



REQUIRED SOFTWARE

- ◆ MICROSOFT WORD 97
- ◆ MICROSOFT EXCEL 97

OPTIONAL SOFTWARE

- ◆ MICROSOFT INTERNET EXPLORER

YOUR JUST DESSERTS

Teacher Guide

SUMMARY

This lesson integrates language arts with math applications as students write letters to town officials and local businesses asking for favorite dessert recipes, tabulate their responses in a spreadsheet, and turn their survey results into colorful graphs.

OBJECTIVES

- ◆ To have students become familiar with spreadsheet and graphing fundamentals using a real-world application
- ◆ To reinforce letter-writing and research skills
- ◆ To gather data through survey techniques

PREREQUISITE SKILLS

- ◆ Familiarity with *Microsoft® Word*
- ◆ Knows how to create a worksheet in *Microsoft® Excel* and use its charting function

TIME ALLOTTED

Approximately 5 weeks

HOW TO BEGIN

Explain to students that this lesson, which uncovers the local community's favorite dessert recipes, has many components including a) letter writing, b) tabulating responses, c) charting recipe data, d) publishing a recipe book, and

Our Community's Favorite Desserts							
Name	Favorite Dessert	Cake	Cookie	Custard	Fudge	Ice Cream	Pastery
Mrs. Simon, Town Clerk	Chocolate Chip Cookies		1				
Home Simon, Police Chief	Grand Doughnut						1
Doc Wines, Tax Collector	Strawberry Cheesecake	1					
Kenneth Frog, Fire Chief	Broccoli Pie						
M. Park, Health Inspector	Potato Chip Fudges						
Gregory J. Gosh, Sanitation Dept. Director							
CATEGORY TOTALS		1	1	0	0	0	1

Hershey's Web page from *Internet Explorer*

e) "sampling" results. Then list the names and addresses of town officials on the board and have students choose someone to write a letter to. If necessary, call Town or City Hall for a list of municipal officers. Or, bring in copies of the area's Yellow Pages and have students look up the names and addresses of local businesses. Plan on having students send out several letters to increase their chances of getting at least one reply.

Review with students the different parts of a letter, e.g., sender's address, date, recipient's address, greeting (salutation), and closing, as well as how to address an envelope.

Have them think about what they are going to include in the body of their letter, e.g., an explanation of why they are writing, the type of recipe they would like to receive, how they will use this recipe, plus special thanks for helping out with the project.

Extension Activities

- ◆ Have more advanced students use *Microsoft Excel* to calculate what they should charge for their book of recipes in order to earn a profit. First have them create a spreadsheet listing the cost of project supplies (e.g. paper, toner, staples, stamps, envelopes). Divide the total cost of the project by the total number of books printed. The resulting calculation determines the "break-even" figure for the cost of each book. Arrive at a fund-raising goal. Divide this number by the number of books printed. Add the result of this calculation to the previously determined break-even cost to establish the book's sale price.

Student Activity

DESCRIPTION

In this activity you will discover your local community's favorite dessert recipes, publish them in a recipe book and sell them to raise money for a favorite local charity.

STEP 1

Writing Letters

SOFTWARE: Microsoft Word

WHAT TO DO: Put together a list of town officials and municipal officers, or local businesses that you would like to write letters to

for favorite dessert recipes. You will add these names and addresses to a data document later in this lesson. Explain in your letters that the goal of the project is to collect a delicious assortment of local desserts in order to publish a book and raise money. Ask them for a small donation to offset the cost, noting that any business which supports the project will be listed as a "patron" in the recipe book.

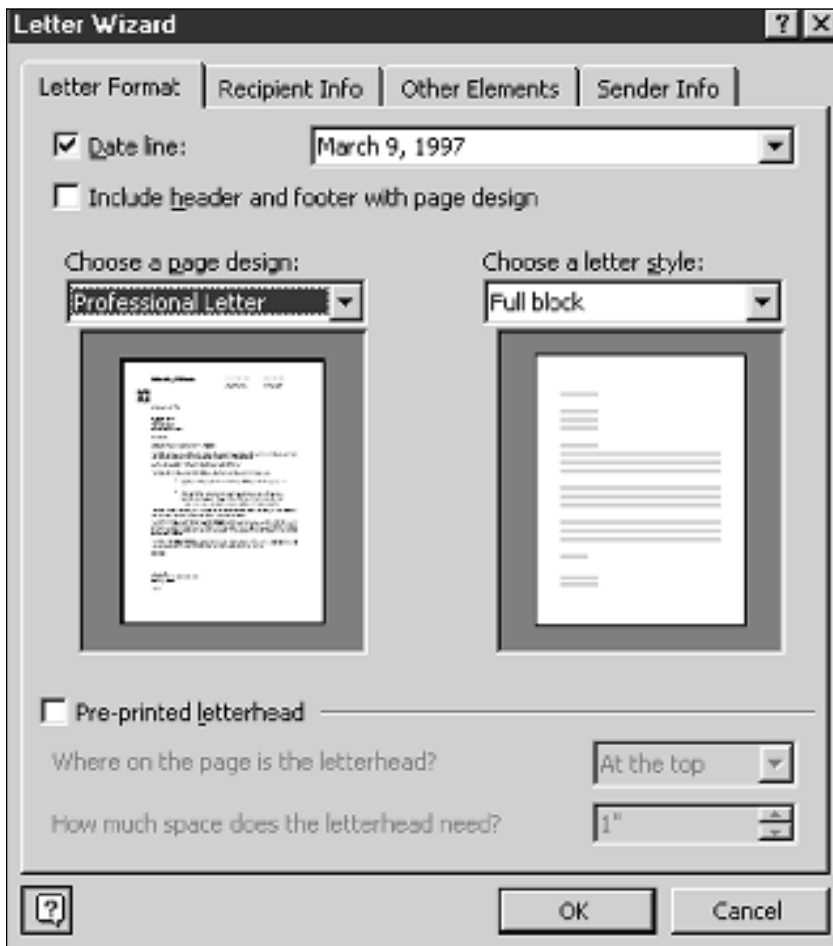
Compose your letters in *Microsoft Word*. *Word* has several Letter templates, or start with the time-saving Letter

Wizard (see Example 1). Choose Letter Wizard from the Tools menu to get started

If you are printing letters on school letterhead, be sure to place a check mark in the "pre-printed letterhead" box on the Letter Format tab of Letter Wizard. Then, enter the letterhead's location. If you are not printing on school stationery, complete the Sender's name and Return address on the Sender Info tab of *Word's* Letter Wizard dialog. *Word* automatically inserts this information in the letter.

Proofread and spell check your letters before printing and consider exchanging letters with classmates for peer review and evaluation. Since you will be sending the same letter out to a list of community members, you can save it and merge the address and name into each letter. This is called a form letter. Choose Mail Merge from the Tools menu, click the Create button, choose Form Letters, then click the Active Window button. You are now ready to set up a table with the address information where each letter will be sent (note: you can also keep this data list in *Excel*, *Access*, or *Works*).

You are now ready to create your data source file. Choose Mail Merge from the Tools menu, then choose Create Data Source. Under Data Source, choose Get Data, then choose Create Data Source. This is where you add the data. Click the OK button, then name and save your document. When you see the Edit Data Source button,



Example 1: Letter Wizard option in *Microsoft Word*

Name	Favorite Dessert	Cake	Cookie	Custard	Fudge	Ice Cream	Pastry	Pie	Pudding	Totals
Marcia Simpson, Town Clerk	Chocolate-Chip Cookies		1							1
Hazel Simpson, Police Chief	Grated Doughnuts						1			1
Don Warner, Tax Collector	Strawberry Shortcake	1								1
Kenneth T. Frog, Fireman	Rocky Road Pie							1		1
M. Paul, Health Inspector	Potato Chip Pudding								1	1
Clara T. Crosby, Banker	Blue Raspberry Pudding								1	1
CATEGORY TOTALS		1	1	0	0	0	1		2	5

Example 2: "Favorite Desserts" worksheet created in Microsoft Excel

click it and enter the name and address information for one of your letter recipients. Click Add New button to add the next person on your list. Click the Merge button in the Mail Merge Helper dialogue box when you're ready to print your form letters.

To prepare envelopes or mailing labels, choose Envelopes and Labels from the Tools menu. Ask the Office Assistant about "envelopes" if you need help.

STEP 2

Tabulating Responses

SOFTWARE: Microsoft Excel

WHAT TO DO: Allow approximately 3 weeks for recipients to respond to your letters. Once received, review responses and identify the various dessert categories (e.g., cookies, cakes, pies, fruit, etc.) from the recipes received.

Create a new worksheet in *Microsoft Excel* with a separate column for each dessert category and sort the headings so they display in alphabetical

order. Title you worksheets, for example, "Our Town's Favorite Desserts" and then enter a "1" in the appropriate dessert category for each person who sends in a reply (see Example 2).

Format column headings and cell contents so that text is centered, and use *Microsoft Excel's* Autofill, AutoSum and Count functions to add formulas and data to your sheet. Ask the Office Assistant for help.

STEP 3

Charting Responses

SOFTWARE: Microsoft Excel

WHAT TO DO: Create a Pie chart using information in the Totals row of the worksheet. Here's how:

- ◆ Highlight the cells in the "Totals" row for each category. (C12:J12). Choose Chart from the Insert menu. Select Pie as the chart type, then select the chart sub-type Pie with a 3D Visual Effect. Click the Press and Hold to View Sample button to preview the chart, then click Next.

- ◆ Click the Series tab. In the

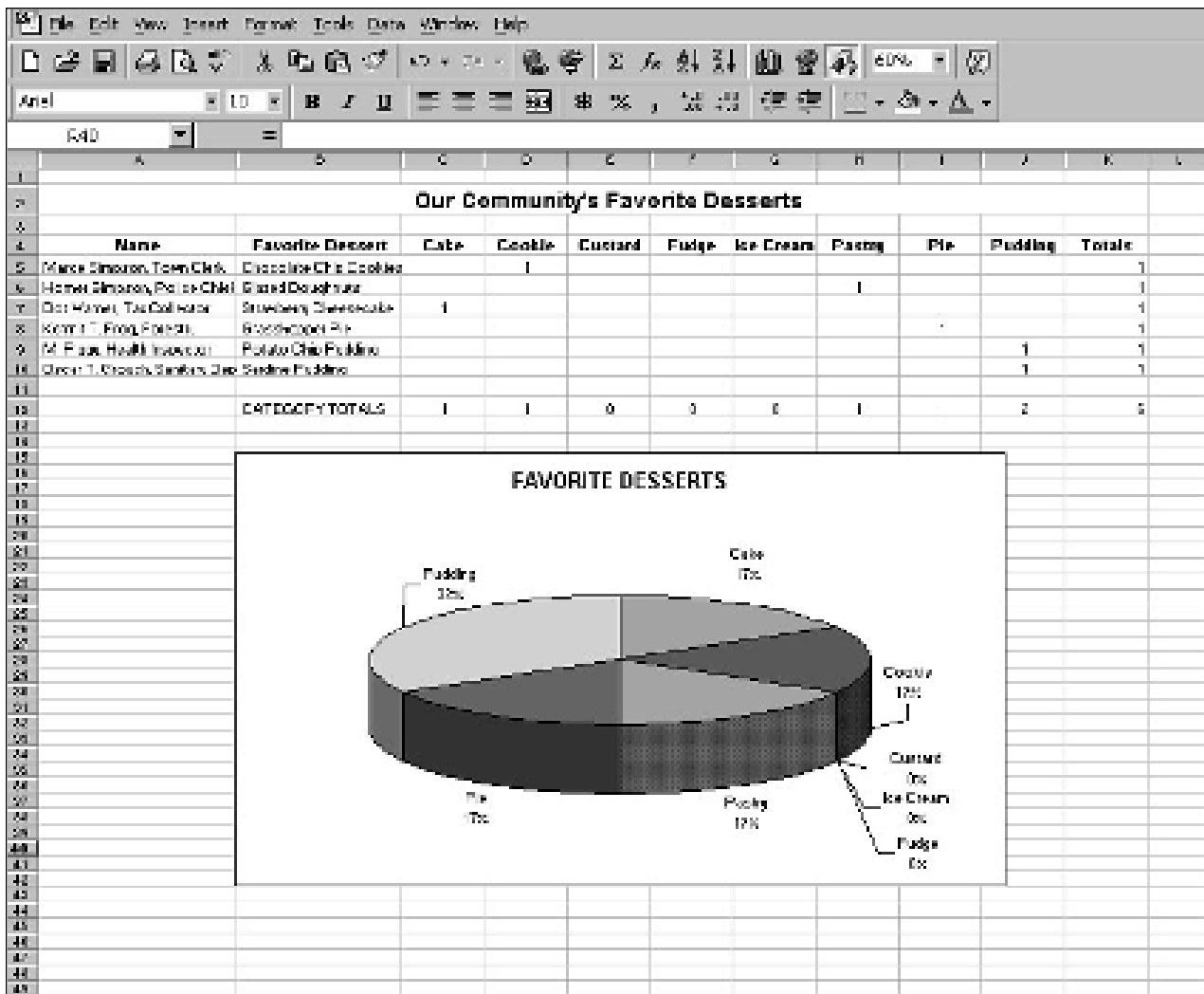
Category labels box, type =sheet1!c4:j4 then click Next. Click the Titles tab, type Dessert Favorites. Click the Legend tab, then choose a location for the chart legend. Click Data labels tab, choose Show Percent. This will make it easy to determine which category is actually the town favorite. Click Next. Choose to place the chart as an object on the original worksheet, so you can see worksheet entries as you view the chart (see Example 3).

STEP 4

The Recipe Book

SOFTWARE: Microsoft Word, Internet Explorer

WHAT TO DO: Every recipe should have its own page in the book. Create a template in *Word* with a 2-column table, to hold recipe ingredients and instructions. Add decorative elements such as clip art or borders to place a stylish design around the card. Save and then copy the template to a floppy disk or server, and install it in the Templates



Example 3: Pie chart as an object on worksheet in Microsoft Excel

folder of every computer that students will use to prepare their recipes.

Type recipe ingredients in the appropriate cells. *Word* table cells grow to fit the text you enter and automatically wrap within the cell when they reach the end of a line. Be sure to delete any unused rows and add new rows if necessary.

You may also want to use *Internet Explorer* to browse the Web for additional recipes to be included in your books.

Recommended Web Sites

- ◆ **Hershey's Chocolate**

Recipe Index

(<http://www.hersheys.com/recipes/recipe.index.html>)

- ◆ **Godiva's Super-Outrageous Ultra-Decadent Mega-Chocolate Desserts**
(<http://www.godiva.com/recipes/recipes/chocolatier/mega-chocolate/index.html>).

Once you are satisfied with the look of your recipe book, think about different ways you can sell it to raise money for a local charity. You might also want to write thank you letters to everyone who sent in a recipe and donation and include a recipe book with your note.

STEP 5

Sampling Recipes

SOFTWARE: None

WHAT TO DO: Decide on some recipes you'd like to try. You may want to invite survey respondents for a tasting as a way of saying "thank you."

Divide up the recipe ingredients and ask each student to bring in one or two items. Use the school kitchen to prepare the desserts, but only teachers should operate the stove or oven. Make sure students clean the kitchen before they leave! ■

