

I. Introduction

- Introductions
- Housekeeping

II. Class Learning Objectives

By the end of this class, you will be able to:

- Open program and create a new workbook
- Navigate through MS Excel functions
- Enter and format data
- Understand how to save/print workbooks
- Apply simple mathematical formulas to data

Activity: Open Microsoft Excel – select Blank Workbook

III. The Real Estate

It's important to understand the different elements of a spreadsheet. Here are some basic components:

Cells

Big grid
Blocks = "cells"

Sheets – on bottom left (how many?)

starts with 1 sheet (previous versions defaulted to 3)

Can add more sheets – hundreds (depends on available memory)

If you save, you will save data in all sheets with same file name

Uses: sales figures for multiple years, etc

Row / column headings

Rows are #s

1,048,576 rows

Columns are letters

16,384 columns

AA, AB, AC

Ribbon - "Command center"

Tabs and Groups

File, Home, Insert, etc.

File- backstage view (covers document), New, Open, Save/Save As

Help button!



Help is actually helpful!(more later)


Formula bar

Explain later!

Cell name box

Hiding/showing ribbon

Minimize – button on top right  or 

Bring it back – click any tab and then click pin  to lock it in place

Viewing

Zoom slider

Scroll bars (right/bottom)

IV. Entering Data

Moving around the worksheet

Default - Start at cell A1 (show the cell address in the *Name Box*)

Use mouse to click. Click anywhere

(note cell name box changes! Row and column label are highlighted in grey).

Click back to A1

Tab – to right

Enter – down

Arrow Keys

Activity:

1. In cell A1, type your first name
Note cursor is flashing – still working in that cell (note ribbon is grey'd out)
2. Press Enter
Note cursor move down
3. Type your mother's first name in A2
4. Press Enter
5. Type another name in A3
Cursor is still flashing! Hit enter or tab if you are done!
6. Type #s into cells for B1, C1, D1 (just to see how #s look)

Note Alignment:
Text – left
Numbers – right

V. Editing Data

We want to add last names to cells A1, A2, A3
What happens when you click A1 & type “Lindsey”? – replaces what was there

There are three ways to edit data:

1. Double-click the cell that contains the data you want to *edit* to continue typing.
 2. Click the cell that contains the data you want to edit, and click anywhere in the formula bar (at the bottom of the ribbon)
 3. Click the cell one time. Whatever you type will replace what is there.
- To accept your changes, press ENTER or TAB.

Activity:

1. Double-click in cell A1 and add your last name
Don't worry if it overlaps adjacent cells – more on that soon!
2. Add last names to cells A2 and A3

VI. Deleting text

There are two ways to delete the contents of cells:

1. To delete text in a single cell - Click the cell and press delete
2. To delete text in multiple cells: Click and drag mouse to highlight everything you have typed and press delete (Note first cell stays white!)

Activity: Practice deleting data from one cell and again from many cells at once.

VIII. Formatting Data

Topics we will cover as we complete the activity for this section:

- font size, color, and style
- fill
- borders
- align content
- merge cells
- wrap text
- insert row/column
- autofill
- renaming sheet tabs
- Page break preview (View tab)
- Printing via File tab and backstage view (also a preview)

Note that cell formatting remains even if the content of a cell or cells is deleted.

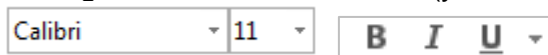
* Take a look at the LAST PAGE in this outline for descriptions of the different mouse cursors used in Excel. These will become apparent as we go through the activities.

Activity: Make a “Winter Sales” table

1. Type in the info in the table (title, names, months, data) starting with cell A1

winter sales			
	Carrie Smith	Joe Barber	Erin Parker
Jan	4	3	2
Feb	8	4	10
Mar	6	4	7

2. Change the font and font size (your choice) using Home Tab -> Font group



3. Add Fill color to title and column/row headings (names, months)





4. Go to View Tab/Print preview and notice borders aren't automatic


- Add borders

5. Insert a column—add your name in between “Carrie Smith” and “Joe Barber” & make up sales figures
 - Several ways to insert column
 - “Cell” group in home tab
 - Right clicking column letter
 - Right click any cell



6. Wrap text  so names are on 2 lines and columns can be narrow. Adjust column widths. 

7. Merge cells for title  and center 

8. Autofill
 - Delete “Feb” & “Mar” cells. Use autofill to complete series. 
 - Note many patterns work with this – days of week, time, etc. Can establish series and then cut/paste into Microsoft Word.

9. Rename sheet tabs – Winter, Spring, Summer, Fall

10. Copy and paste the date onto Spring, Summer, Fall tabs
 - Notice that not all formatting features are copied over

11. Save to your USB flash drive if you have one.

You should finish with a table that looks similar to the following:

	A	B	C	D	E
1	winter sales				
2		Carrie Smith	Your Name	Joe Barber	Erin Parker
3	Jan	4	8	3	2
4	Feb	8	7	4	10
5	Mar	6	5	4	7

IX. Using Math And Formulas

There are several simple ways to apply simple math to your data:

- Manually
- Using AutoSum function
- Using AutoFill feature
- Selecting cell range and applying AutoSum all at once

Activity: Add totals to your “Winter Sales” table

a. Do your own formula manually:

1. Click in cell B6 below the data for Carrie Smith
2. Add her sales data by typing the following formula: **=sum(B3:B5)** and then press ENTER
 - Every formula begins with an EQUALS symbol
 - Add up multiple adjacent cells by using their CELL RANGE as indicated by the first and last cell in the group you want to total. So (B3:B5) adds up cells B3, B4, and B5. Note the parentheses around the cell range.

b. Using the AutoSum function:

1. Click in cell C6
2. Click the AUTOSUM button (Σ) in the Home Tab -> Editing Group and then press ENTER.
 - Note cells C3, C4, and C5 are now selected as indicated by the “marching ants” border around those cells – this CELL RANGE will be totaled automatically when you press ENTER!
 - Click back into cell C6 and note the formula that was applied and visible in the Formula Bar located above your spreadsheet

c. Using the AutoFill feature:

1. Click again in cell C6
2. Hover your mouse on the bottom RIGHT corner of the cell until you get the black plus cursor **+**
3. Press and hold your LEFT mouse button and drag your cursor over to cell E6, then release your mouse button
 - Notice how the AutoSum formula was applied automatically to columns D and E?

d. Using AutoSum for all columns at once:


1. Select cells B6, C6, D6, and E6 and press delete to remove the data there from the previous example.
2. Select cell range B3 through E5
3. Click the AutoSum button in the Home Tab -> Editing group
 - Note that each column is totaled in row 6!

You should now have a spreadsheet that looks similar to this:

	A	B	C	D	E
1	winter sales				
2		Carrie Smith	Your Name	Joe Barber	Erin Parker
3	Jan	4	8	3	2
4	Feb	8	7	4	10
5	Mar	6	5	4	7
6		18	20	11	19

e. Using the AutoSum “Average” function:

There are times when Excel incorrectly guesses which data you want to use in your formula. Try this example:





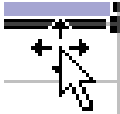
1. Click in cell B7
2. Click the arrow next to the AUTOSUM button (Σ) in the Home Tab -> Editing Group and select AVERAGE.
 - Note cells B3, B4, B5 and B6 are now selected as indicated by the “marching ants” border around those cells –**click and drag/select the correct cells** to average: B3, B4, B5.
 - Use the **Decrease Decimal** to show fewer decimal places 
3. Do the same for cells C7, D7, and E7.

IV. Wrap Up

- Any last minute questions?
- Access additional learning resources at our Technology Education webpage: www.vbgov.com/tech-ed (Also under Adults)
- Lynda.com demonstration
 - Go to VBPL website: www.VBgov.com/libraries -> Find Materials -> Research & Articles -> A to Z Resources
 - Scroll down and click on Lynda.com
 - Enter library card number and pin number into appropriate boxes
 - Explain that students will need to finish account setup with their name and email address
 - Locate Search bar across top of page and enter subject
 - Notice list of suggested courses in middle of page with course descriptions and related courses tab
 - Use filter options on the left side of page to narrow results by skill level and subject
 - Use + button to add courses to your playlist
- **Homework** – if you would like to practice your new skills, play around with one of the templates in the File tab of the ribbon. You could download and work on an inventory list, shopping list, or a to-do list.
- Google search – for text-based or video instructions
 - Go to Google.com
 - Type in the appropriate terms – for example: format cell excel 2013
- Remember to check our online calendar of upcoming classes
- For assistance with specific projects, please consider scheduling a Tech Help session through your local library branch, if available.
- Please take a few moments to complete the evaluation. Your valuable input helps us improve these classes.

Thank you for coming!

YOUR CURSOR

CURSOR	WHAT IT DOES
	To select cells
	To copy cells or to use the autofill function
	To resize an image, table or chart
	To resize columns and rows
	To move the contents of a selected block of cells to another location in the worksheet