and horizontally. Finally, the tools in the Move group can be used to reorganize cells by moving them up or down.

Adding, Moving, and Removing a Control

When you want to add a new field from the Field List to an existing control layout, just drag the field from the Field List pane to the grid. To add it to the layout, select all the controls in the layout and the new control, and click the Stacked or Tabular button. Removing a control from a control layout allows you to place it anywhere on the report or form without affecting the positioning of any other controls. Click the control you want to remove and click Remove Layout from the Table group. The Remove Layout button is only available in the Table group in report or form Design View. In this exercise, you add and move controls within a layout and remove a control from a layout.

STEP BY STEP	Add, Move, and Remove a Control from a Layout

USE the database open from the previous exercise.

1. Select all three controls, if they aren't selected already.
2. Click on the selection and move the group of fields down about half an inch.
3. Click the **In Production** field from the Field List pane. Drag it to the grid and place it to the right of the *Description* field.
4. Drag the *ID* field to the grid and place it above the *Description* field.
5. Press and hold the **Shift** key and select the **ID** field control, if necessary. Still holding the **Shift** key, select the **Description**, **In Stock**, and **Price** field controls so that all four are selected.
6. On the Arrange tab, in the Table group, click the **Stacked** button. The ID control is added to the bottom of the stacked layout.
7. On the Arrange tab, in the Position group, click the **Control Margins** button and select **Narrow** from the menu, as shown in Figure 8-45. The margins within the field control and label are formatted using the Narrow option.
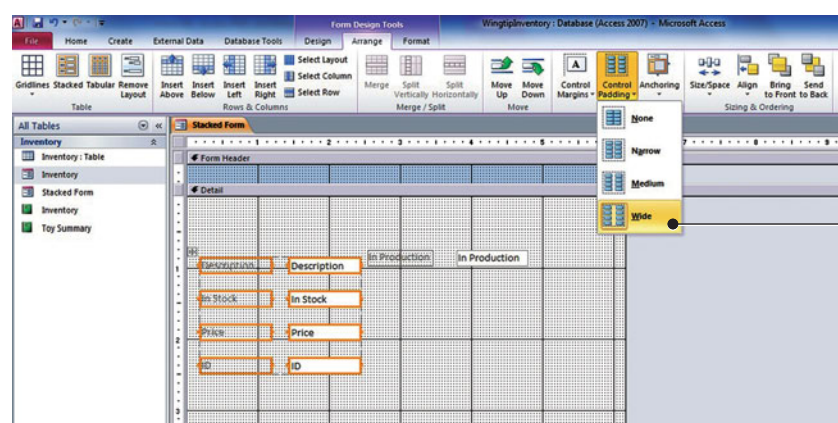
Figure 8-45

Control Margins button and menu

Narrow option selected
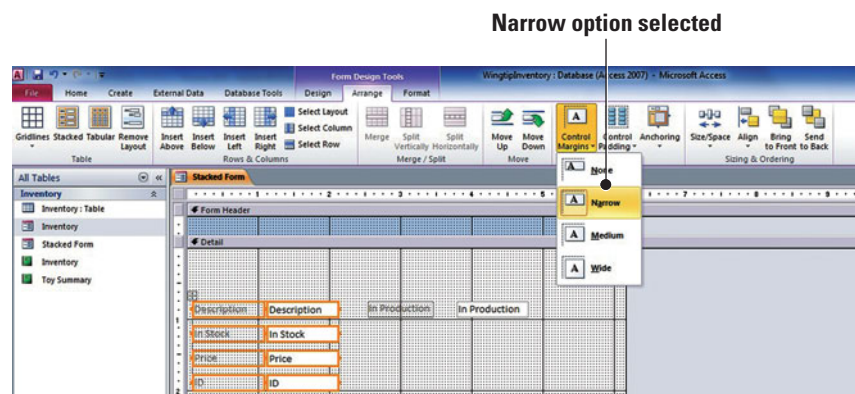
8. On the Arrange tab, in the Position group, click the **Control Padding** button and select **Wide** from the menu, as shown in Figure 8-46.

Figure 8-46

Control Padding button and menu

Wide option selected

CERTIFICATION READY 3.3.3

How do you apply form arrange options by repositioning and formatting controls and records?

9. Select the **ID** field control and click **Select Row** in the Rows & Columns group. Notice the ID label and field control are both outlined in orange. Click the **Move Up** button three times to move it to the top of the layout.
10. Move the In Stock label and field control to the bottom of the layout.
11. Try to move the Price control into place under the *In Production* field. It won't move out of the layout.

12. Select the **Price** label and field control if they aren't selected already.

13. On the Arrange tab, in the Table group, click the **Remove Layout** button. Notice the In Stock label and field control automatically move up to occupy the area where the Price label and field control were when they were part of the layout.

14. Drag the Price control into place under the In Production control.

15. Save and close the form.

PAUSE. LEAVE the form open to use in the next exercise.

Take Note   To select multiple controls, hold down the Shift key and then click the controls.

Arranging and Anchoring Controls

In this exercise you practice arranging controls within a layout using a variety of arrangement tools.

STEP BY STEP   **Arrange and Anchor Controls within a Layout**

USE the database open from the previous exercise.

1. Click the **Inventory** table in the Navigation pane to select it.

2. On the Create tab, in the Forms group, click the **Form** button. A new form containing all the fields from the Inventory table is created in Layout View. Notice the stacked control layout is the default.

3. Switch to Design View.

4. Click the **ID** control to select it.

5. On the Arrange tab, in the Merge/Split group, click the **Split Horizontally** button. Notice the *ID* field control splits into two columns with the right-most column outlined by dashed lines.

6. Click the **In Production** field control and drag it to the right of the *ID* field control to place it next to it. Your screen should resemble Figure 8-47.
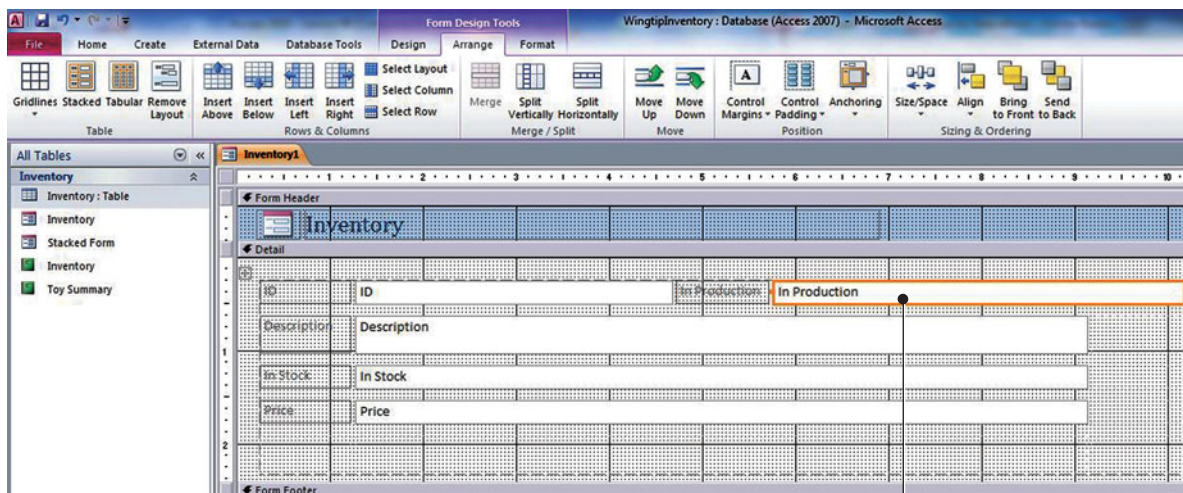

Figure 8-47

In Production control next to ID control
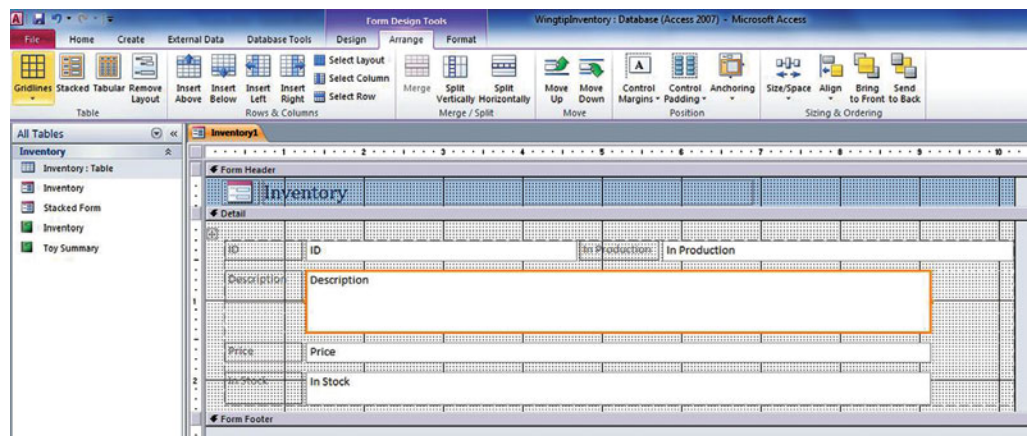
In Production control dragged to this location

7. Click the **In Stock** field control to select it. Press and hold the **Shift** key and select the **In Stock** control label. On the Arrange tab, in the Move group, click the **Move Down** button once. The *In Stock* field control and label move to the bottom of the layout.
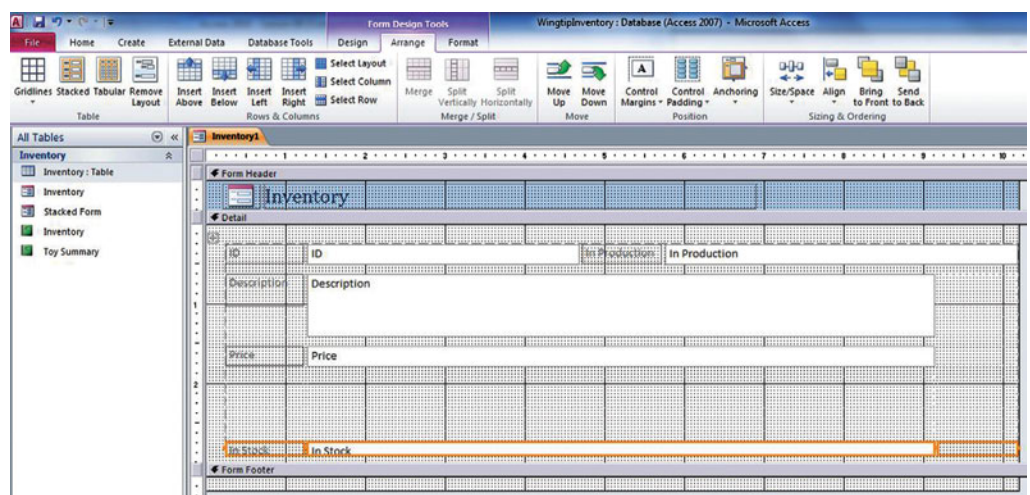
8. Click the **Description** field control to select it. Press and hold the **Shift** key and select the cell below the *Description* field control you just selected. Both the *Description* field control and cell below should be outlined in orange. On the Arrange tab, in the Merge/Split group, click the **Merge** button. The *Description* field control and cell have now merged into one, as shown in Figure 8-48.

Figure 8-48

Description field control merged with cell

9. Click the **In Stock** field control to select it. On the Arrange tab, in the Rows & Columns group, click the **Insert Below** button twice. Two empty cells are added under the In Stock control.

10. Click the **In Stock** field control to select it. On the Arrange tab in the Rows & Columns group, click the **Select Row** button. Both the In Stock label and field control should be selected.

11. On the Arrange tab, in the Move group, click the **Move Down** twice to move the In Stock control to the last cell row at the bottom of the layout, as shown in Figure 8-49.

Figure 8-49

In Stock control moved to bottom of layout

Take Note   In Layout View, you can also use the tools on the Arrange tab to arrange controls within a layout for both forms and reports.

12. Click the **Description** field control to select it. On the Arrange tab in the Position group, click the **Anchoring** button. The Anchoring menu appears. Click the **Stretch Down and Across** option, as shown in Figure 8-50. The *Description* field control will now automatically resize to display all the containing text if the form window is resized in Form View.

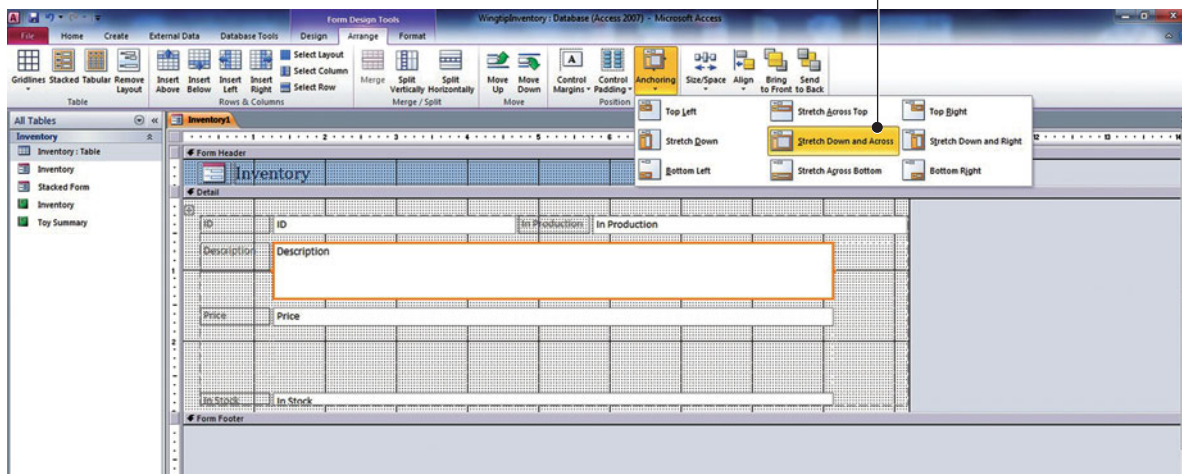**Stretch Down and Across option selected**

Figure 8-50

Anchoring menu

13. Switch to Form View to display the new arrangement of the controls and resize the form window to see the *Description* field control stretch and shrink in conjunction with the window size.

Take Note

As you learned in a previous exercise, you could resize the field controls to make them more consistent with the data they display. For example, in this exercise, some of the data in the *In Stock* field control is not completely shown within the field control. The control can be easily and appropriately resized in Layout or Design View. You will have the opportunity to do this in an exercise at the end of this lesson.

14. Save the form as Modified Inventory Form and close it.

PAUSE. LEAVE the database open to use in the next exercise.

ARRANGING CONTROL ALIGNMENT, SIZE, AND POSITION

The Bottom Line

You can change the alignment, size, or position of controls and associated labels. Aligning, sizing, and positioning commands on the Arrange tab gives you more options for improving the look of controls and labels in forms and reports. The Sizing & Ordering group, present on the Arrange tab only in report or form Design View has commands for aligning labels and controls to the grid (the intersecting horizontal and vertical lines, and points that appear in Design View) to allow for precise position. For example, you can precisely align a group of controls and related labels using the align To Grid command to ensure all the labels' upper-left corners align to their nearest grid points. This will help ensure the organization of your controls is consistent throughout. In this exercise, you arrange the alignment, size, and position of controls and labels.

You can also align multiple controls and labels at one time so their left, right, top, and bottom borders are perfectly aligned to each other using the align left, right, top, and bottom commands.

Also in the Sizing & Ordering group, you can use the commands to adjust the size of controls and labels to Size to Fit, Size to Grid, Size to Tallest, Size to Widest, Size to Shortest, or Size to Narrowest.

Additionally you can use the Bring to Front and Send to Back commands to move objects in front or to the back of other objects. Also in the Sizing & Ordering group, you can use the commands to increase or decrease horizontal or vertical spacing using the Equal Horizontal,

Equal Vertical, Increase Horizontal, Decrease Horizontal, Increase Vertical, and Decrease Vertical commands.

Finally, the Sizing & Ordering group contains toggle commands for showing or hiding the Grid, the Ruler, and enabling or disabling Snap to Grid—allowing you to precisely arrange a label when you move the associated control by enabling Access to automatically align the upper-left corner of a label to its closest grid point—as well as Group and Ungroup commands that allow you to group several controls together so you can move or modify them all at once.

STEP BY STEP   **Arrange Alignment, Size, and Position**

USE the database open from the previous exercise.

1. Open the **Stacked Form** form in Design View.

2. Select the **Price** label and control.

3. On the Arrange tab, in the Sizing & Ordering group, click the **Size/Space** button. In the Size category on the menu that appears, click the **To Fit** button.

4. Select all the controls in the stacked layout, (the labels and controls for the ID, Description, and In Stock controls).

5. On the Arrange tab, in the Table group, click the **Remove Layout** button.

6. All the controls and labels should be still selected. On the Arrange tab, in the Sizing & Ordering group, click the **Size/Space** button. In the Size category on the menu that appears, click the **To Fit** button.

7. With the controls and labels still selected, on the Arrange tab, in the Sizing & Ordering group, click the **Align** button. In the menu that appears, click the **Right** button. The labels are right-aligned to the controls. Click on a blank space on the design grid to deselect all the highlighted controls and labels.

8. Press and hold the **Shift** key and click on both the labels and controls for the In Production and ID controls.

9. With the controls and labels still selected, on the Arrange tab, in the Sizing & Ordering group, click the **Align** button. In the menu that appears, click the **Bottom** button. The In Production control is bottom-aligned with the ID control.

10. With the controls and labels still selected, press and hold the **Shift** key and select the **Price** label and control.

11. On the Arrange tab, in the Sizing & Ordering group, click the **Size/Space** button. In the Spacing category on the menu that appears, click the **Decrease Horizontal Spacing** button until your screen looks similar to Figure 8-51.

Figure 8-51

Form with decreased horizontal spacing between controls
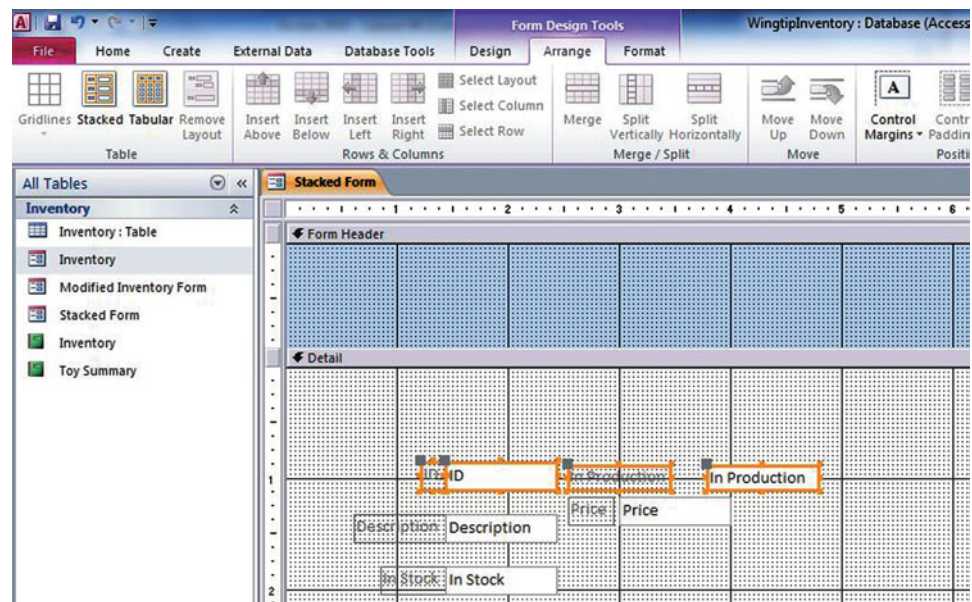
12. Click on a blank space on the design grid to deselect all highlighted controls and labels. Press and hold the **Shift** key and click on both the labels and controls for the **Description** and **Price** controls.

13. With the controls and labels still selected, on the Arrange tab, in the Sizing & Ordering group, click the **Align** button. In the menu that appears, click the **Bottom** button. The Price control is bottom-aligned with the Description control. Your screen should resemble Figure 8-52.

Figure 8-52

Form with bottom aligned controls
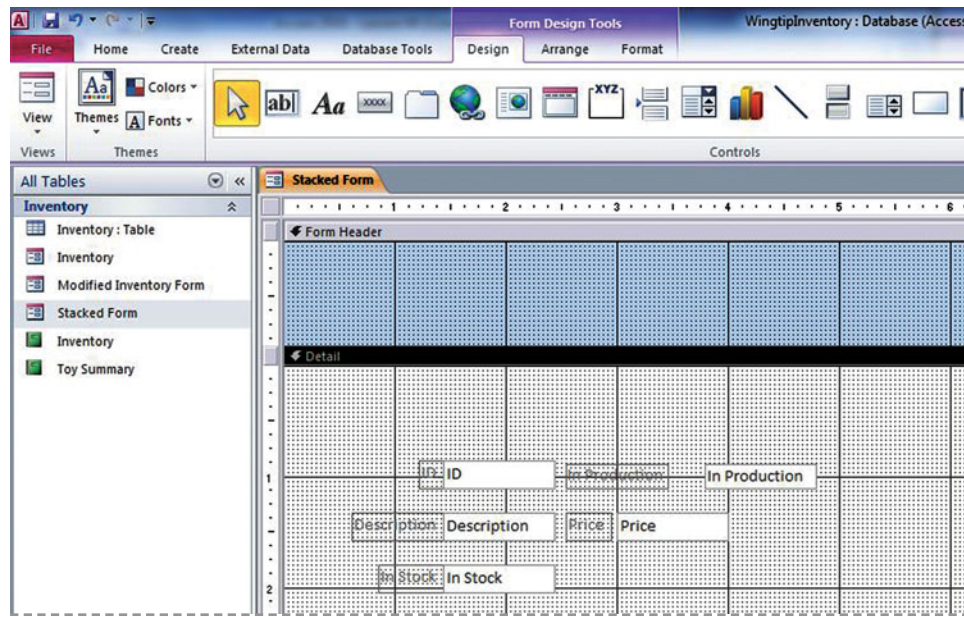
14. Click on a blank space on the design grid.

15. On the Arrange tab, in the Sizing & Ordering group, click the **Size/Space** button. In the Grid category on the menu that appears, click the **Grid** button. The design grid disappears.

16. Click the **Grid** button again. The design grid appears.

17. Click on a blank space on the design grid and drag to draw a box around the labels and controls so they are all selected, or press and hold the **Shift** key and select each label and control.

18. On the Arrange tab, in the Sizing & Ordering group, click the **Align** button. In the menu that appears, click the **To Grid** button. Notice the control and labels slightly move. The upper-left corners of all the labels are now aligned to their nearest grid points.

19. On the Arrange tab, in the Sizing & Ordering group, click the **Size/Space** button. In the Grid category on the menu that appears, click the **Ruler** button. The rulers disappear.

20. Click the **Ruler** button again. The rulers reappear.

21. Save and close the form.

PAUSE. CLOSE the database.

CERTIFICATION READY   3.3.3

How do you arrange controls on forms by repositioning and formatting?

CERTIFICATION READY   5.3.4

How do you arrange controls on reports by aligning to the grid?

Knowledge Assessment

Matching

Match the term in Column 1 to its description in Column 2.

Column 1		Column 2
1. control	**a.**	a control that displays the result of a calculation or expression
2. unbound control	**b.**	help you create controls such as command buttons, list boxes, combo boxes, and option groups
3. bound control	**c.**	a layout in which the controls are arranged in rows and columns, with labels across the top
4. calculated control	**d.**	a control that doesn't have a source; it displays information such as lines, shapes, or pictures
5. Expression Builder	**e.**	controls that are arranged vertically with a label on the left and the control on the right
6. Control Wizards	**f.**	layouts that align controls horizontally and vertically to give your report or form a unique appearance
7. conditional formatting	**g.**	an object that displays data, performs actions, and lets you improve the look and usability of a form or report
8. control layouts	**h.**	a control that uses a field in a table or query as the data source
9. tabular layout	**i.**	means to change the appearance of a control or the value in a control when certain conditions are met
10. stacked layout	**j.**	provides the names of the fields and controls in a database, lists the operators available, and has built-in functions to help you create an expression

True/False

Circle T if the statement is true or F if the statement is false.

T F **1.** The easiest way to create a bound control is to double-click or drag a field from the Property Sheet to the report.

T F **2.** You can bind a control to a field using the Property Sheet.

T F **3.** You can turn off Control Wizards.

T F **4.** Display formatting can be applied to controls and labels in a form or report.

T F **5.** You can specify only one condition for conditional formatting.

T F **6.** You can switch an entire control layout of a report or form from one type to the other.

T F **7.** Control padding adjusts the amount of space between a control and the gridlines of a layout.

T F **8.** The Remove Layout command in the Table group removes a control from a form or report.

T F **9.** You can set a tab order for each section of a form or report.

T F **10.** Tab order refers to the order of tabs displayed in a dialog box.

Competency Assessment

Project 8-1: Refine the Alpine Ski House Report

You have learned a great deal about reports and forms while working as an administrative assistant at the Alpine Ski House. Refine the basic report you created previously so you can display it proudly at the front desk.

GET READY. LAUNCH Access if it is not already running.

@ The *Alpine* file for this lesson is available on the book companion website or in WileyPLUS.

@ The *Winter* file for this lesson is available on the book companion website or in WileyPLUS.

@ The *winterback-ground.jpg* file for this lesson is available on the book companion website or in WileyPLUS.

 1. **OPEN** the *Alpine* database.
 2. **SAVE** the database as *AlpineXXX* (where *XXX* is your initials).
 3. Open the **Report Design** report.
 4. Switch to Design View.
 5. Select all four controls in the report.
 6. On the Arrange tab, in the Table group, click the **Tabular** button.
 7. On the Arrange tab, in the Position group, click the **Control Margins** button, and select **Narrow** from the menu.
 8. On the Arrange tab, in the Position group, click the **Control Padding** button, and select **Medium** from the menu.
 9. On the Design tab, in the Header/Footer group, click the **Title** button. A title is inserted in the report header.
10. Key **Alpine Ski House Rooms Report** and press **Enter**.
11. On the Design tab, in the Header/Footer group, click the **Logo** button. Navigate to the student data files for this lesson and select *Winter*. Click **OK**.
12. On the Format tab, in the Background group, click the **Background Image** button. Open the folder that contains the data files for this lesson and select *winterbackground*. Click **OK**.
13. Press and hold the **Shift** key and click on all four labels and controls to select them.
14. On the Format tab in the Font group, click the **Font Color** menu button. Select the dark blue color called **Dark Blue, Text 2** in the first row and fourth column of the Access Theme Colors section.
15. Make sure all the controls are still selected. On the Arrange tab, in the Table group, click **Remove Layout**.
16. With the controls still selected, click and drag them together up to position just below the Detail section bar.
17. Scroll down and position the mouse pointer over the Page Footer section bar. Drag the section bar up to position just below the controls. Your screen should look similar to Figure 8-53.
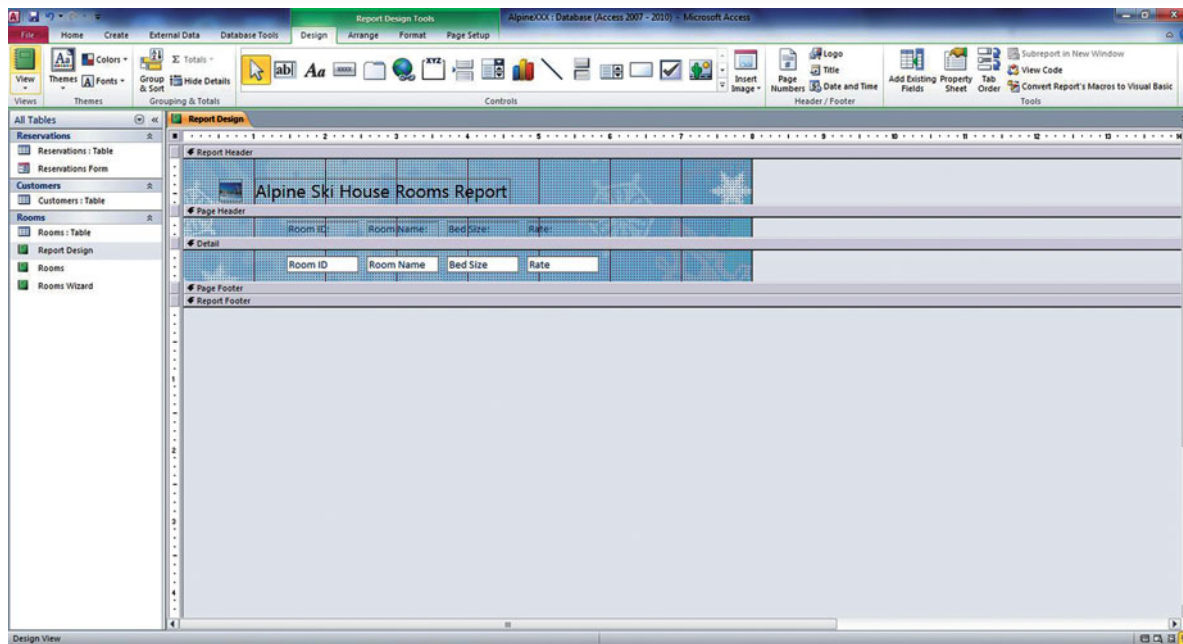
Figure 8-53

Report design

18. Save and close the report.

CLOSE the database.

Project 8-2: Format the Soccer Roster

Since you have increased your Access skills, you decide to improve on the soccer roster you created at the beginning of the season. There have been a few changes anyway, so you need an updated version.

GET READY. LAUNCH Access if it is not already running.

@ The *SoccerData* file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** *SoccerData* from the data files for this lesson.

2. **SAVE** the database as *SoccerDataXXX* (where *XXX* is your initials).

3. Open the Roster report.

4. Switch to Design View.

5. Press and hold the **Shift** key and click on all the labels in the Page Header section to select them.

6. On the Format tab, in the Font group, click the **Bold** button.

7. Select the title, Roster, and key **Soccer Roster**.

8. On the Format tab, in the Font group, click the **Font** menu and select **Arial Black**.

9. On the Format tab, in the Font group, click the **Font Size** menu and select **22**.

10. On the Arrange tab, on the Size/Space menu in the Sizing & Ordering group, click the **To Fit** button.

11. Press and hold the **Shift** key and click on all the controls in the Detail section. On the Arrange tab, on the Align menu in the Sizing & Ordering group, click **To Grid**.

12. Delete the report image.

13. On the Design tab, in the Header/Footer group, click the **Logo** button.

@ The *soccer* file for this lesson is available on the book companion website or in WileyPLUS.

14. Navigate to the student data files for this lesson and select *Soccer.jpg*.

15. Save the report and view it in Report View.

CLOSE the database.

Proficiency Assessment

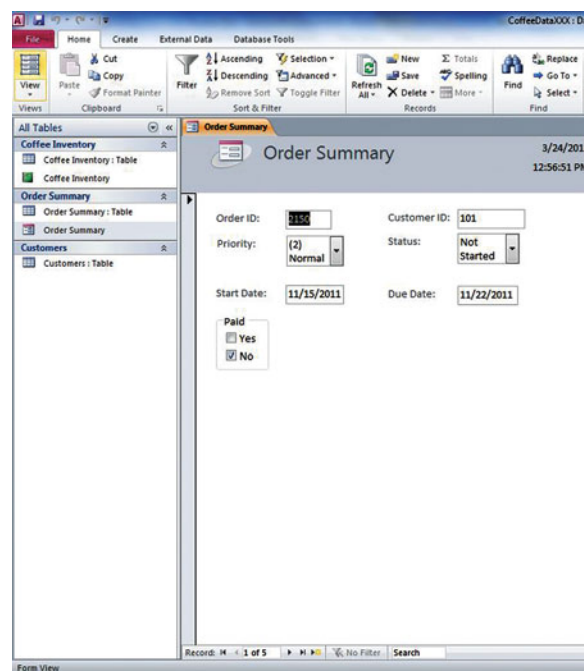### Project 8-3: Create the Fourth Coffee Order Summary Form

In your part-time job at Fourth Coffee, you are often involved in taking and filling orders. Create a summary table to help make your job easier.

GET READY. LAUNCH Access if it is not already running.

@ The **Coffee Data** file for this lesson is available on the book companion website or in WileyPLUS.

1. **OPEN** *Coffee Data* from the data files for this lesson.
2. **SAVE** the database as *CoffeeDataXXX* (where *XXX* is your initials).
3. Select the **Order Summary** table in the Navigation pane.
4. Create a simple form using the Form button.
5. Insert a Date and Time control with the format **00/00/0000**.
6. Delete the **Paid** control and create a **Yes/No option** group control using check boxes with **Paid** as the caption. Set the value for Yes as **−1** and the value for No as **0**.
7. Delete the **Attachment** field.
8. Resize and arrange the controls to look similar to the form in Figure 8-54. Remember to remove the control layout formatting so that you can move individual controls.

Figure 8-54

Order Summary form

9. Save the form as **Order Summary**.
10. Check your work in Form View.
11. Close the form.
CLOSE the database.

Project 8-4: Create the Alpine Ski House Reservations Form

Entering data in the table is becoming cumbersome, so you decide to create a form you can use to enter reservation data.

USE *AlpineXXX* database, which you saved in a previous exercise.

1. Click the **Reservations** table in the Navigation pane to select it.
2. Create a new form using Design View.

3. Insert a title control. Change the title to **Alpine Ski House Reservations Form**.

4. Insert a logo control using the *Penguins.jpg* image from the student data files from this lesson.

5. Add the following bound controls to the design grid: **Customer ID**, **Room**, **Rate**, **Check-In Date**, **Check-Out Date**, and **Notes**.

6. Select all the controls and apply the **Stacked** control layout.

7. Position the controls in the upper-left corner of the Details section, remove the stacked layout and resize the Notes control, as shown in Figure 8-55.

@ The *Penguins* file for this lesson is available on the book companion website or in WileyPLUS.

Figure 8-55

Reservations form
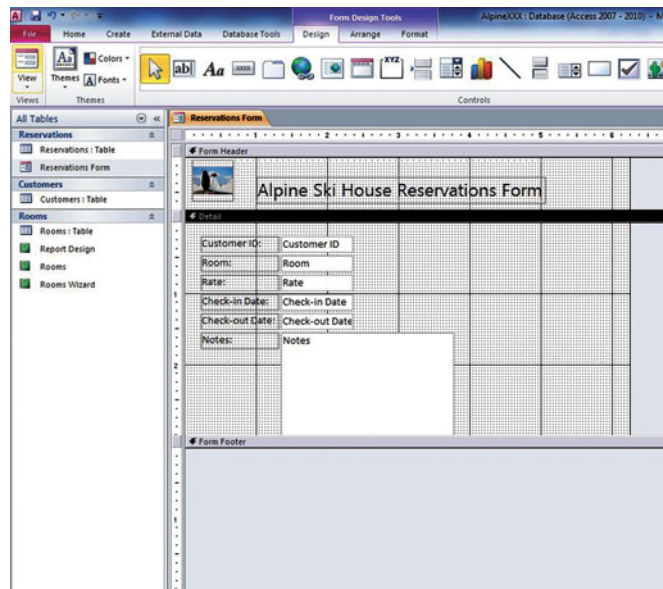
8. Save the form as **Reservations Form** and leave it open for use in the next exercise.

LEAVE the database open for the next project.

Mastery Assessment

Project 8-5: Refine the Alpine Ski House Reservations Form

The reservations form you created is very helpful; however, you need to add more functionality to the form using calculated controls and Control Wizards.

USE the form open from the previous exercise.

1. Add an Option group control on the right side of the form. Use the Control Wizard to create the option box for the *Credit Card on File* field. Using the Option Group Wizard, add two Labels, one for Yes and the other for No. Set the value for Yes to **−1** and the value for No to **0**. Use option buttons, and label the control **Credit Card on File**.

2. Add an unbound text box control below the *Credit Card on File* field.

3. Open the Property Sheet and click the **Build** button in the Control Source property.

4. Create an expression to subtract the Check-In Date from the Check-Out date.

5. Key **Number of Nights** as the label. (Note the default label number, such as Text##.)

6. Add an unbound text box control beside the Notes control.

7. Open the Property Sheet and click the **Build** button in the Control Source property.

8. Create an expression to multiply the Number of Nights (or Text##) by the Rate.

9. Key **Rate Subtotal** as the label.

10. Change all the controls and labels you added with black text to the red color.

11. Switch to Layout View. Your screen should look similar to Figure 8-56.

Figure 8-56

Revised Reservations form

12. Save the form and switch to Form View.

CLOSE the database.

Project 8-6: Fix the Angel Project Contact Information Form

A volunteer did some work on the Angel Project database while you were on vacation. The Contact Information form has a few problems that you need to fix.

GET READY. LAUNCH Access if it is not already running.

1. **OPEN** *AngelData* from the data files for this lesson.

2. **SAVE** the database as *AngelDataXXX* (where *XXX* is your initials).

3. Open the Contact Information Form.

4. Change the layout from tabular to stacked.

5. Bind the unbound control to the *City* field.

6. Fix the control tab order.

7. Save and close the form.

CLOSE Access.

The *AngelData* file for this lesson is available on the book companion website or in WileyPLUS.

INTERNET READY

What are your favorite toys? Maybe you have some favorites from childhood or perhaps you have some favorite grown-up toys, such as electronic gadgets. Search online stores for details about the toys. Create a database table with fields like Name, Description, Store, and Price. Use what you've learned in this lesson to create a form with controls for each field. Enter the data for five toys into your form. For extra practice, create a report that displays a summary of all your data.