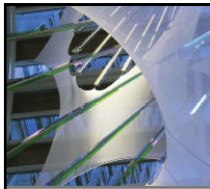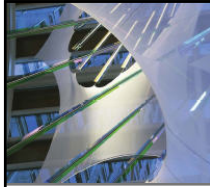# Tutorial 6

Working With Multiple Worksheets and
Workbooks

**Review of Lists – a collection of similar data
in a structured manner**

- Freezing rows/columns
- Split Pane
- Find and Replace
- Sort
- Data forms
- Filtering
- Subtotals
- Pivot tables

Worksheet groups

- You may want to work with the worksheets within a workbook as if they were a single unit.

- You can combine worksheets together into a group. Grouping worksheets allows you to:
  - Apply formulas across the worksheets in the group
  - Apply formatting across worksheets in a group
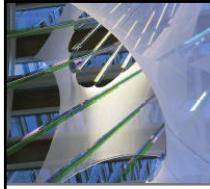 - Make multiple changes through a single change

A worksheet group
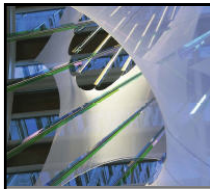

Worksheets grouped — Figure 6-2

Create a group

- To select the group, click first sheet tab then hold the shift key and click on the last sheet tab in the group.

- To ungroup, click a sheet tab not in the group or right-click a sheet tab in the group and choose ungroup command.

- Don't forget that anything you do in one worksheet of a group is applied to all worksheets in the group!!!
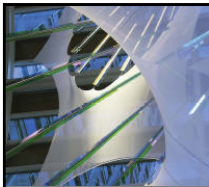
Edit multiple worksheets at the same time

- In a worksheet group, you can enter formulas that will effect all of the worksheets in the group.
  - For example, placing a formula in cell A5 in a worksheet in a group, will place that same formula in cell A5 in all the worksheets in the group
- You can also apply formatting to a worksheet in a worksheet group that will affect all of the worksheets in the group.
  - For example, if you apply an AutoFormat to a worksheet in a worksheet group, all of the worksheets in the group will receive the AutoFormat
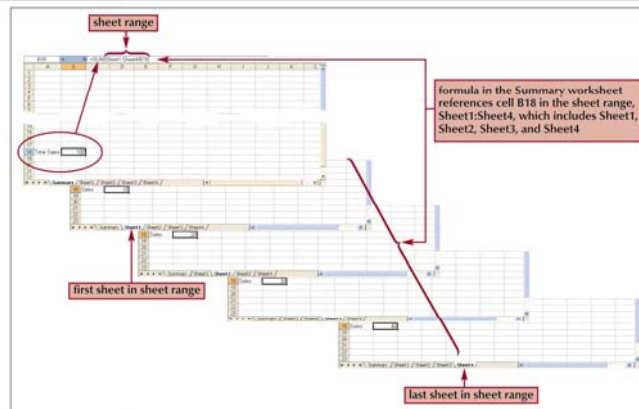- The worksheets will continue to be considered a group until you specify the "Ungroup Sheets" option.

Create 3-D cell references and workbook references

- Think of the collections of worksheets in a workbook as a third dimension.
- You know that you can reference rows and columns in a worksheet.
- You can also reference worksheets. You can, therefore, have a reference in a worksheet that pertains to a cell in another worksheet.
  - The reference Sheet3!A5 is a reference to cell A5 on Sheet3
- You can place the reference in any cell on any worksheet within the workbook.
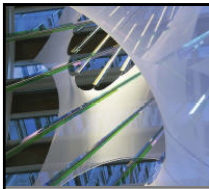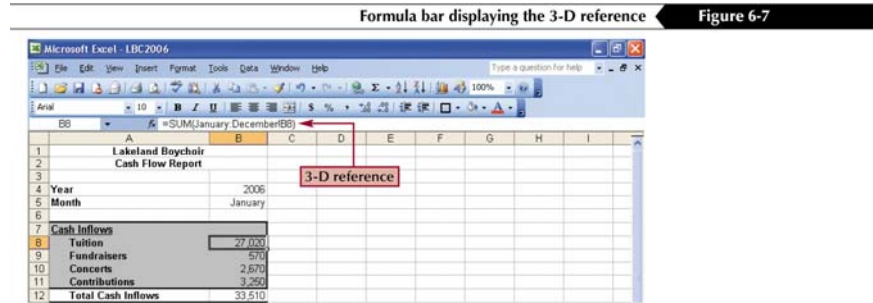
The three dimensions of a workbook

Figure 6-5   Three dimensions of a workbook

sheet range

formula in the Summary worksheet references cell B18 in the sheet range, Sheet1:Sheet4, which includes Sheet1, Sheet2, Sheet3, and Sheet4

first sheet in sheet range

last sheet in sheet range

An example of a 3-D Cell reference

Formula bar displaying the 3-D reference | Figure 6-7

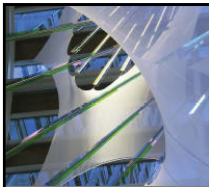# Consolidate information from multiple worksheets and workbooks

- In a workbook, you often have several worksheets that represent the same kind of data but for different entities.
- It may be beneficial for you to summarize the data onto one worksheet, or consolidate the data.
- When you consolidate, each worksheet must have the same format and structure.
- You can easily copy the contents and/or formats of a worksheet to a whole group of worksheets with the "Fill Across Worksheets" dialog box.
- On the sheet you intend to use to summarize the data of the worksheets, you can use 3-D Cell References to calculate totals across the worksheets involved in the summary.

# A summary worksheet

Figure 6-8   Complete Annual worksheet

Create a workbook template

- In business, you often create workbooks that have common elements such as invoices, expense statements, etc.
- Using a template makes this process easier because the elements are already in place; all you do is fill them in.
- You can use any of the templates supplied with Excel or you can create your own.
- When you design your template, you can include formatting and calculations.
- When you open a new workbook with the template, the formatting and calculations will be built into the workbook.
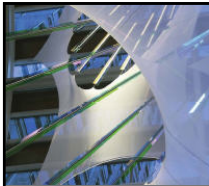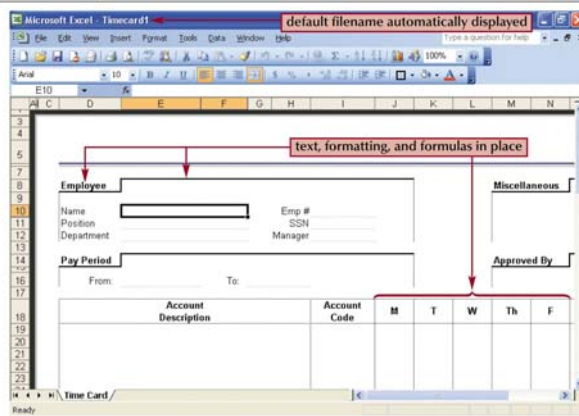
Use pre-built templates

Spreadsheet Solutions tab in the Templates dialog box   Figure 6-10

available built-in templates   preview of the selected template
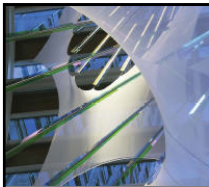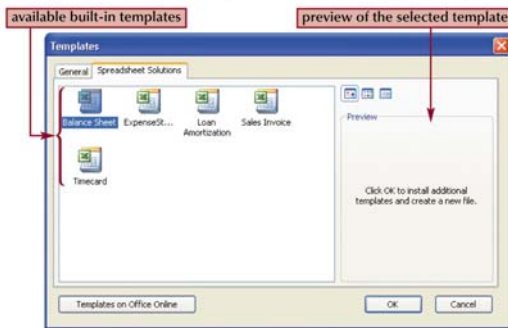
An Excel template

Figure 6-11   Timecard template

default filename automatically displayed

text, formatting, and formulas in place

Store and access templates

- To save a template, use the "Save As" option on the File menu and then change the "File Type" to template.
- When you save a template, it must be saved in the Templates folder.
  - This makes it possible for Excel to locate the template when you are ready to use it again
  - You usually don't see the Templates folder in Windows Explorer because it is a hidden folder
 - Once the template has been saved, it will be listed as an icon in the Templates dialog box.
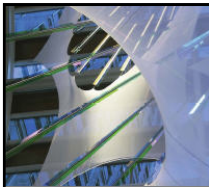
Link workbooks to summarize data

- You can summarize data from several workbooks by creating links between them.
- To create a workbook reference:
  - Click the tab for the workbook that will be the destination workbook
  - Click in the cell that will receive the data, and enter an equal sign (=), but do not press the Enter key
  - Switch to the target workbook, click in the cell containing the data to be linked, and press the Enter button on the Formula bar
  - The formula referencing the source workbook will appear in the destination cell
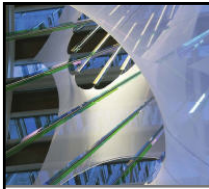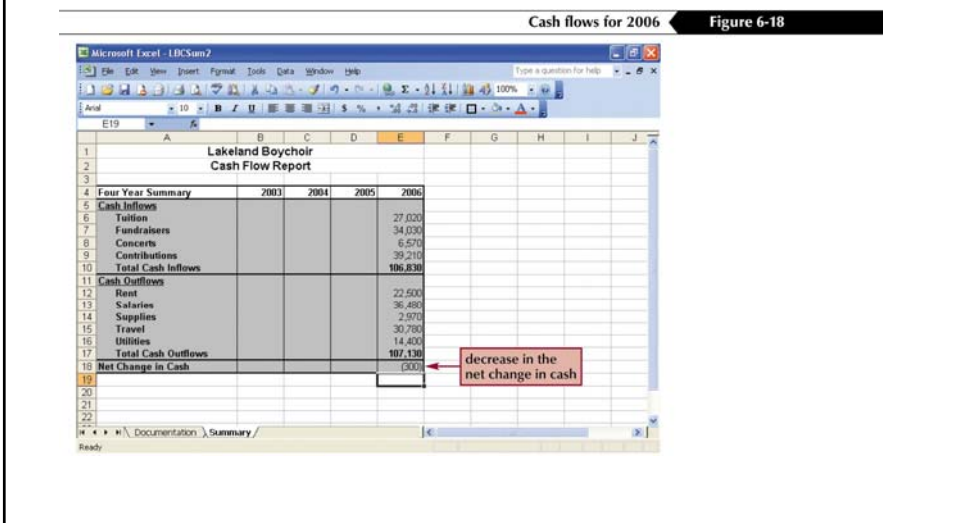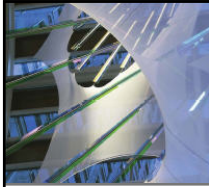
Link Workbooks by specifying source and destination files

Figure 6-16 — Source and destination files
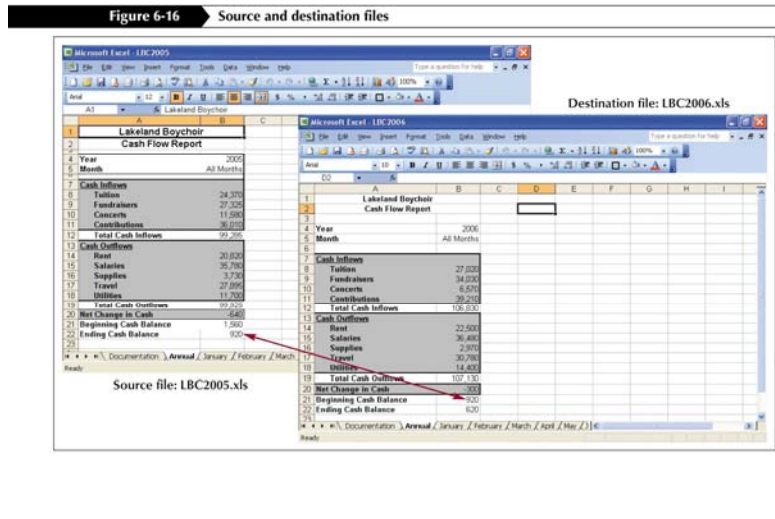
A summary sheet with a workbook reference
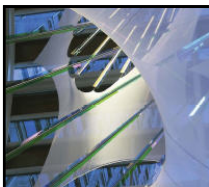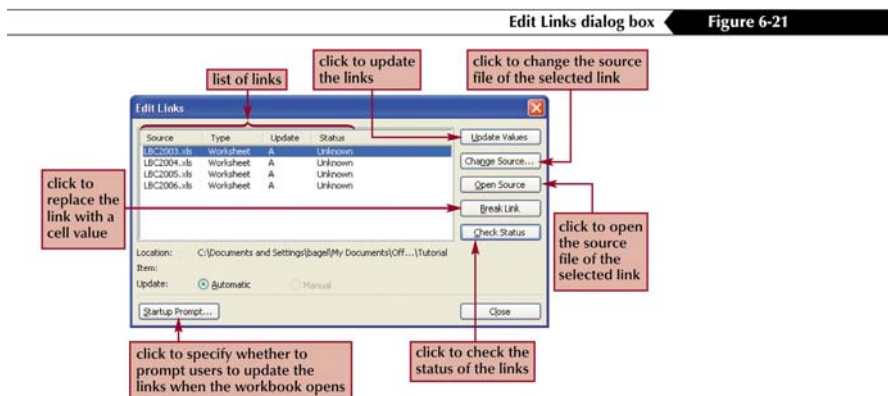

Cash flows for 2006 — Figure 6-18

Updating Data

If changes are made in the source file, the link must be updated to reflect the change in the destination file:

1. Excel prompts you to update when you open the destination file
2. If both source and destination files are opened, Excel will automatically update the link
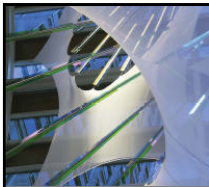3. You can manually update the link without the source file having to be opened.

The Edit Links dialog box

Edit Links dialog box   Figure 6-21

list of links

click to update the links

click to change the source file of the selected link

click to replace the link with a cell value

click to open the source file of the selected link

click to specify whether to prompt users to update the links when the workbook opens

click to check the status of the links

Create a lookup table and use Excel's lookup functions

- You can create a Lookup Table that will summarize data but will allow you to perform lookups that will go to particular workbook references to retrieve data.
  - A lookup table organizes values that you want to retrieve into different categories
  - These categories are called compare values
  - If you want to locate a particular value, you must supply a lookup value that is matched against the compare value
  - The lookup value and compare value are tested against each other and the matching value is then returned from the workbook cell reference
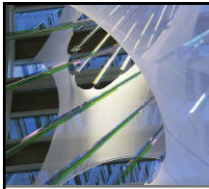
Planning the Lookup

Figure 6-24   A lookup table for a range of values

The Function Arguments dialog box

Figure 6-26 — Arguments for the VLOOKUP function
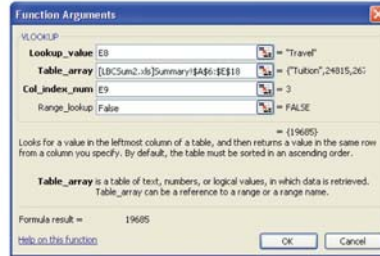
A formatted lookup section
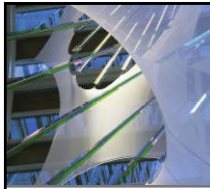
Formatted lookup section — Figure 6-27

Create and use an Excel workspace

- Often, you will create several workbooks that are related to one another in terms of subject.
- You may want to open all of those related workbooks at one time, which you can do by creating an Excel workspace.
  - An Excel workspace is a file that contains information about all workbooks that are currently open
  - The information saved in a workspace includes the location of the workbooks, the window sizes, and the screen positions
  - Once the workspace has been created, you will only need to open the workspace file and all of the related workbooks will open as well
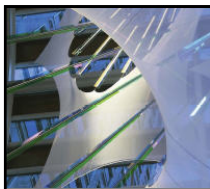
Opening a workspace file

Figure 6-28   Opening the Choir Files workspace file
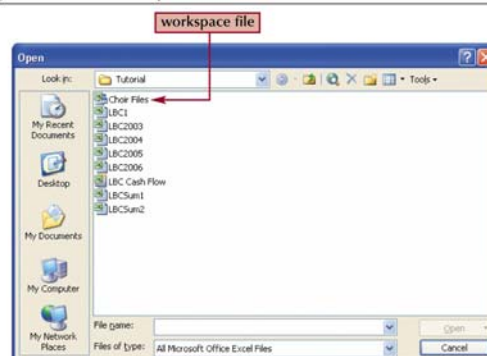
Homework

Tutorial 6 - Case Problem 2
Pages: EX 294 - 295