

Course: Excel

Overview

Offering the teachers and administrators an opportunity to use Excel, this course will focus on basic skills needed to use the program to create forms, spreadsheets and generate graphs and charts. The compatibility of Microsoft productivity software will be demonstrated copying and pasting Excel elements into a Word document or PowerPoint presentation.

Terms

AutoSum – A feature in Excel that will automatically add a column of numbers

Active Sheet – The spreadsheet that is currently displayed

Cell – The intersection of a row and a column in a spreadsheet. Each row and column in a spreadsheet is unique, so each cell can be uniquely identified—for example, cell B17, at the intersection of column B and row 17. Each cell is displayed as a rectangular space that can hold text, a value, or a formula.

Column – On a display screen in character mode, a column is a vertical line of characters extending from the top to the bottom of the screen.

Formula – a general fact, rule, or principle expressed in usually mathematical symbols; In Excel, all formulas begin with =

Row – On a display screen in character mode, a row is a horizontal line of characters extending from the top to the bottom of the screen.

Sort – To organize data, typically a set of records, in a particular order.

Spreadsheet – An application commonly used for budgets, forecasting, and other finance-related tasks that organizes data values using cells, where the relationships between cells are defined by formulas. A change to one cell produces changes to related cells. Spreadsheet programs usually provide graphing capabilities for output and a variety of formatting options for text, numeric values, and graph features.

Toolbar – In an application in a graphical user interface, a row, column, or block of on-screen buttons or icons. When these buttons or icons are clicked on with the mouse, macros or certain functions of the application are activated. For example, word processors often feature toolbars with buttons for changing text to italic, boldface, and other styles. Toolbars often can be customized by the user and usually can be moved around on the screen according to the user's preference.

Workbook – In a spreadsheet program, a file containing a number of related worksheets. *See also* worksheet.

Worksheet – In a spreadsheet program, a page organized into rows and columns appearing on screen and used for constructing a single table

Zoom – To enlarge a selected portion of a graphical image or document to fill a window or the screen. Zooming is a feature of many programs, including drawing, word processing, and spreadsheet programs, that allow the user to select a small part of the screen, zoom it, and make changes to the enlarged portion at a finer level of detail.

Things to Do:

- Check web site and make sure all links are working
- Place each brand of cookies in a bag labeled A, B, or C.
- Gather materials for the activity
 - Paper saucers – 2 per students
 - Toothpicks

Instructor Materials:

- Cookies (3 different brands)
- Baggies – large
- Toothpicks
- Laminated Cookies for class grouping

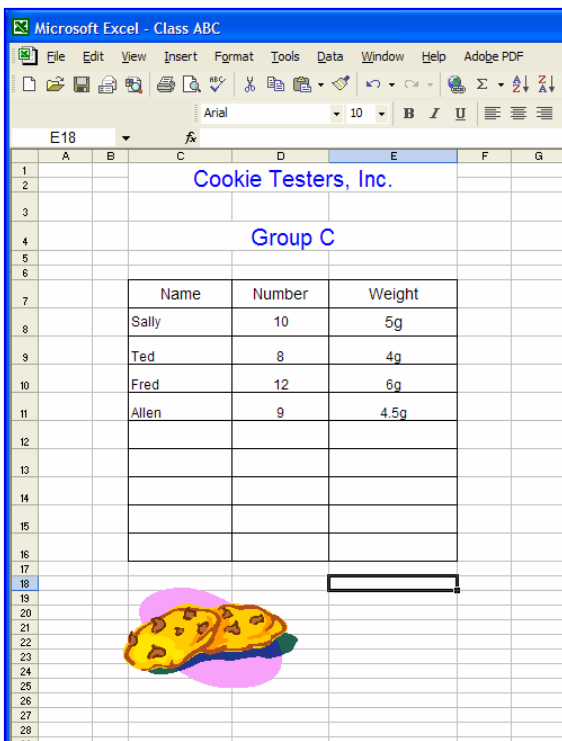
Participant Handouts:

- Vocabulary
- Cookie Testers Inc.
- Same Cookie Comparison
- Different Cookie Comparison
- Cookie Testers Rubric

Lesson Plan Procedures

The instructor will walk the teachers through the creation of the Excel spreadsheet used to record information from the Cookie Testers Inc. handout.

- The following skills will be modeled for the class:
 - Open Excel
 - Save the spreadsheet
- Explain the standard and formatting toolbar items
 - Point out similarities to Word
 - Point out buttons that are unique to Excel
- Look through the menus to familiarize the class with features
- Demonstrate
 - Entering information into a cell
 - Resizing a column and a row
- Use the screen shot to begin creating the spreadsheet. Formatting Notes:
- Merge cells for title



- Change font size and color
- Merge cells for table heads – optional
- Table head font size is 14
- Font size for table is 12
- Row height in the rows in which the students will enter their data is 25.
- Alignment for table heads is Center and Center
- Border on table
- Insert Clip Art cookie – optional
- Rename the worksheets – tabs at the bottom
- Copy and paste the data table on Worksheet 1 (Group A) to Worksheet 2 (Group B)
- Add title and group name to each sheet
- The spreadsheet is saved as Class ABC in the TIP202 folder on pooh
- Also demonstrate Print Preview and inserting rows and columns
- Optional – Format borders and backgrounds

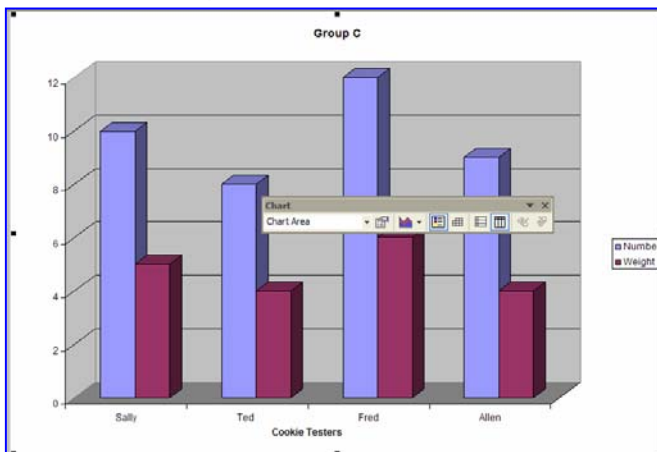
After the tables are completed, follow the lesson plan to

- Group the participants using the laminated cookies
- Distribute the cookies from Bags A, B, and C to participants who have that letter on their laminated cookie

- Direct them to the Cookie Testers, Inc worksheet in order to enter their chocolate chip data
- In the interest of time and mess, have the participants record the number of visible chocolate chips only
- If a balance is available, participants may weigh cookies as time allows

The participants will work together to enter data onto the spreadsheet they have created

- Share data with other participants **that are in the same group** (see the laminated cookies) to enter the data for at least 4 cookies – their own and three others on the correct table
- Point out how this could be done with a single computer or with several computers in a classroom



- Tell them to eat or toss their cookies

Model for the class the creation of a graph using the data they have entered

- Select the table
 - Use the chart wizard
 - Put in a Title for the Chart – Group A or Group B
 - Save the chart as a new sheet
- Get three volunteers – one from each group to print the charts
 - Optional – show the participants how to recolor the chart elements and make changes to the format of the chart area

In the lesson the teacher would pass out copies of the graph to the class for use in answering the questions on the Same Cookie Comparison sheet. If time allows, this can be done.

Regroup the class so that each new group consists of someone with an A laminated cookie, a B laminated cookie, and a C laminated cookie. Using the Cookie Tester, Inc. sheet, have them compare cookies of different brands and answer the questions.

Additional Projects

- Look at TIP Lite web site for additional projects.
- Use Excel for checklist
- Have students track grades with formulas