Excel (spreadsheets) for Practical Uses

ICL Fall 2024   Class 5

Read Gilgen

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Excel #5

- Questions
- Course website: gilgens.org/icl/excel/

Today's Topics

- Excel Templates
- Formatting Review and More
- Quick Charts
- Import/Export Data
- Mail Merge w/Word
- Functions

Excel Templates

New

Blank workbook	Family tree generator
Basic mileage and expens...	Christmas card list
Address and phone list	

Home inventory

Inventory list

Home construction budget

Simple invoice

Any year custom calendar
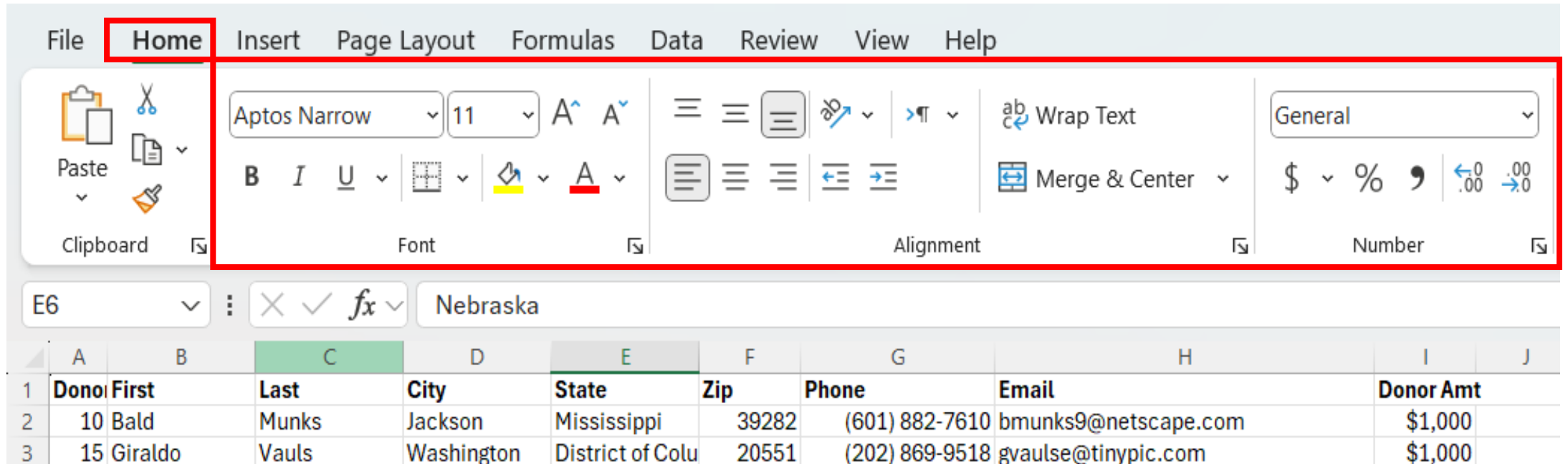
Home

New

Open

Search for online templates 🔍

Suggested searches: Business   Personal   Planners and Trackers   Lists   Budgets   Charts   Calendars

Let's Do This!

- Open **XL5-Format** to practice the following

- Feel free to experiment with various options

More Formatting

- Select Cells/Columns/Rows to be formatted
- Many options are on the "Home" menu

More Formatting

- Right-click/Format Cells for detailed dialog boxes
  - We've already reviewed Number
  - Alignment
  - Protect

More Formatting - Alignment

- Vertical alignment
- Text Orientation
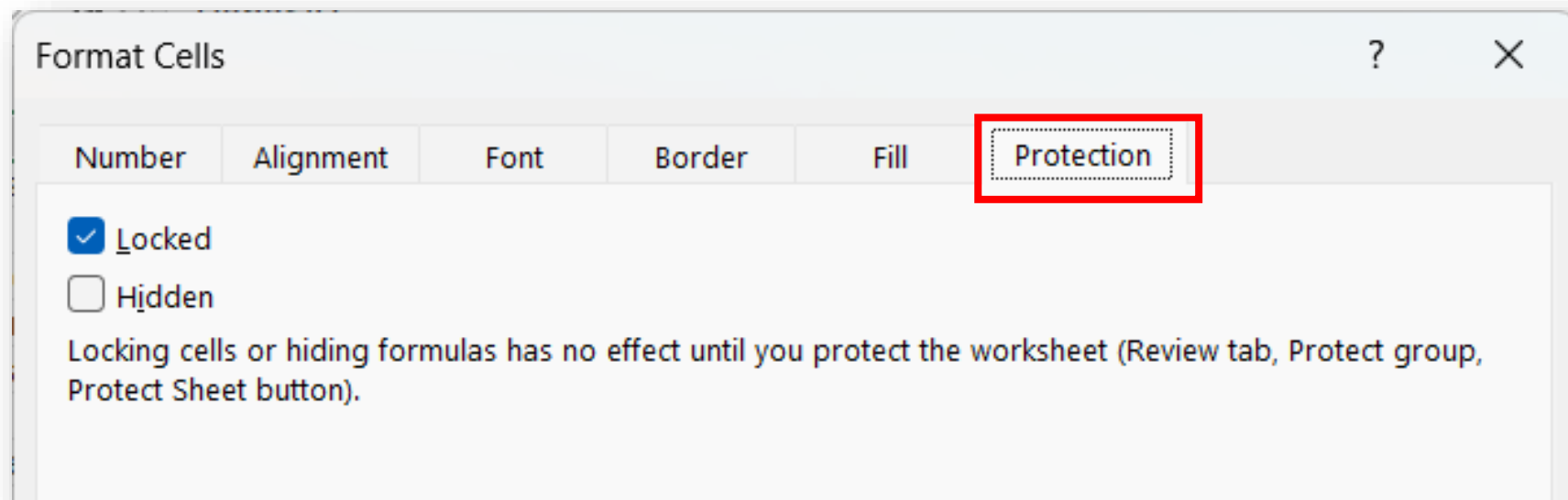- Wrap text
- Merge selected cells
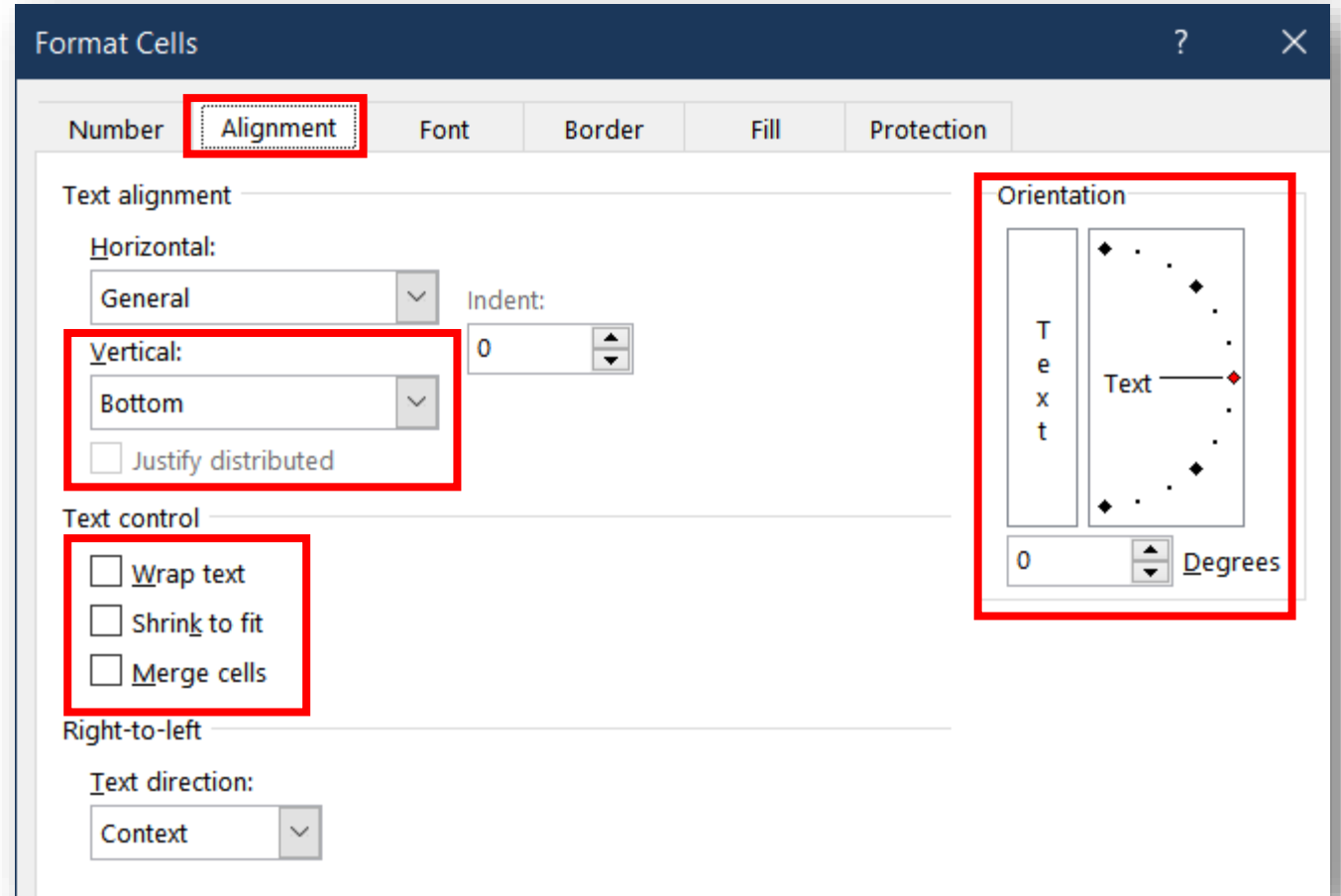
More Formatting - Borders

- Default: no borders

- More borders:
  - Fine tune where they appear
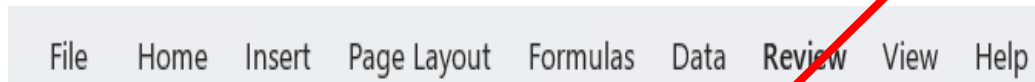 - Find tune what style/color

- Use buttons to preview

Protecting Cells

- Locked
  - Protects against accidental changes to complicated formulas or static values
- Hidden
  - Hides content completely (cell and formula bar)
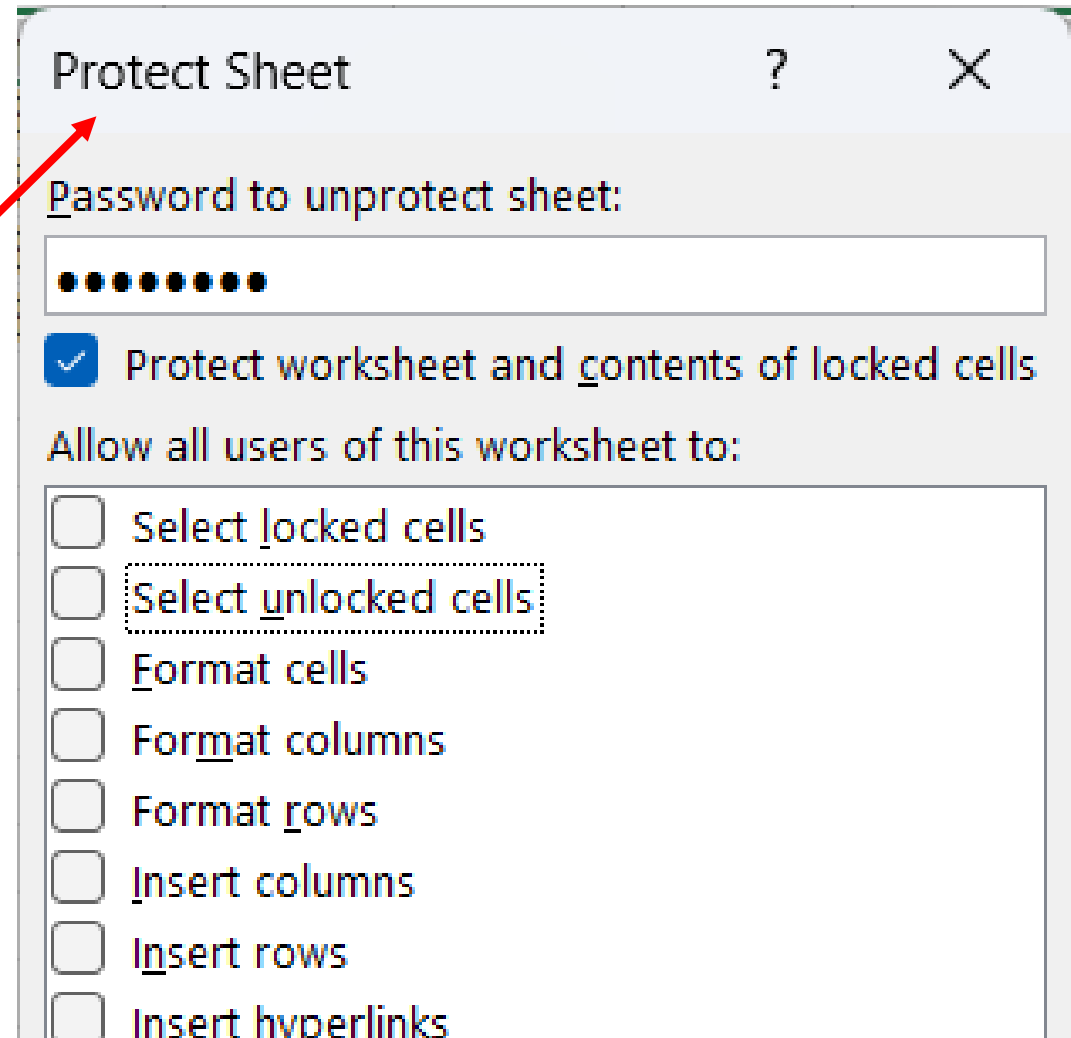
Protecting Worksheet

- Review Menu

File   Home   Insert   Page Layout   Formulas   Data   **Review**   View   Help

- Protect contents of locked or hidden cells

Protect Sheet   Protect Workbook   Allow Edit Ranges

- Password protect entire worksheet

- *Note: if you lock and then want to make changes, you'll have to unlock the sheet first.*

Protect Sheet   ?   ✕

Password to unprotect sheet:

●●●●●●●●

☑ Protect worksheet and contents of locked cells

Allow all users of this worksheet to:

- ☐ Select locked cells
- ☐ Select unlocked cells
- ☐ Format cells
- ☐ Format columns
- ☐ Format rows
- ☐ Insert columns
- ☐ Insert rows
- ☐ Insert hyperlinks

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More Formatting

- Resize multiple columns/rows (easiest to select/drag)

- Equal width/height for all selected columns/rows

Note text orientation

Resize Example

- Formulas to populate dates
- Align top and left

Quick Charts

- Visually show data
- Chart based on/linked to spreadsheet data
- Chart changes as data changes
- Chart can be copied/pasted
  - With links (spreadsheet must be available)
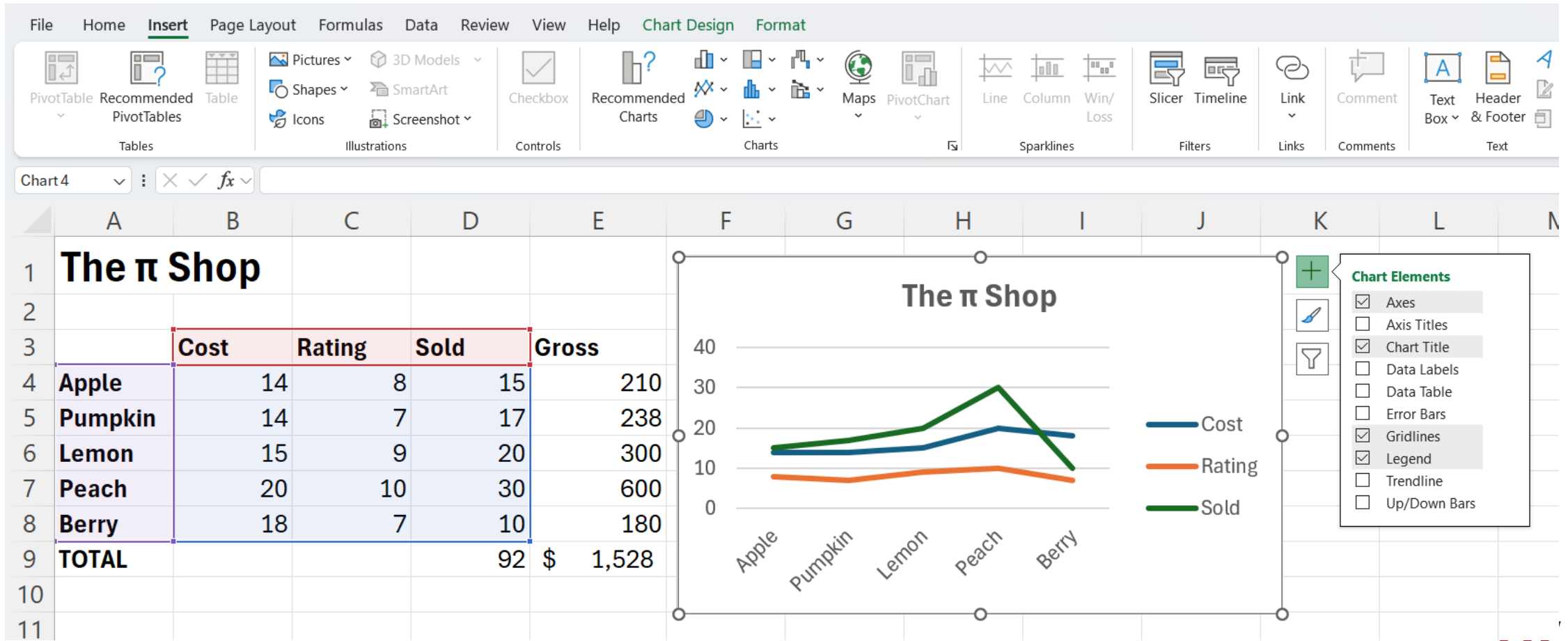 - Without links (as image)
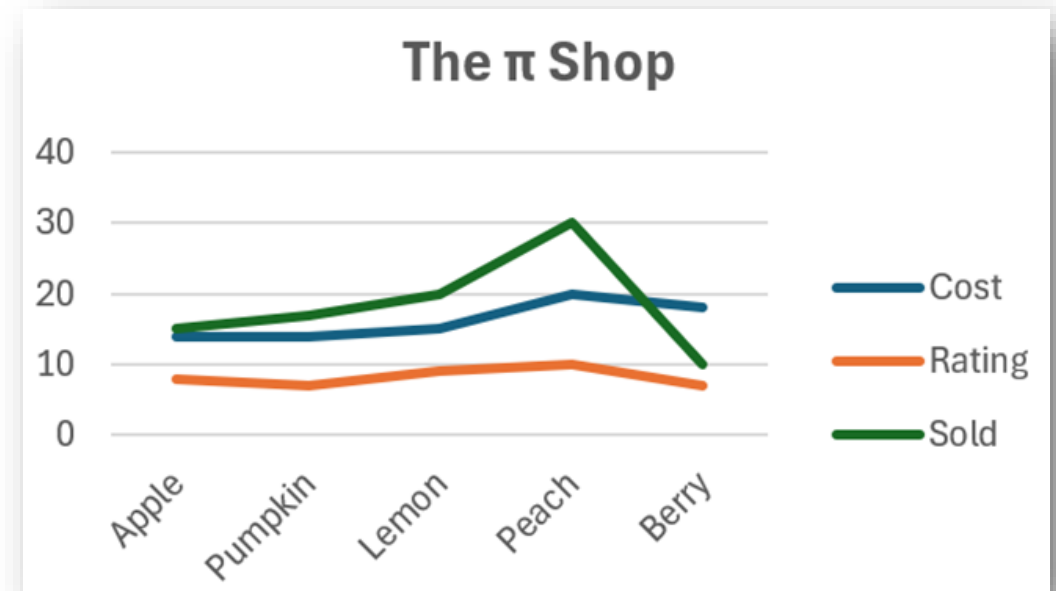
Charts

- Select Data
  - Include data labels

- Select Chart type
  - Insert Menu
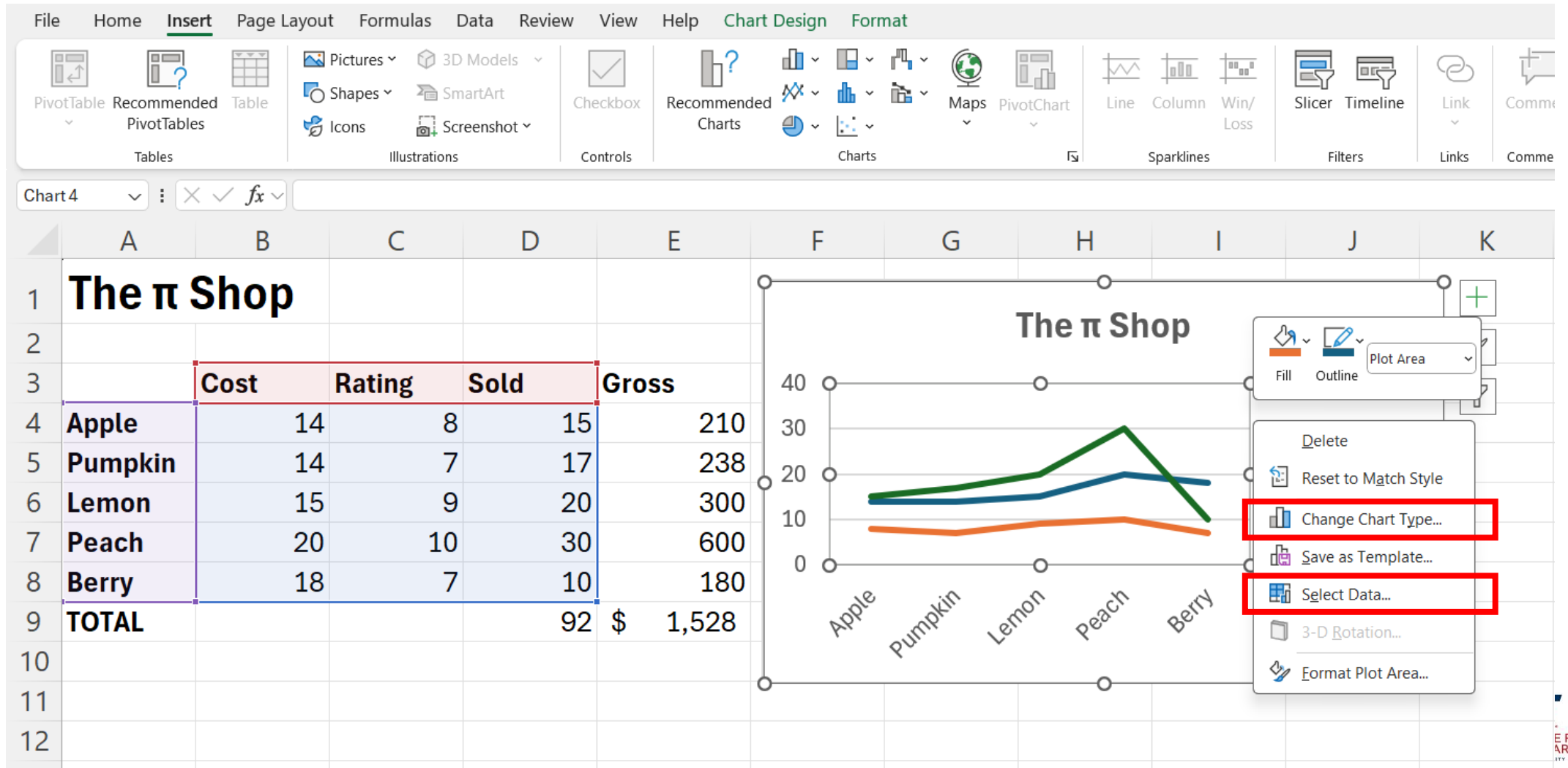 - Choose an appropriate type to illustrate the interpretation of the data

Charts

• Modify Chart Elements

Charts

• Modify Chart Type/Data

Let's Do This!

- Open **XL5-Chart** to practice
- Create a quick chart
  (see completed chart under the "Chart" Sheet Tab)
- Experiment with changing chart options

- Ask questions if you have them
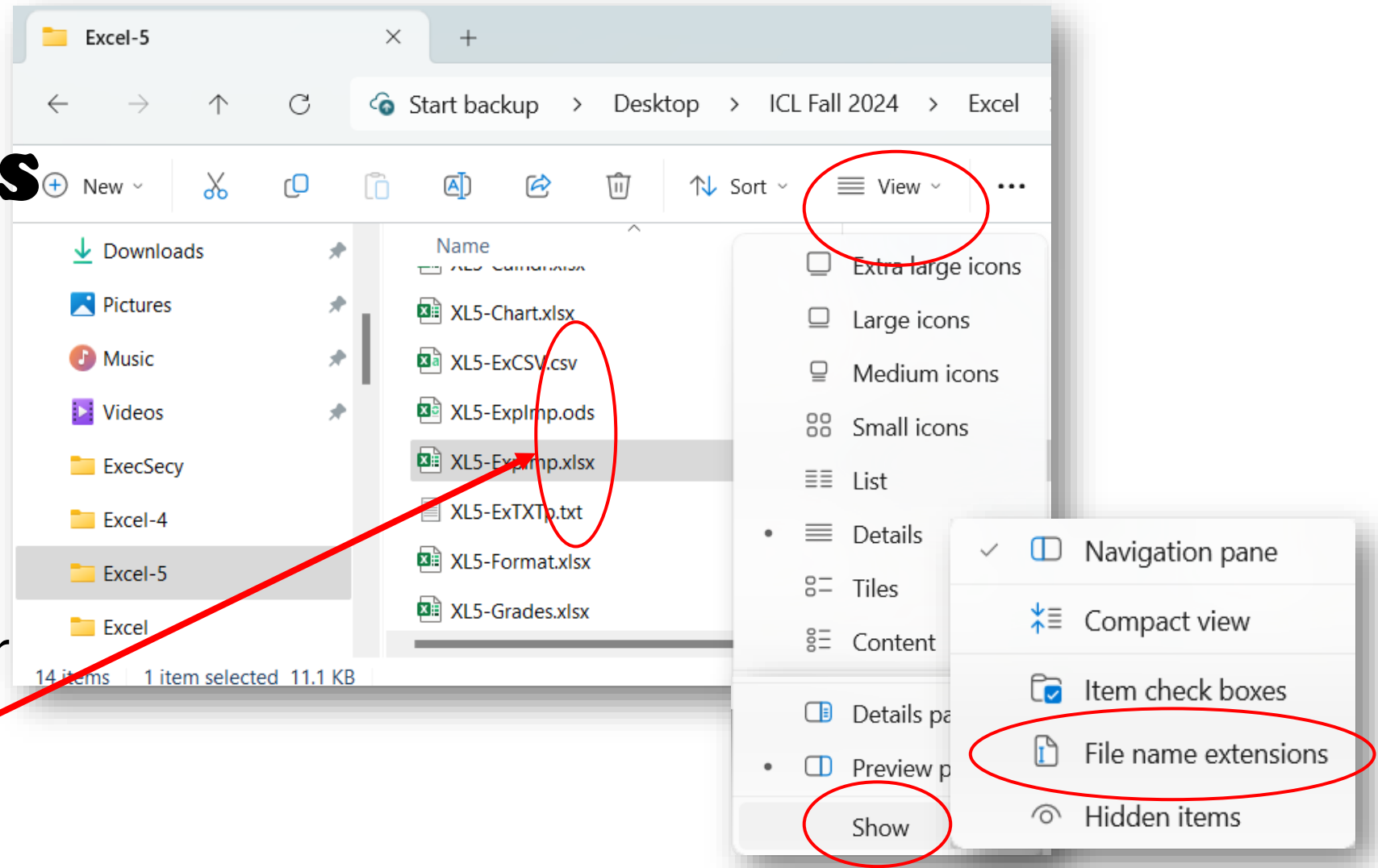
Import/Export Data

- Reuse data from elsewhere without retyping

- Provide data for other users/programs

- Examples:
  - From Word tables
  - From other programs (e.g., Open Office, Google Sheets)
  - To Word tables
  - To Email messages
  - To other programs (e.g., Open Office, Google Sheets)

Import/Export Data Types

- File data formats generally indicated by filename extension
  - .xlsx (Excel)
  - .xls (older, less secure Excel format)
  - .ods (Open Office, Libre Office, etc.)
  - .csv (text, comma separated values)
  - .txt (text, tab delimited values)
  - .prn (text, formatted for printing only, not really usable as a data source)

- Those most useful as files for Excel users: .xlsx, .csv, and .ods

Filename Extensions

- Some versions of Windows don't automatically show filename extensions.

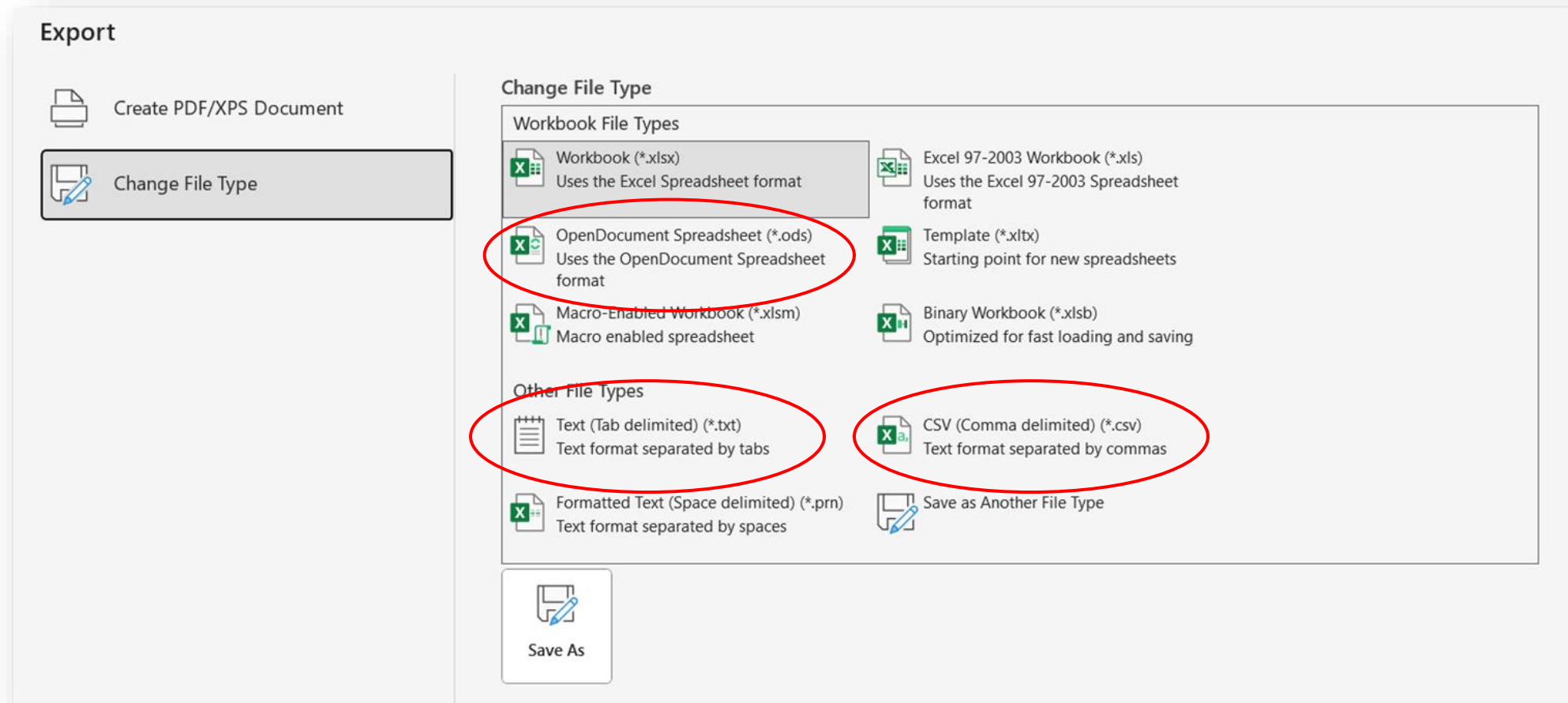- Open File Explorer and enable file name extensions!

Let's Do This!

- Open **XL5-Format** to practice the following

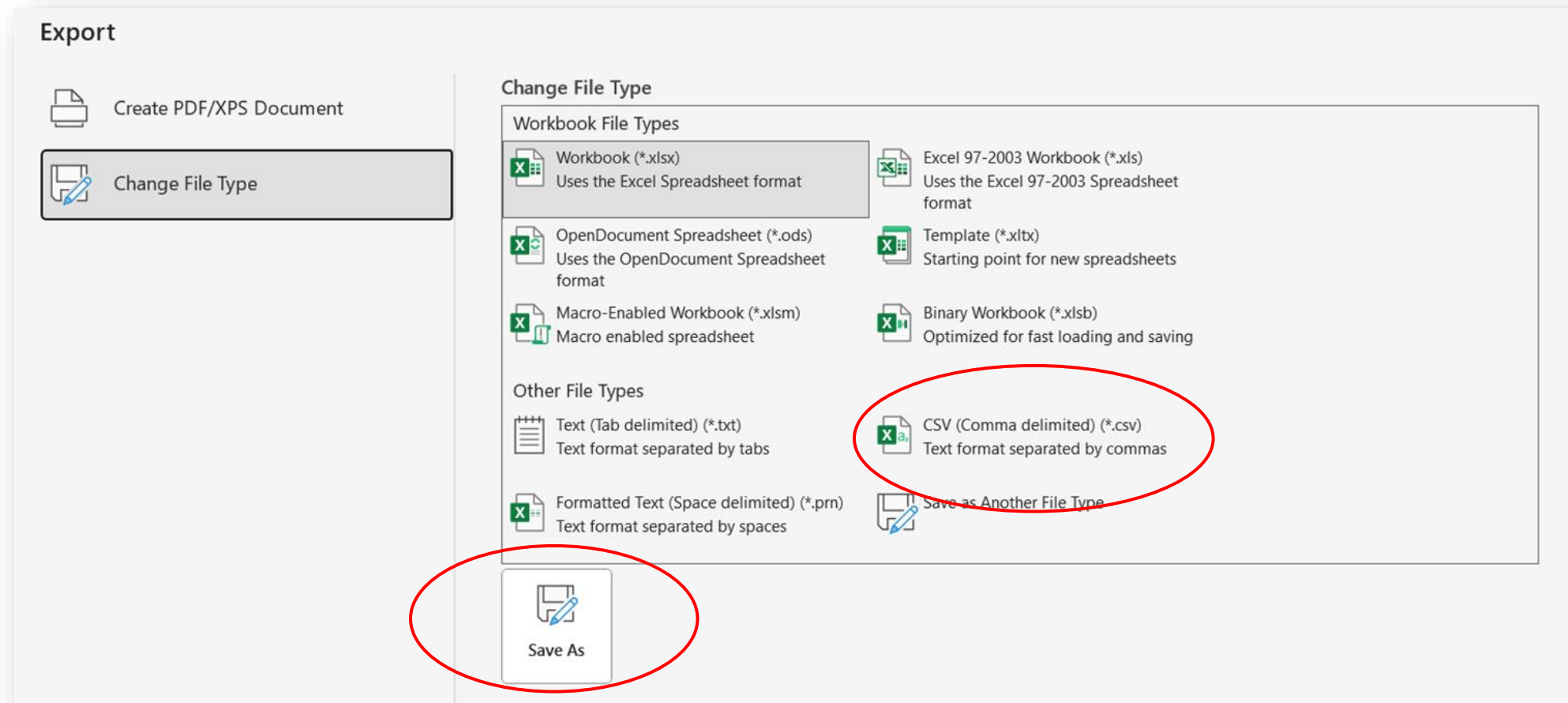- Feel free to experiment with various options
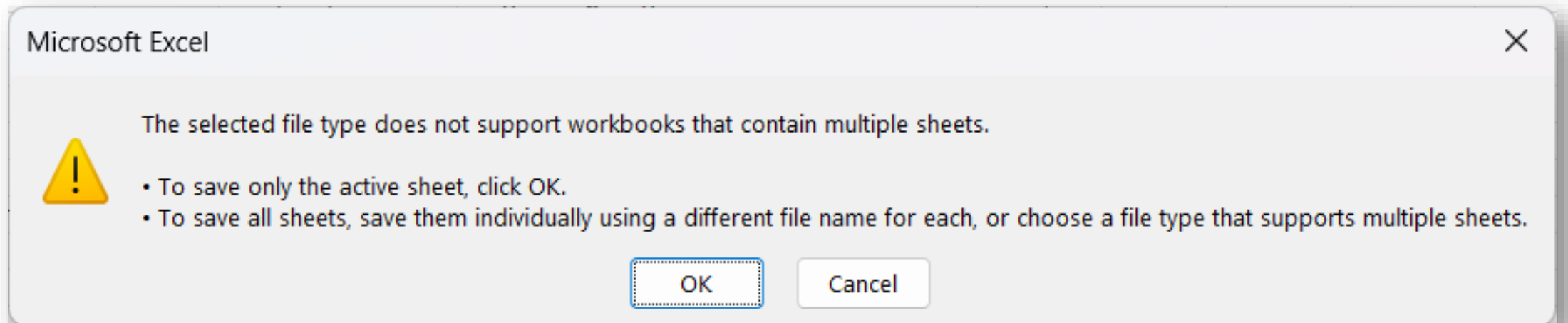
Export Data

- File/Export...
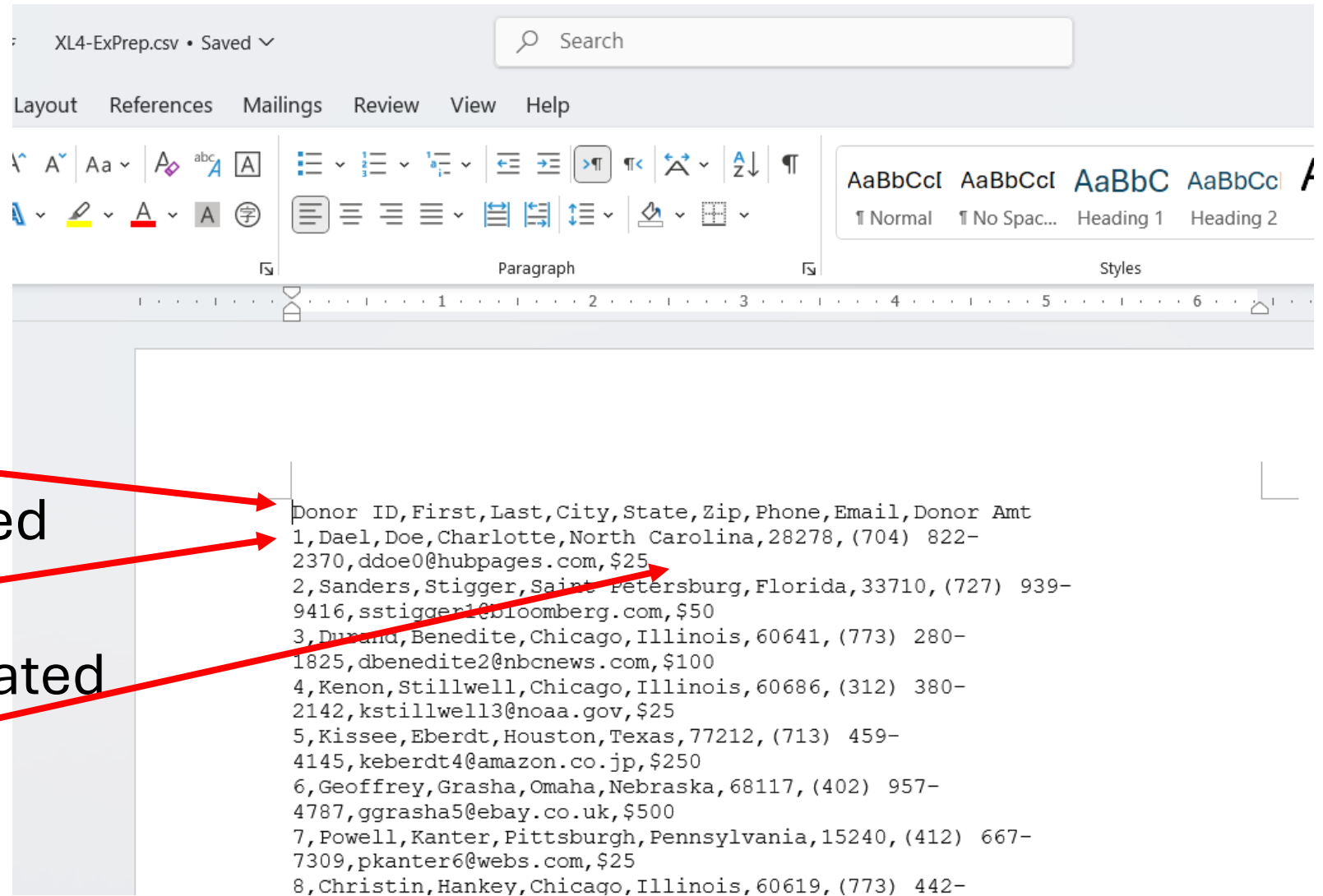
Export Data

- File/Export...

Export Data

- You might get error messages when saving to another file format
- Some Excel features might be lost but proceed anyway
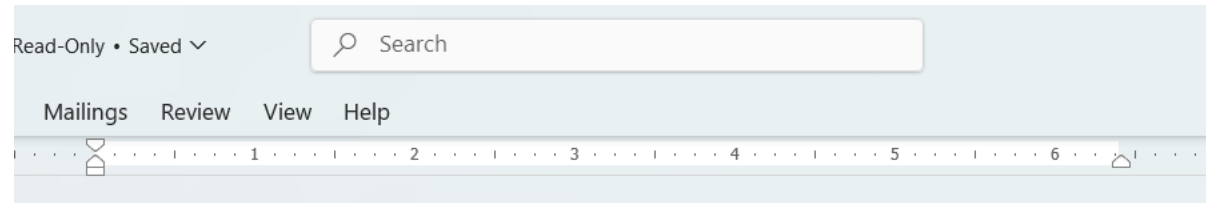- Some formats only allow one sheet at a time

Microsoft Excel   ✕

⚠️ The selected file type does not support workbooks that contain multiple sheets.

- To save only the active sheet, click OK.
- To save all sheets, save them individually using a different file name for each, or choose a file type that supports multiple sheets.

[OK]   [Cancel]

CSV File

- Headers
- Each field separated by a Comma
- Each record separated by a Return

Screenshot of XL4-ExPrep.csv opened in Word showing:

```
Donor ID,First,Last,City,State,Zip,Phone,Email,Donor Amt
1,Dael,Doe,Charlotte,North Carolina,28278,(704) 822-2370,ddoe0@hubpages.com,$25
2,Sanders,Stigger,Saint Petersburg,Florida,33710,(727) 939-9416,sstigger1@bloomberg.com,$50
3,Durand,Benedite,Chicago,Illinois,60641,(773) 280-1825,dbenedite2@nbcnews.com,$100
4,Kenon,Stillwell,Chicago,Illinois,60686,(312) 380-2142,kstillwell3@noaa.gov,$25
5,Kissee,Eberdt,Houston,Texas,77212,(713) 459-4145,keberdt4@amazon.co.jp,$250
6,Geoffrey,Grasha,Omaha,Nebraska,68117,(402) 957-4787,ggrasha5@ebay.co.uk,$500
7,Powell,Kanter,Pittsburgh,Pennsylvania,15240,(412) 667-7309,pkanter6@webs.com,$25
8,Christin,Hankey,Chicago,Illinois,60619,(773) 442-
```

TXT File

- Headers

- Each field separated by a Tab

- Each record separated by a Return

Copy/Paste Export
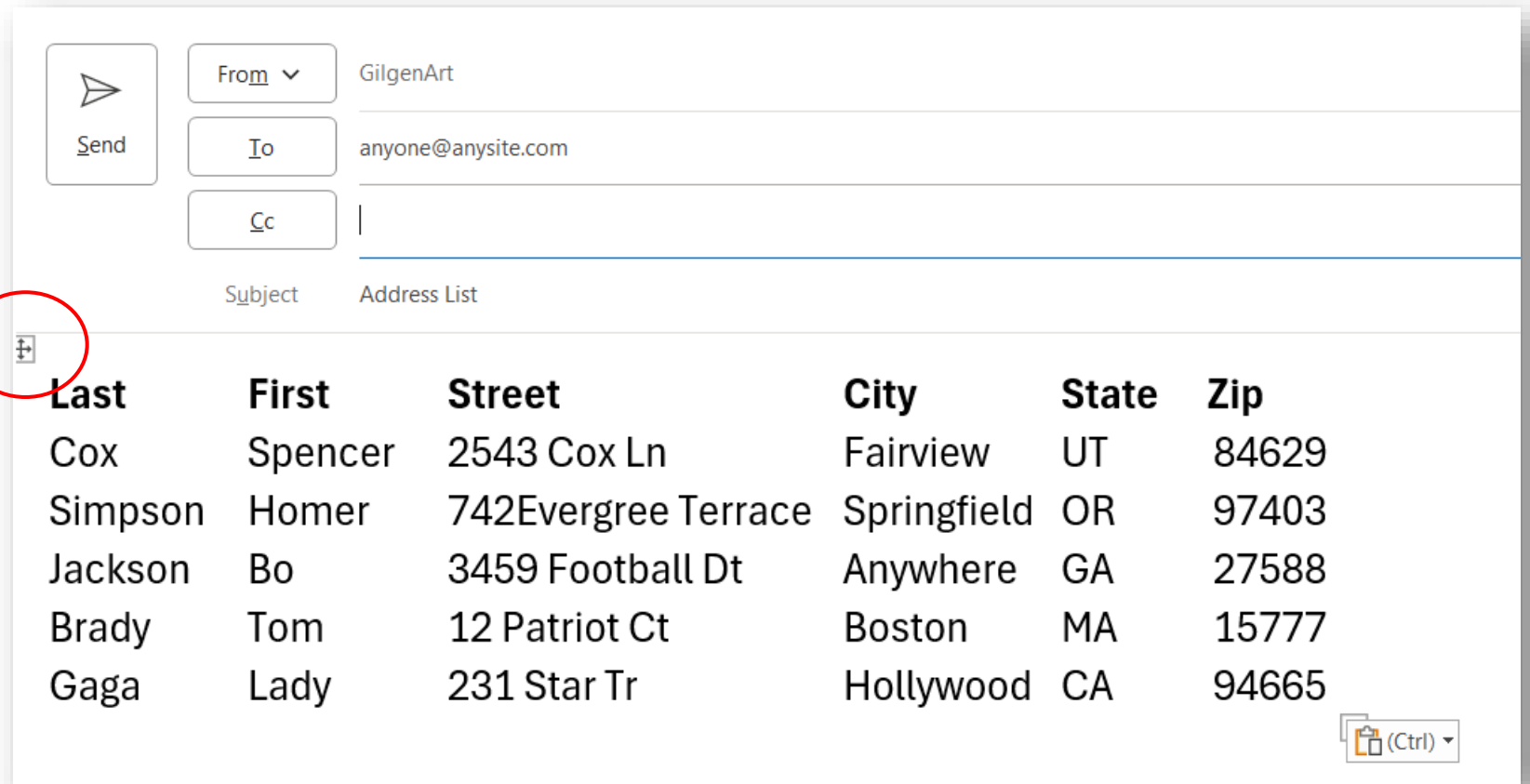
- Copy to Word, **Email**, etc.

- Choose paste format that works best (table or image)

Import Data

- File/Open

- Browse

- Go to folder

- Indicate
  All Files (*.*)

- Choose .csv
  (.ods, .txt file)
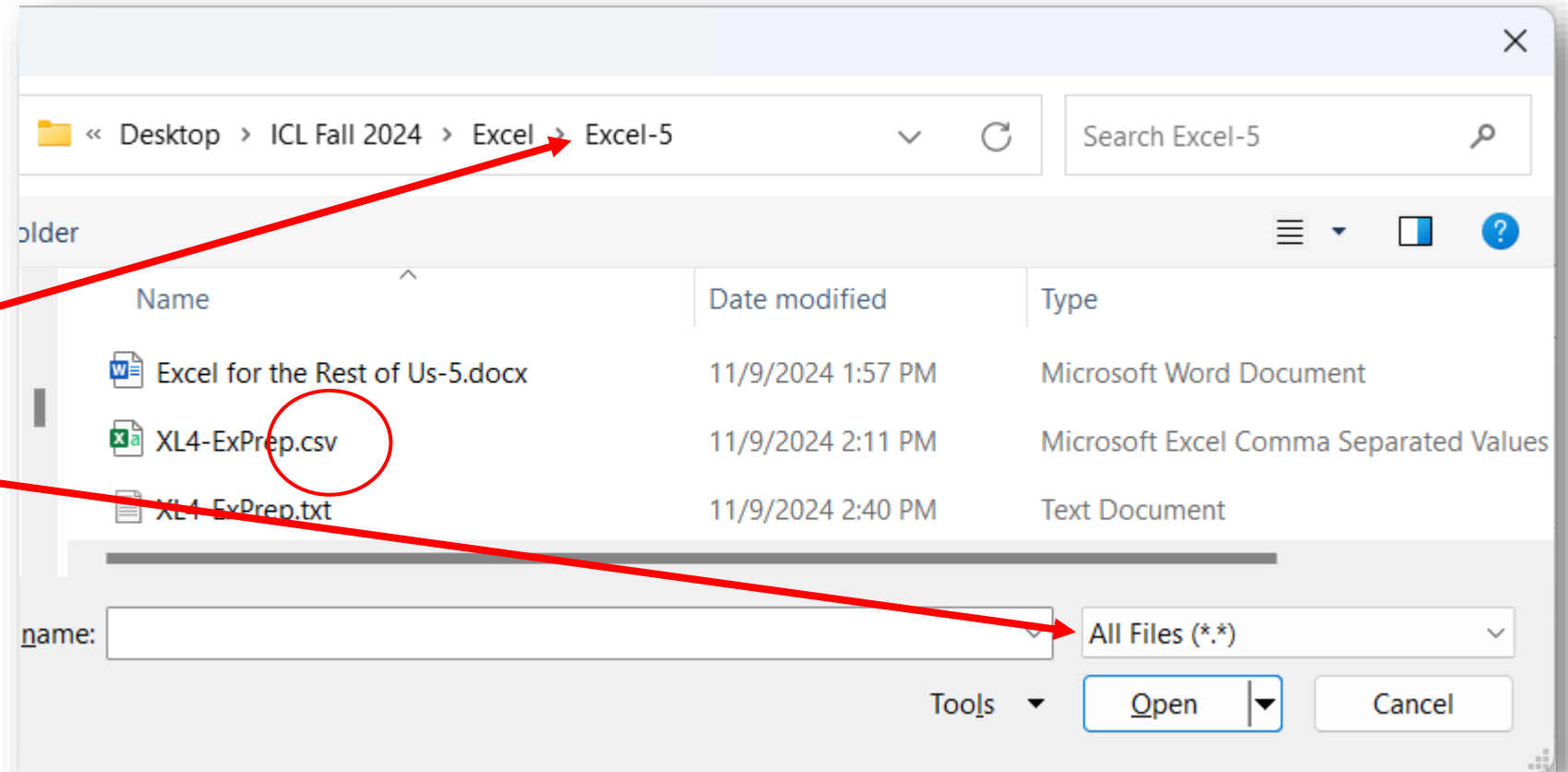
Import Data

- Excel opens most all files automatically

- Have file name extensions enabled in File Explorer!

- You can usually *copy* and *paste* data from other sources directly into Excel, depending on the other source's formats.
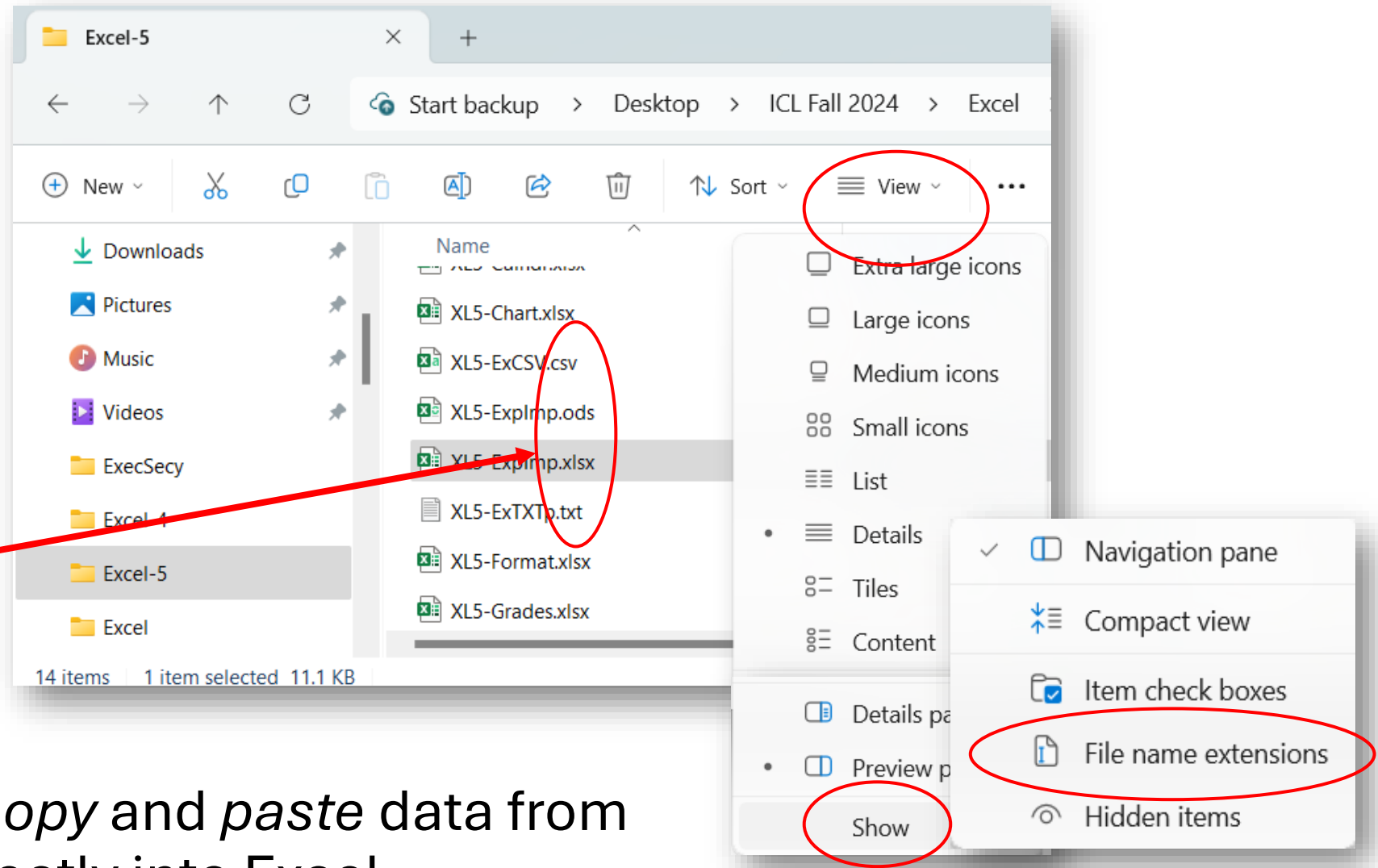
Integrating Data

- Excel can be an external data source to (some) other programs
- Example:
  - Word can use data from Excel spreadsheet
  - Integrates with Mail Merge functions
  - Can generate customized memos & letters
  - Can create mailing lists, directories, name tags

Excel to Word Steps

- Create Excel data in good database format and save file
- Open Word

Excel to Word Steps

- Choose the Mailings menu

- Click Start Mail Merge

- Select the type of merge document you want
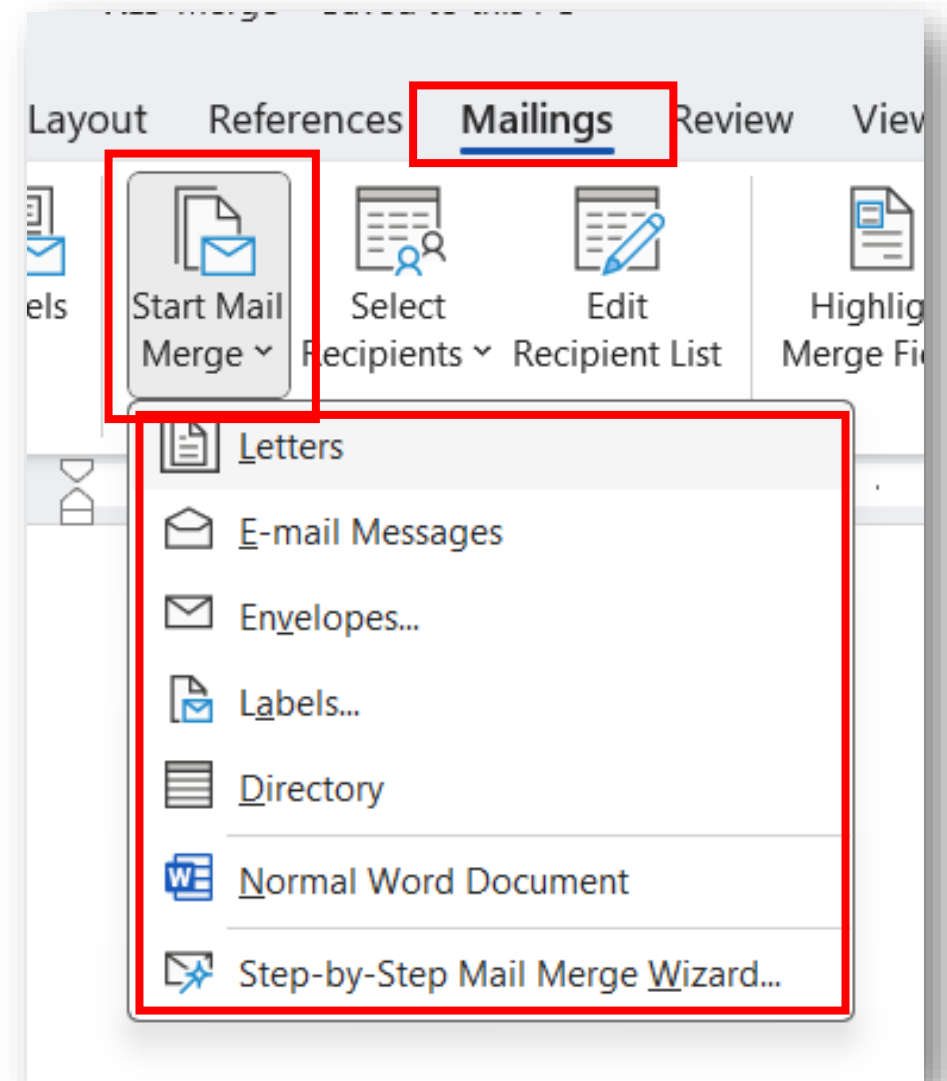
Excel to Word Steps

- Click Select Recipients
- Select Use an Existing List

- On the screen that opens, *ignore* requests for SQL databases.
- *Instead*...
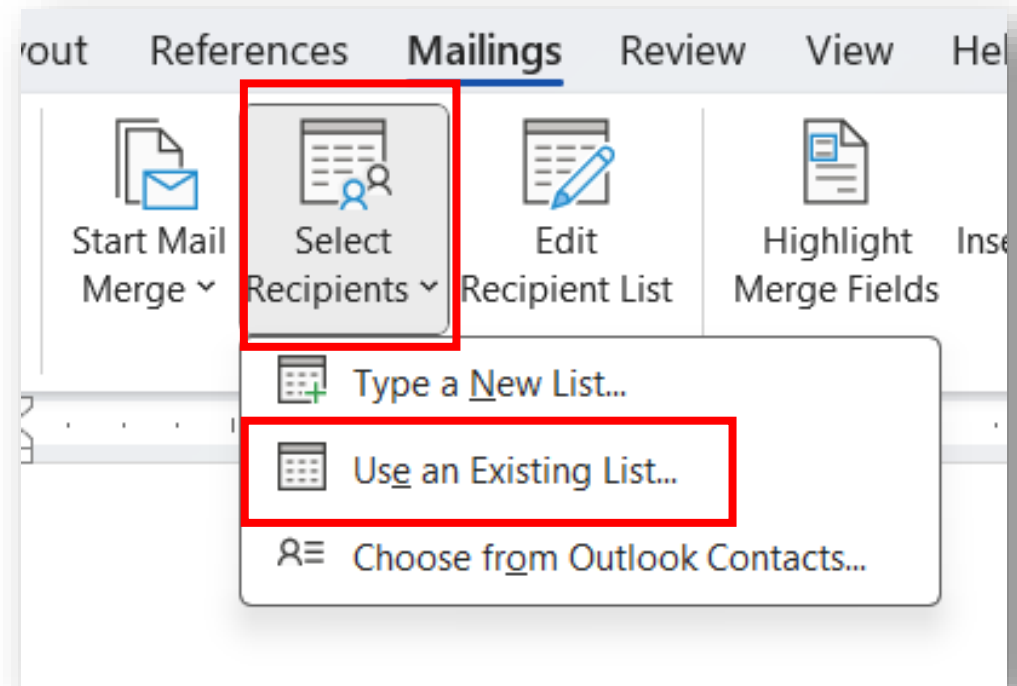
Excel to Word Steps

- Browse to find the Excel spreadsheet that contains your data.

- Click it, then click Open
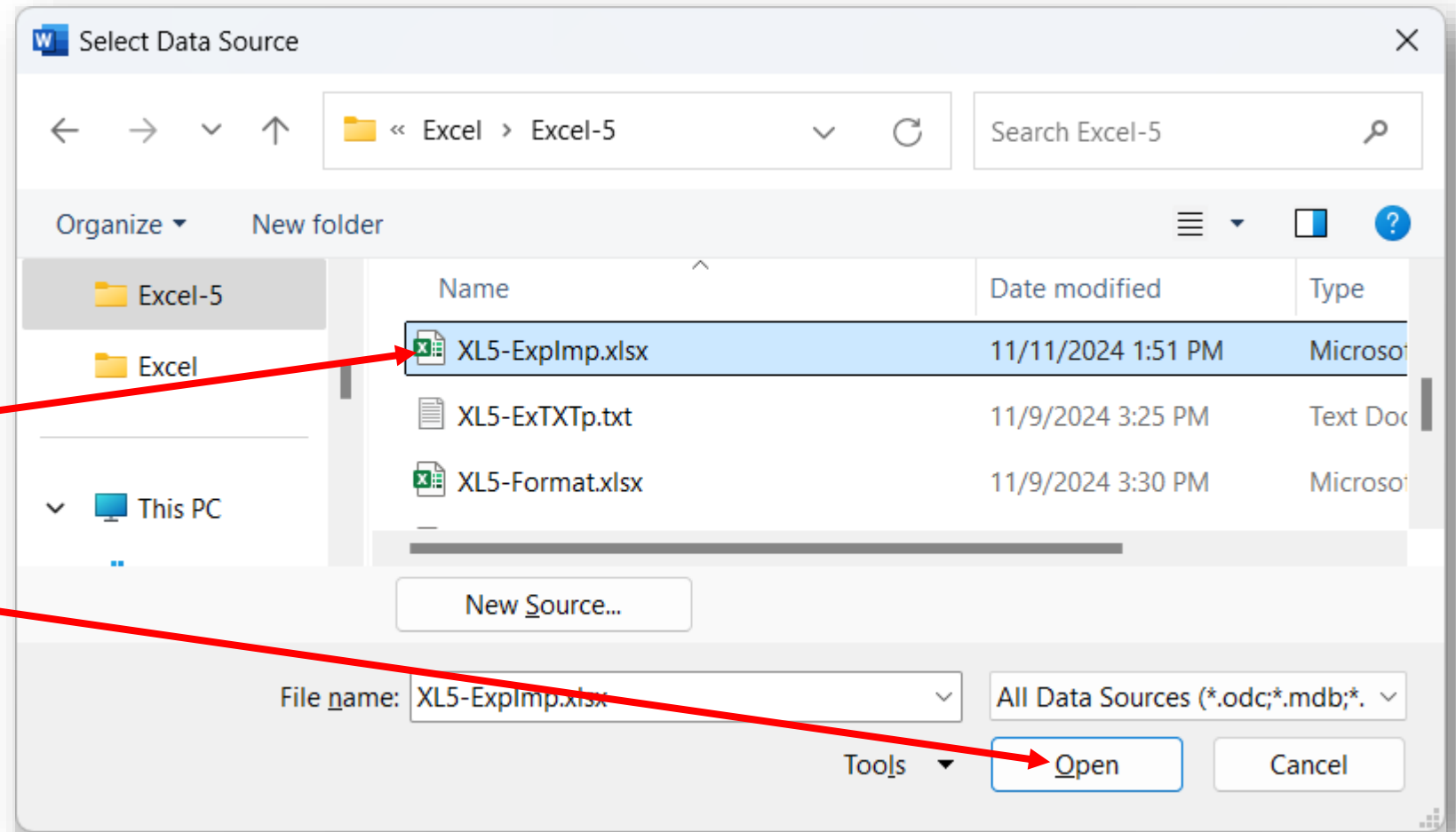
Excel to Word Steps

- Click the table (sheet) that contains your data (e.g., Master$)

- Click OK

Excel to Word Steps

- Click the Edit Recipient List button
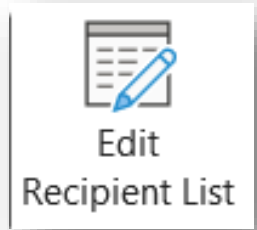
- In this dialog box, you can
  - Select/deselect entries
  - Sort
  - Filter
  - Etc.
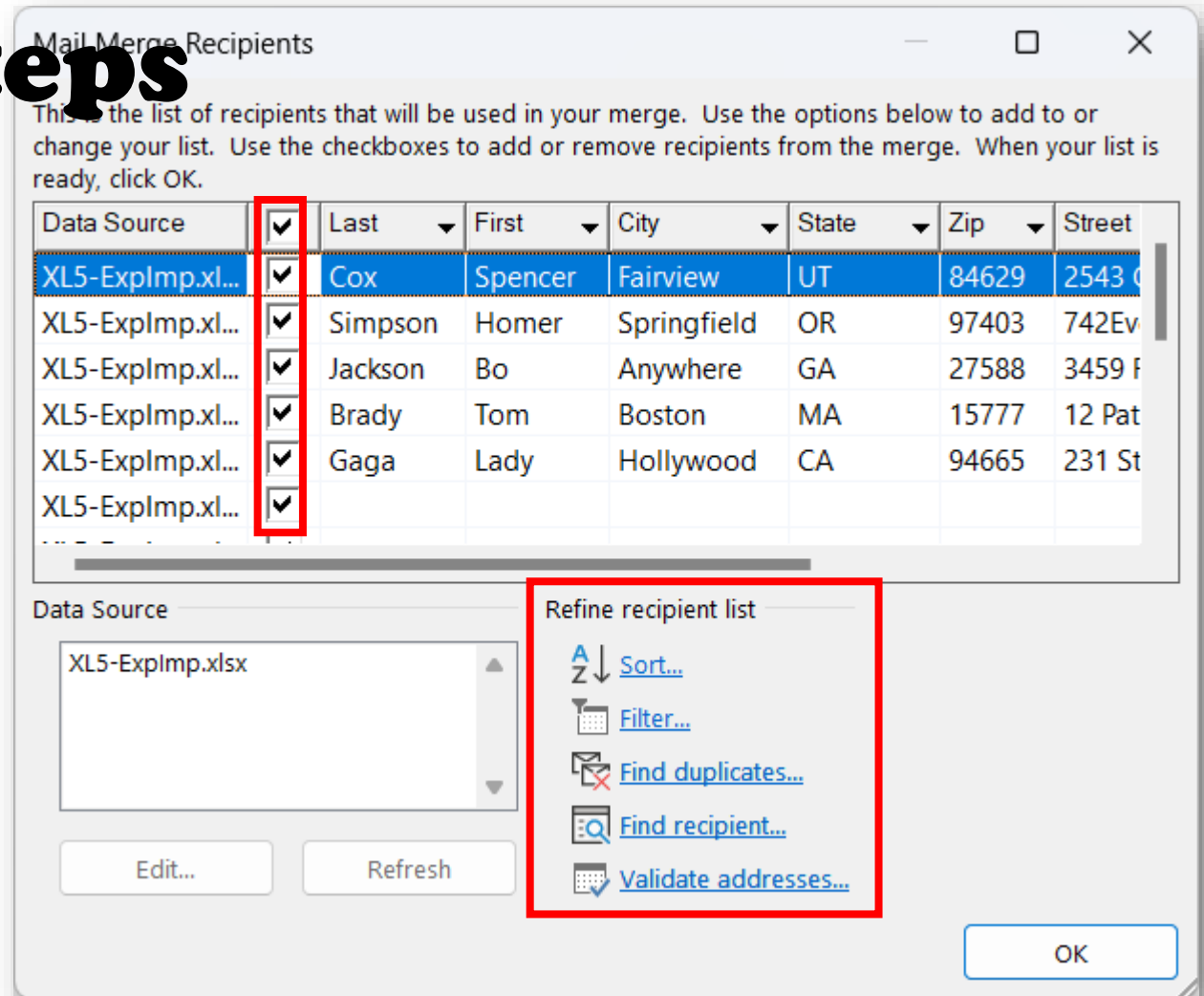
Excel to Word Steps

- Now create the text for your document.
- Insert Merge Fields at appropriate places.

«First» «Last»
«Street»
«City», «State» «Zip»

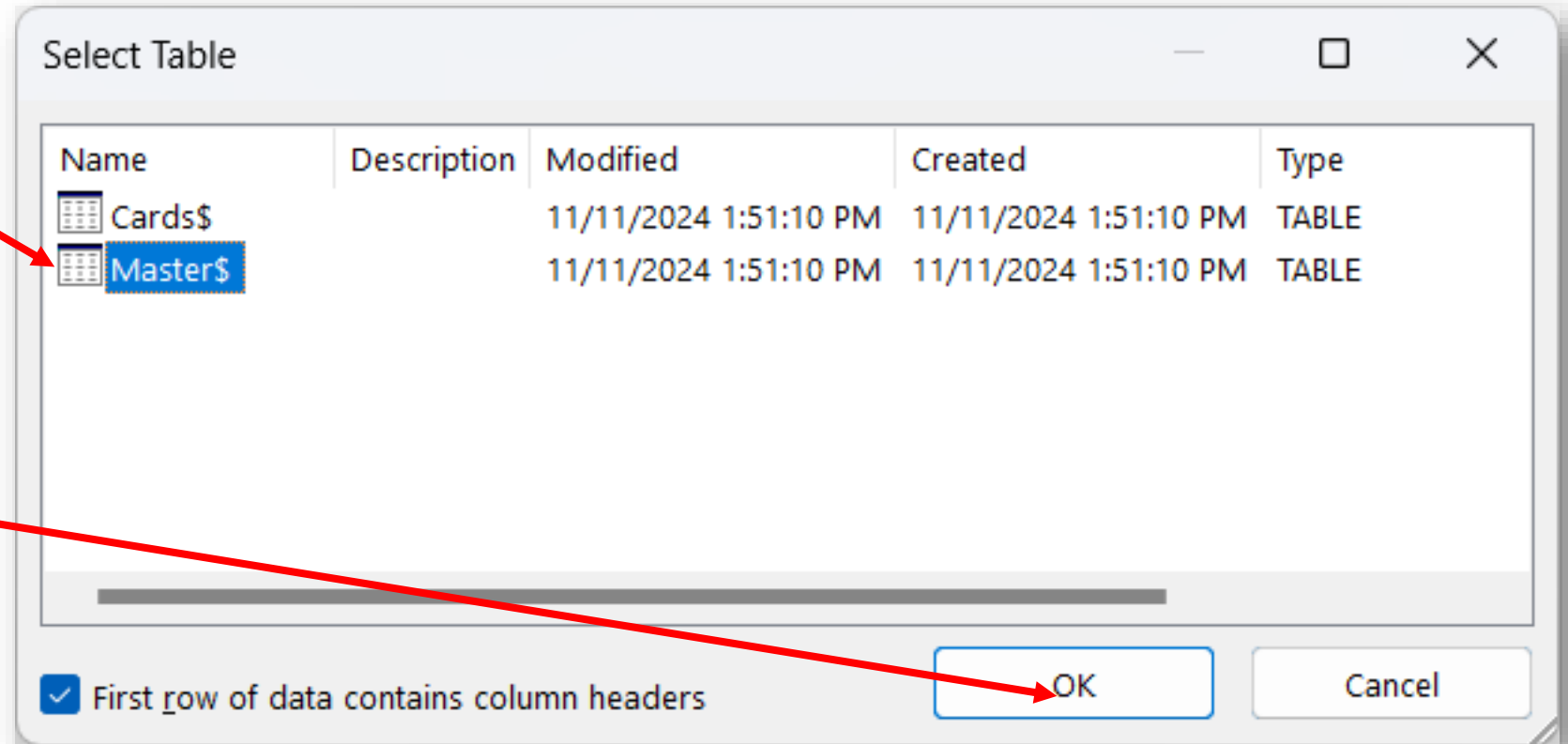You have been selected to receive a new television, based on your Zip code «Zip». If you send us a prepaid gift card for handling fees of $100, we will ship it immediately to your address in «City», «State».

Congratulations. We hope to hear from you soon.

Fake Prize Company
123 Scammer Ave
Anywhere, BogusCountry

Rules ˅
Match Fields
Insert Merge Field ˅
Update Labels

Insert Mail Merge Field

Last
First
Street
City
State
Zip
Card
F8

Excel to Word Steps

- Now create the text for your document.
- Insert Merge Fields at appropriate places.
- Click the Preview Results button to verify the data is being inserted correctly.

ABC
Preview Results

«First» «Last»
«Street»
«City», «State» «Zip»

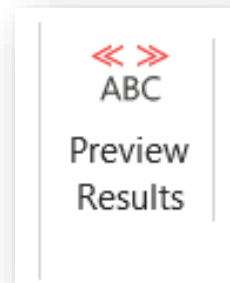You have been selected to receive a new television, based on your Zip code «Zip». If you send us a prepaid gift card for handling fees of $100, we will ship it immediately to your address in «City», «State».

Congratulations. We hope to hear from you soon.

Fake Prize Company
123 Scammer Ave
Anywhere, BogusCountry

Excel to Word Steps

- Now create the text for your document.

- Insert Merge Fields at appropriate places.

- Click the Preview Results button to verify the data is being inserted correctly.

- Make corrections as needed.

« »
ABC
Preview Results

Spencer Cox
2543 Cox Ln
Fairview, UT 84629

You have been selected to receive a new television, based on your Zip code 84629. If you send us a prepaid gift card for handling fees of $100, we will ship it immediately to your address in Fairview, UT.

Congratulations. We hope to hear from you soon.

Fake Prize Company
123 Scammer Ave
Anywhere, BogusCountry

Excel to Word Steps

- Save the merge file
- Click Finish & Merge
- Select Edit Individual Documents
- In the next dialog box, click OK to merge all the records into a new/separate Word document
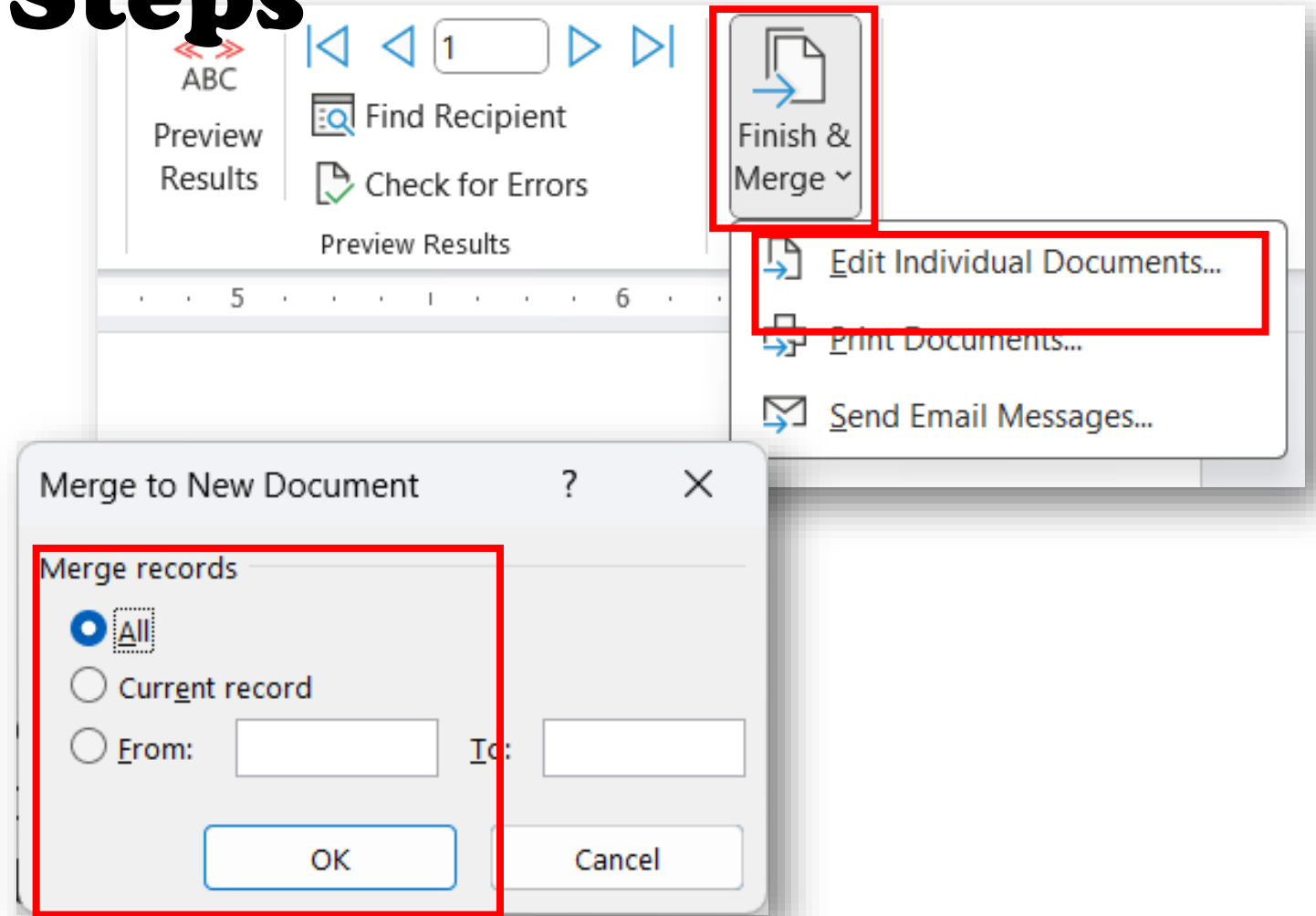
Let's Do This!

- Open **XL5-Merge** (in Word) to practice
  - This is intended to be used with the **XL5-EpxImp** Spreadsheet which provides the data to be merged into the document
  - Both files need to be in the same folder

- Practice the last steps in Word
  - Edit the Recipient List (if desired)
  - Use the merge letter (if desire, add a field or custom text)
  - Finish and Merge All

Functions

- Excel "functions" can do much more than add and subtract

- If you explore a bit, you may find "functions" you can use in your formulas

- Microsoft provides web pages to help with using each function
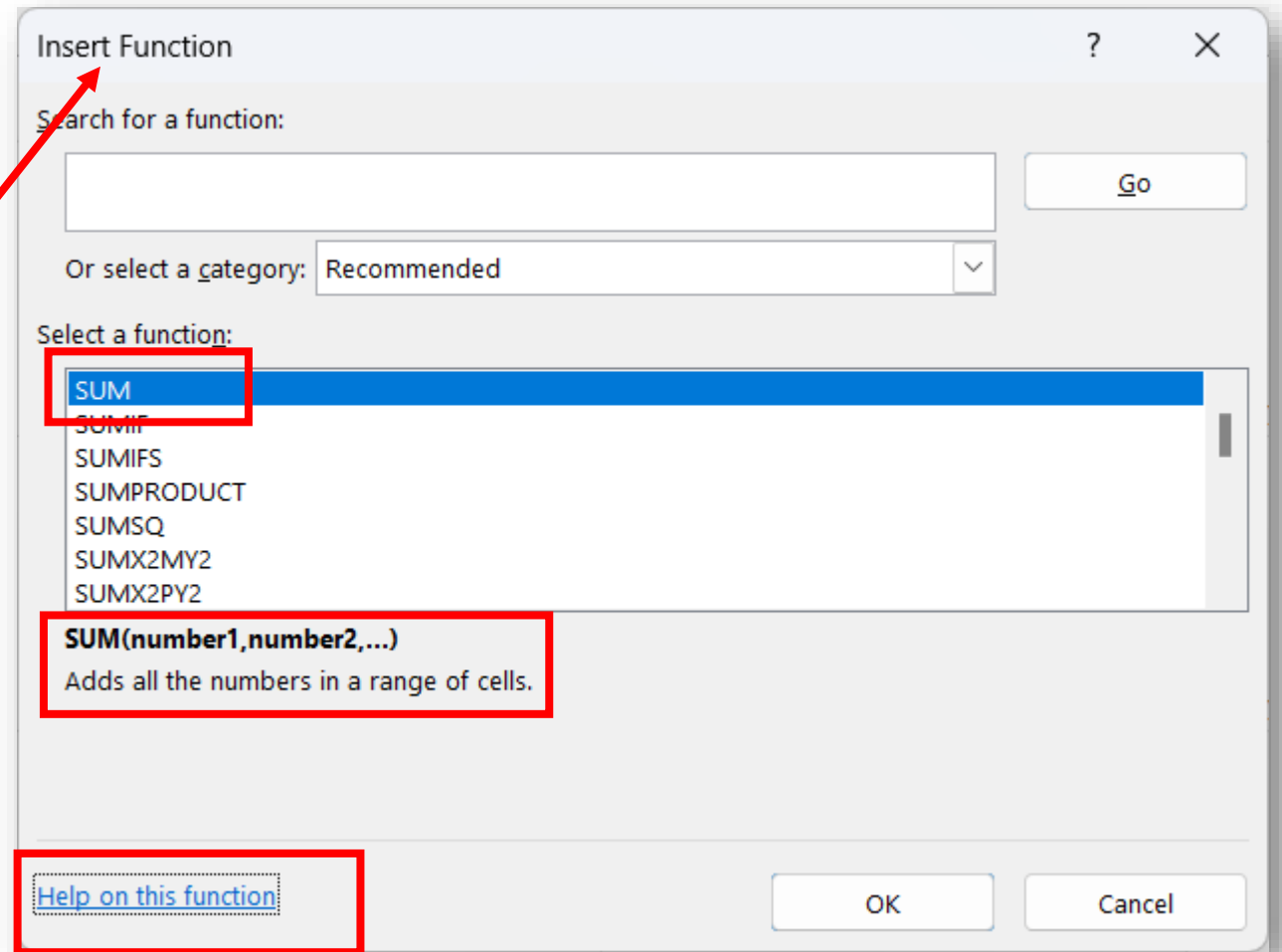
Summary

- What have you learned that will be useful?

- What could we have done without?

- Please send me an email with suggestions/comments about this course:

read@gilgenart.com

HAPPY THANKSGIVING

MERRY CHRISTMAS

Next Time... That's All!