Excel Training Handout

Goal: Build confidence using modern Excel features — SUMIFS, XLOOKUP, spill functions (UNIQUE/FILTER/SORT), Tables with Slicers, and Shift+Move data.

# Exercises (Student Version)

1. Range vs. Table Formula: Sum(G2:G121) Total sales
   1. Now add a new row at the bottom [Note that Total sales does not update]
2. Convert the SalesData range to a Table (Ctrl+T). Name it tblSales.
3. Sort tblSales by Region then by Total Sales (Largest to Smallest).
4. Use Shift+ctrl Drag to move the Product column to the left of Units (practice Shift+Move).
5. Use Text formulas to create Month and Year
6. Create a SUMIFS formula to calculate Total Sales for North region in January.
7. Create a dynamic list of unique Regions using UNIQUE (spill).
8. Create a dynamic list of unique Salesperson
9. Use FILTER to spill only rows from the East region.
10. Create a summary table: unique Products in one column and a SUMIFS for each (Total Sales for 2025 and February).
11. Insert a Slicer for Region on tblSales

**Lookup Table**

1. Use Unique to Pull Product from tblSales
2. Use Xlookup to Pull Unit Price from tblSales

# Practice Time

1. Create Expense table name tblExpenses
2. Use Text formulas to create Month and Year
3. Create a SUMIFS formula to calculate Total Expenses for HR region in January 2025.
4. Create a dynamic list of unique Regions using UNIQUE (spill).
5. Use FILTER to spill only rows from the East region.
6. Create a summary table: unique Products in one column and a SUMIFS for each (Total Category for 2025 and February).
7. Insert a Slicer for Region on tblExpenses
8. Data Validation

# New Functions

**Text Manipulation Functions**

1. **TEXTBEFORE** – Returns text occurring *before* a specified delimiter.
2. **TEXTAFTER** – Returns text occurring *after* a specified delimiter.
3. **TEXTSPLIT** – Splits a text string into multiple segments (rows or columns) using one or more delimiters.

**Array Manipulation Functions**

**Combining Arrays**  
4. **VSTACK** – Vertically stacks multiple arrays into one.  
5. **HSTACK** – Horizontally stacks multiple arrays into one.

**Reshaping Arrays**  
6. **TOROW** – Converts a multi-cell array into a single row.  
7. **TOCOL** – Converts a multi-cell array into a single column.  
8. **WRAPROWS** – Wraps a single row or array into multiple rows of given width.  
9. **WRAPCOLS** – Wraps a single column or array into multiple columns of given height.

**Resizing / Slicing Arrays**  
10. **TAKE** – Retrieves a specified number of rows or columns from the start or end of an array.  
11. **DROP** – Drops a specified number of rows or columns from the start or end of an array.  
12. **CHOOSEROWS** – Picks rows by index from an array.  
13. **CHOOSECOLS** – Picks columns by index from an array.  
14. **EXPAND** – Expands an array to a new specified dimension, optionally filling with a default value.