Chapter 15 Worksheets

Chapter Objectives
Discuss the Chapter 15 objectives with students:
• Use Microsoft Excel spreadsheet software to create worksheets.
• Use formatting and editing features to make worksheets attractive and easy to read.
• Use functions and formulas to prepare worksheets.
• Create charts using worksheet data.

Web Resources
Review the activities for Chapter 15 that are found on the Web site. Decide whether you wish to have students complete the games and activities.
• Data Files
• Vocabulary Flash Cards
• Beat the Clock, Worksheet
• PowerPoint Reviews
• More Activities
  o Chapter 15 Supplementary Activity, Change Row Height
  o Chapter 15 Supplementary Activity, Create a Bar Chart

Slides
Preview the PowerPoint slides for Chapter 15 found on the IRCD. Decide which ones you will use for your presentations and demonstrations.

Assessment
ExamView test for Chapter 15

Lesson 91 Spreadsheet and Worksheet Basics

Lesson Objectives
Discuss the Lesson 91 objectives with students:
• Learn about spreadsheet software and worksheets.
• Enter information in a cell and move around in a worksheet.

Data Files
• DF 91A Worksheet Parts

Software Features
The following software features are introduced in Lesson 91:
• Enter data in a worksheet
• Navigate in a worksheet using the mouse and keyboard

**Document Formats**
No document formats are taught in this lesson.

**Vocabulary Terms**
The vocabulary terms from Lesson 91 and their definitions are listed below. Explain the meaning of these words to students as you discuss the appropriate sections of the lesson.

<table>
<thead>
<tr>
<th>Vocabulary Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>spreadsheet software</td>
<td>A computer program used to record, report, and analyze data in worksheets</td>
</tr>
<tr>
<td>workbook</td>
<td>A spreadsheet file that may contain one or more worksheets, usually with related data</td>
</tr>
<tr>
<td>worksheet</td>
<td>A section in a workbook (spreadsheet file) where the user can enter data</td>
</tr>
<tr>
<td>name box</td>
<td>Identifies the active cell by the letter of the column and the number of the row it intersects</td>
</tr>
<tr>
<td>formula bar</td>
<td>Displays the contents of the active cell and is used to enter or edit text or values</td>
</tr>
<tr>
<td>active cell</td>
<td>The current location of the insertion point; stores information that is entered</td>
</tr>
</tbody>
</table>

**Teaching Strategies**
Refer to the teaching notes in the *Century 21 Jr., Annotated Teacher’s Edition* for each section and activity listed below.

1. Have students read Lesson 91.
2. Discuss the *Worksheets and Workbooks* section with students. Have them complete activity *91A Learn: Identify Worksheet Parts*. Make the data files needed for this activity available to students.
3. Discuss the *Moving Around in a Worksheet* section with students. Have them complete activity *91B Learn: Move Around a Worksheet*.
4. Discuss the *Entering Data* section with students. Have them complete activity *91C Learn: Enter Data*.

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**Lesson 92 Formatting and Printing Worksheets**

**Lesson Objectives**
Discuss the Lesson 92 objectives with students:
• Learn guidelines for formatting worksheets.
• Format worksheets.
• Print worksheets.

Data Files
None

Software Features
The following software features are introduced in Lesson 92:

• Apply bold format to cells
• Change font size
• Font, Font Size, Font Color
• Merge and center cells
• Center data in cells
• Apply borders to cells
• Save a workbook
• Set margins
• Center worksheet data horizontally for printing
• Use Print Preview
• Print the active sheet

Document Formats
The following document format is introduced in Lesson 92:

• Worksheet table.

Vocabulary Terms
The vocabulary terms from Lesson 92 and their definitions are listed below. Explain the meaning of these words to students as you discuss the appropriate sections of the lesson.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>worksheet title</td>
<td>Describes the content of a worksheet table</td>
</tr>
<tr>
<td>column head</td>
<td>Appears at the top of a column and describes the data in the column</td>
</tr>
<tr>
<td>range</td>
<td>A group of two or more cells on a worksheet</td>
</tr>
</tbody>
</table>

Teaching Strategies
Refer to the teaching notes in the Century 21 Jr., Annotated Teacher’s Edition for each section and activity listed below.

1. Have students read Lesson 92.
2. Discuss the Worksheet Guidelines section with students. Have them complete activity 92A Learn: Format Data.
3. Discuss the *Printing Worksheets* section with students. Have students complete activity 92B *Learn: Print a Worksheet*. Then have them complete activity 92C *Practice: Create and Print a Worksheet*.

**Lesson 93 Using Formulas and Functions**

**Lesson Objectives**
Discuss the Lesson 93 objectives with students:
- Use formulas and functions in worksheets.
- Apply number formats such as currency and percent.
- Change the number of decimal places displayed in a number.

**Data Files**
- *DF 93A Festival*
- *DF 93C Schedule*

**Software Features**
The following software features are introduced in Lesson 93:
- Enter formulas
- Use functions
- Apply number formats
- Change the number of decimal places displayed in a number

**Document Formats**
No document formats are taught in this lesson.

**Vocabulary Terms**
The vocabulary terms from Lesson 93 and their definitions are listed below. Explain the meaning of these words to students as you discuss the appropriate sections of the lesson.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>formula</td>
<td>An equation that performs calculations on values in a worksheet</td>
</tr>
<tr>
<td>function</td>
<td>A predefined formula that can be used to perform calculations</td>
</tr>
</tbody>
</table>

**Teaching Strategies**
Refer to the teaching notes in the *Century 21 Jr., Annotated Teacher’s Edition* for each section and activity listed below.

1. Have students read Lesson 93.
2. Discuss the *Formulas* section with students. Have students complete activity 93A *Learn: Use Formulas*. Make the data files needed for this activity available to students.

3. Discuss the *Functions* section with students. Have students complete activity 93B *Learn: Use Functions*. Then have them complete activity 93C *Practice: Use Formulas and Functions*. Make the data files needed for activity 93C available to students.

**Lesson 94 Editing, Moving, and Copying Cells**

**Lesson Objectives**
Discuss the Lesson 94 objectives with students:
- Edit data in cells.
- Clear the contents and formats of cells.
- Move, copy, and paste cells.
- Use formulas and functions in worksheets.

**Data Files**
- *DF 94B Schedule*
- *DF 94C Sales*
- *DF 94D Budget*

**Software Features**
The following software features are introduced in Lesson 94:
- Edit cell contents
- Clear the contents and formats of cells
- Cut, copy, paste, and move data
- Use the fill handle to copy data

**Document Formats**
No document formats are taught in this lesson.

**Vocabulary Terms**
The vocabulary term from Lesson 94 and its definition is listed below. Explain the meaning of this term to students as you discuss the appropriate sections of the lesson.

<table>
<thead>
<tr>
<th>term</th>
<th>definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>fill handle</td>
<td>The small square in the bottom-right corner of the cell used to copy or fill data</td>
</tr>
</tbody>
</table>
Teaching Strategies
Refer to the teaching notes in the Century 21 Jr., Annotated Teacher’s Edition for each section and activity listed below.

1. Have students read Lesson 94.
2. Discuss the Editing Cell Content section with students. Have them complete activity 94A Learn: Edit Cell Content.
3. Discuss the Clearing and Deleting Cell Contents and Formats section with students. Have them complete activity 94B Learn: Clear and Delete Cell Contents. Make the data files needed to complete this activity available to students.
4. Discuss the Copying and Moving Data sections with students. Have students complete activity 94C Learn: Cut, Copy, and Paste Data. Then have them complete activity 94D Practice: Edit a Budget Worksheet. Make the data files needed to complete these activities available to students.

Lesson 95 Formatting Cells and Columns

Lesson Objectives
Discuss the Lesson 95 objectives with students:
• Change column widths and row heights in worksheets.
• Insert and delete columns and rows in worksheets.
• Sort data in a worksheet.
• Use formulas and functions in worksheets.
• Wrap text in a cell.
• Scale a worksheet to fit on one page.
• Create an Excel worksheet in a Word document.

Data Files
• DF 95A Players
• DF 95B Vehicles
• DF 95C Art
• DF 95D Dinner
• DF 95E Memo

Software Features
The following software features are introduced in Lesson 95:
• Change column widths and row height in worksheets
• Insert and delete columns and rows in worksheets
• Sort worksheet data
• Wrap text in a cell
• Scale worksheet to fit on one page
• Print a selection
• Insert a worksheet in a *Word* document

**Document Formats**

No document formats are taught in this lesson.

**Vocabulary Terms**

The vocabulary terms from Lesson 95 and their definitions are listed below. Explain the meaning of these words to students as you discuss the appropriate sections of the lesson.

<table>
<thead>
<tr>
<th>sort</th>
<th>To arrange or group items in a particular order</th>
</tr>
</thead>
<tbody>
<tr>
<td>ascending</td>
<td>Going from the lowest number to the highest or from A to Z</td>
</tr>
<tr>
<td>descending</td>
<td>Going from the highest to the lowest number or from Z to A</td>
</tr>
</tbody>
</table>

**Teaching Strategies**

Refer to the teaching notes in the *Century 21 Jr., Annotated Teacher’s Edition* for each section and activity listed below.

1. Have students read Lesson 95.
2. Discuss the *Changing Column Width and Row Height* section with students. Have them complete activity *95A Learn: Change Column Widths and Row Heights*. Make the data files needed to complete this activity available to students.
3. Discuss the *Inserting and Deleting Rows and Columns* section with students. Have them complete activity *95B Learn: Insert and Delete Rows and Columns*. Make the data files needed to complete this activity available to students.
4. Discuss the *Sorting Data in a Worksheet* section with students. Have them complete the activities in this order:
   - *95C Learn: Sort a Class List*
   - *95D Practice: Sort a Guest List*
   - *95E Apply: Insert a Worksheet in a Word Processing Document*
   Make the data files needed to complete these activities available to students.

**Lesson 96 Worksheets with Charts**

**Lesson Objectives**

Discuss the Lesson 96 objectives with students:
• Create column, bar, and pie charts using worksheet data.
• Embed charts on a worksheet page.
Data Files
- DF 96A Sales
- DF 96B School
- DF 96C Expenses

Software Features
The following software features are introduced in Lesson 96:

- Create charts: column, bar, and pie
- Embed charts on a worksheet page
- Print charts separately and with the worksheet page

Document Formats
The following document formats are introduced in Lesson 96:

- Column chart
- Bar chart
- Pie chart

Vocabulary Terms
The vocabulary terms from Lesson 96 and their definitions are listed below. Explain the meaning of these words to students as you discuss the appropriate sections of the lesson.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>column chart</td>
<td>Graph that compares values across categories of data</td>
</tr>
<tr>
<td>bar chart</td>
<td>Graph that compares values across categories of data</td>
</tr>
<tr>
<td>pie chart</td>
<td>Graph that shows how much each value is of a total value</td>
</tr>
<tr>
<td>category axis</td>
<td>Used to plot categories of data in a chart, sometimes called the x-axis</td>
</tr>
<tr>
<td>value axis</td>
<td>Used to plot values associated with the categories of data, usually the y-axis</td>
</tr>
<tr>
<td>data points</td>
<td>Bars, columns, or pie slices that represent the numerical data in a chart</td>
</tr>
<tr>
<td>legend</td>
<td>A key (usually with different colors or patterns) used to identify a chart’s data categories</td>
</tr>
</tbody>
</table>

Teaching Strategies
Refer to the teaching notes in the Century 21 Jr., Annotated Teacher’s Edition for each section and activity listed below.

1. Have students read Lesson 96.
2. Discuss the Charts and Parts of a Chart sections with students. Have students complete the activities in this order:
96A Learn: Create a Column Chart  
96B Practice: Create a Bar Chart  
96C Practice: Pie Charts

Make the data files needed to complete these activities available to students.

Chapter Review

Data Files
- DF C15 Grades
- DF C15 Statistics
- DF C15 Directions
- DF C15 Business
- DF C15 Expenses
- DF C15 Personal Finances

Vocabulary Terms
The vocabulary term from the Chapter Review and its definition is listed below. Explain the meaning of this term to students as you discuss the appropriate sections of the lesson.

| economic indicators | Measurements that describe how well the economy is doing |

Teaching Strategies
Refer to the teaching notes in the Century 21 Jr., Annotated Teacher’s Edition for each section and activity listed below.

1. Have students complete the Reviewing What You Have Learned questions.
2. Have students complete the activity Create Worksheet and Chart. Make the data files needed for this activity available to students.
3. Have students complete the activity Complete a Worksheet. Make the data files needed for this activity available to students.
4. Have students complete the activities in Keyboarding Skillbuilding.
5. Discuss the Academic Connections, Student Organizations: Spreadsheet Competitions section with students. Have them follow the steps provided to complete the activity. Make the data files needed for this activity available to students.
6. Discuss the About Business, Economic Indicators section with students. Have them follow the steps provided to complete the activity. Make the data files needed for this activity available to students.
7. Discuss the Life Success Builder, Develop Personal Finance Skills section with students. Have them follow the steps provided to complete the activity. Make the data files needed for this activity available to students.
8. Discuss the *Career Exploration Portfolio* activity with students. Have students follow the steps provided to complete the activity. They will need Internet access for this activity. Students will work with a classmate to complete this activity.