2. A starter workbook with practice sheets (Instructions, Data, Tasks, Hints, Answers, Checklist, Lookup).

Which topic do you want to start with?

User:

6

ChatGPT:

Perfect choice! 🞉 We'll dive into Text Functions in Excel. These are super useful for cleaning up messy data, splitting information, or joining words together.

Here's your tutorial plan + starter workbook.



Tutorial: Text Functions in Excel

Objective

Learn how to use Excel text functions LEFT, RIGHT, MID, LEN, CONCAT/TEXTJOIN to extract or join text from cells.

Why It Matters

- Often data comes in combined form (e.g., full names, product codes, phone numbers).
- · Text functions let you split, rearrange, or combine information without retyping.
- · Saves time and reduces mistakes.

Steps & Key Functions

- 1. **LEFT(text, num_chars)** → extracts characters from the left side.
 - o Example: =LEFT("Singapore", 3) → "Sin"
- 2. RIGHT(text, num_chars) → extracts characters from the right side.
 - Example: =RIGHT("Singapore", 4) → "pore"
- 3. MID(text, start_num, num_chars) → extracts characters from the middle.
 - o Example: =MID("Singapore", 4, 3) → "gap"
- LEN(text) → counts number of characters (including spaces).
 - Example: =LEN("Singapore") → 9
- 5. CONCAT(text1, text2, ...) or TEXTJOIN(delimiter, ignore_empty, text1, ...) → joins text together.
 - \circ Example: =CONCAT("Hello ", "World") \rightarrow "Hello World"
 - Example: =TEXTJ0IN(", ", TRUE, "Apple", "Orange", "Banana") → "Apple, Orange, Banana"

Worked Example

Imagine we have student data:

Full Name First Name Last Name Characters Short Code

Lim Wei Ming Lim Ming 12 LIM-MING Tan Siew Ling Tan 13 TAN-LING Ling

Formulas used:

- First Name → =LEFT(A2,3) (if surname is first 3 letters)
- Last Name → =RIGHT(A2,4)
- Characters → =LEN(A2)
- Short Code → =CONCAT(LEFT(A2,3), "-", RIGHT(A2,4))

Try-It Tasks

Starter

- 1. Use LEN to count characters in "Excel Skills".
- 2. Use **LEFT** to extract the first 4 letters of "Singapore".

Cor

- 3. Extract "2025" from "INV2025-AB".
- 4. Join "N Level" and "Excel" with a space using CONCAT.

Stretch

- 5. From "Tan Siew Ling", extract "Siew" using MID.
- 6. Use TEXTJOIN to combine Apple, Mango, Pear with commas.

♣ Common Mistakes

- · Forgetting that spaces count as characters in LEN.
- Mixing up num_chars (e.g., extracting too many or too few).
- Using CONCAT when TEXTJOIN is easier for multiple cells.

Quick Recap

- LEFT / RIGHT / MID → cut text into pieces.
- LEN → counts characters.
- CONCAT / TEXTJOIN → stick text together.
- · Combine them for flexible data cleaning!
- I'll now prepare a starter workbook with:
 - Instructions (how to use functions)
 - Data (sample names, product codes, items)
 - Tasks (Starter → Core → Stretch)
 - Hints (formula structure)
 - · Answers (with formulas filled in)
 - · Checklist (skills covered)
 - Lookup (handy formula reference)

Do you want me to generate the workbook using a **Python script (you run it to get an .xlsx file)**, or should I give you **copy-paste tables** to build directly in Excel?

User:

python

ChatGPT:

Awesome — I'll generate a **Python (openpyxl)** script that builds your Text Functions starter workbook with all the sheets, data, formulas, a small chart, and some data-validation. Copy the whole script into a file and run it locally.

How to run (Windows & Mac)

Windows

- 1. Install Python 3 (if needed): from microsoft store or python.org
- 2. Open Command Prompt.
- 3. Install openpyxl: pip install openpyxl
- 4. Save the script below as make_text_functions_workbook.py.
- 5. Run: python make_text_functions_workbook.py
- 6. Open the created file: Text_Functions_Practice.xlsx.

Mac