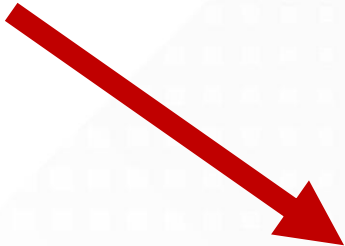


Don't Fear the Spreadsheet!



Welcome!

Download the practice workbook:

<https://tinyurl.com/SSCMockData>



Welcome and Objectives

- Pulse check: Excel comfort level
- Learn practical techniques for checking and cleaning data
- Build simple pivot tables for quick insights
- Use XLOOKUP to find and match information
- Practice with realistic datasets

Download the practice workbook:

<https://tinyurl.com/SSCMockData>



Pulse Check: Excel Experience

On a scale of 1-5, what is your comfort level with Excel?

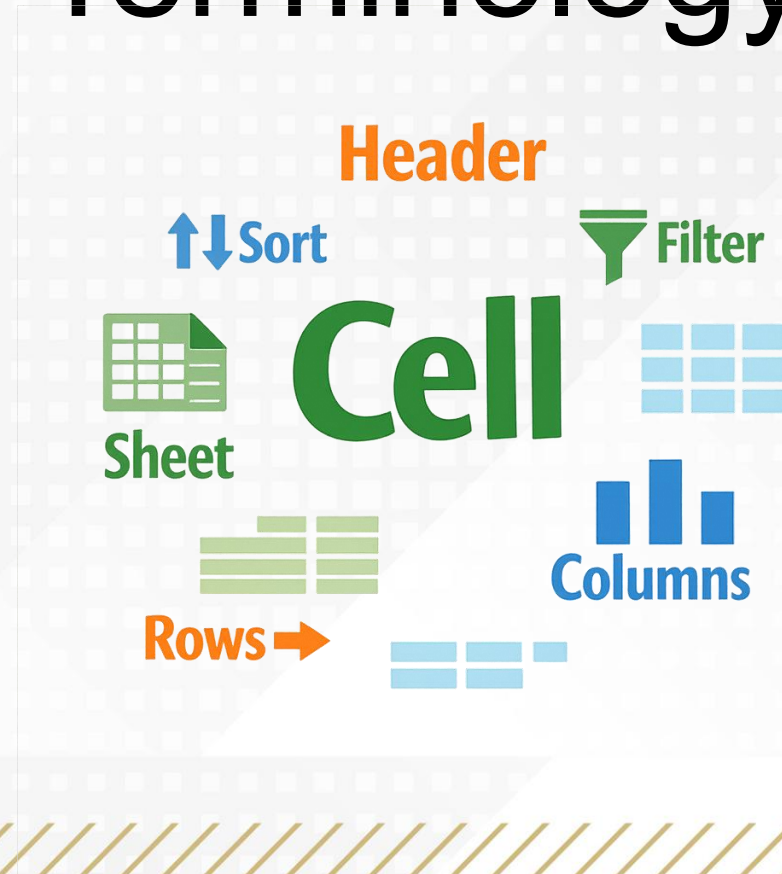
How do you use (or hope to use) Excel in your job?

Download the practice workbook:

<https://tinyurl.com/SSCMockData>



Some Basic Excel Terminology



Data: Garbage in, Garbage Out

- Inconsistent data labels
- Blank rows or columns
- Duplicates
- Mixed type of data in columns
- Merged cells



Practice Reviewing & Cleaning Data



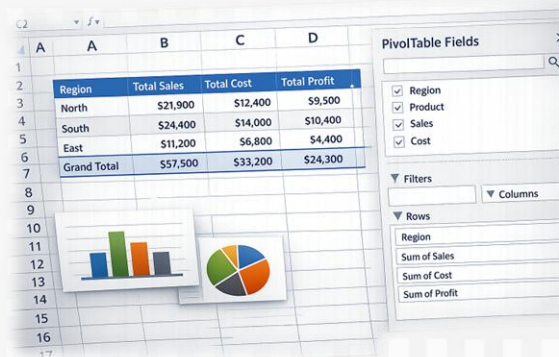
| | A | B | C | D | E |
|---|---|-----------|------------|----------|---------|
| 1 | | Name | Date | Amount | Status |
| 2 | | Jon Smith | 12/32/2021 | \$250.00 | Pending |
| 3 | | E. Davis | 3/1-2023 | \$320.00 | Paid |
| 4 | | M. Lee | 03-10-23 | \$120.00 | Paid |
| 5 | | | | \$150.00 | Late! |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |

On the Student Roster tab:

- Remove any blank rows or columns
- Look for duplicates and remove if applicable
- Look for and fix inconsistent data and/or data labels



Pivot Tables



| Region | Total Sales | Total Cost | Total Profit |
|-------------|-------------|------------|--------------|
| North | \$21,900 | \$12,400 | \$9,500 |
| South | \$24,400 | \$14,000 | \$10,400 |
| East | \$11,200 | \$6,800 | \$4,400 |
| Grand Total | \$57,500 | \$33,200 | \$24,300 |

PivotTable Fields

Region
Product
Sales
Cost

Filters

Columns

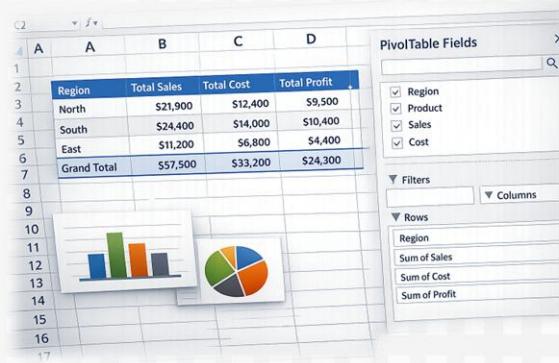
Rows

Region
Sum of Sales
Sum of Cost
Sum of Profit

- Summarize large datasets instantly
- Spot trends and outliers
- Slice and filter data dynamically



Building a Pivot Table



The screenshot shows an Excel spreadsheet with a PivotTable and the PivotTable Fields task pane. The PivotTable summarizes data by Region, with columns for Total Sales, Total Cost, and Total Profit. The task pane shows the source data fields (Region, Product, Sales, Cost) and their placement in the PivotTable layout (Rows, Columns, Values).

| Region | Total Sales | Total Cost | Total Profit |
|-------------|-------------|------------|--------------|
| North | \$21,900 | \$12,400 | \$9,500 |
| South | \$24,400 | \$14,000 | \$10,400 |
| East | \$11,200 | \$6,800 | \$4,400 |
| Grand Total | \$57,500 | \$33,200 | \$24,300 |

PivotTable Fields

Region
 Product
 Sales
 Cost

Filters: [None]
Columns: [None]
Rows: Region
Values: Sum of Sales, Sum of Cost, Sum of Profit

1. Select your data
2. Insert -> PivotTable
3. Drag fields into Rows, Columns, Values, etc.



Pivot Table Practice

Use the Student Roster tab to answer the following:

1. How many Engineering students are Pell Eligible?
2. Which college has the highest number of First-Generation students?
3. What percent of Leeds students are first-generation?
4. Add a slicer for college



What is XLOOKUP?

In a nutshell:

XLOOKUP is an Excel function that helps you find something in a list or table and return related information from the same row.

“Look for this value, and when you find it, bring me the information from over there.”



XLOOKUP Syntax

```
=XLOOKUP(lookup_value, lookup_array, return_array, [if_not_found])
```

1. **Lookup_value:** What do you want it match on in your current spreadsheet?
2. **Lookup_array:** Which column do you want it to match on in the other spreadsheet?
3. **Return_Array:** What value in the other spreadsheet are you trying to bring into your current spreadsheet?
4. **If_not_found (optional):** What message do you want to display if there is no matching value?



XLOOKUP Pitfalls

- Duplicate identifiers with different return values will always pull the first value.
- Mismatched data types will return “N/A” error.
- If pulling from entirely different spreadsheets, data will disappear when the other spreadsheet is closed.



XLOOKUP Practice

1. Use **Student Roster** tab to add the student's college to the **Support Interactions** tab
2. Use the **Student Roster** tab to add the student's GPA to the **Course Enrollments** tab
3. **Bonus:** Building on #2, use the **Course Enrollments** tab to find the average Term GPA by Term and CourseShort



Questions?

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