

ChatGPT:

Great choice 🎉 — **Dates & Time** is very practical and comes up often in exams and real life. Here's your **tutorial + starter workbook plan** for Topic 8: **Date & Time Functions**.

Tutorial: Date & Time in Excel

Objective

Learn how to:

- Insert today's date/time automatically (TODAY, NOW)
 - Extract parts of a date (DAY, MONTH, YEAR)
 - Format dates clearly (e.g., 21-Sep-2025 vs 21/9/25)
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Why It Matters

- Excel stores dates as numbers (e.g., 21-Sep-2025 = 45192).
 - Functions let you **calculate age, deadlines, or durations**.
 - Useful in attendance, scheduling, or reporting tasks.
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Steps

1. **TODAY()** → gives current date only (no time).
 - Example: =TODAY() → 21-Sep-2025
 2. **NOW()** → gives current date *and* time.
 - Example: =NOW() → 21-Sep-2025 14:32
 3. **DAY()** / **MONTH()** / **YEAR()** → extract parts of a date.
 - Example: =DAY(A2) → returns 21 if A2 = 21-Sep-2025.
 4. **Formatting dates**
 - Right-click cell → Format Cells → Date → choose style (e.g., long or short).
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Worked Example

If cell A2 = 15/02/2024:

- =TODAY() → today's date
 - =NOW() → today's date + time
 - =DAY(A2) → 15
 - =MONTH(A2) → 2
 - =YEAR(A2) → 2024
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Try-it Tasks

Starter:

1. Use =TODAY() in cell B2. What do you see?
2. In C2, type =NOW(). Compare with B2.

Core:

3. Cell A5 has 10/08/2023. Extract:

- Day → in B5
- Month → in C5
- Year → in D5

Stretch:

4. If someone's birthday is 01/01/2000 in A10, write a formula to calculate their age in 2025 (hint: =YEAR(TODAY()) - YEAR(A10)).

⚠ Common Mistakes

- Forgetting brackets () — every function needs them (e.g., TODAY ✗, TODAY() ✓).
- Wrong cell formatting (sometimes Excel shows ##### if the column is too narrow).
- Mixing up system date formats (UK = dd/mm/yyyy, US = mm/dd/yyyy).

🔄 Quick Recap

- TODAY() = current date
- NOW() = current date + time
- DAY(), MONTH(), YEAR() = extract parts of a date
- Format cells to make dates readable

✓ Next step: I can generate a **starter workbook** for practice.

It will have sheets: Instructions, Data, Tasks, Hints, Answers, Checklist, Lookup with preloaded dates and formulas.

Would you like me to **generate the Python script** so you can create the workbook on your computer?

User:

python

ChatGPT:

Awesome — here's a complete **Python (openpyxl)** script that builds your **Dates & Time** starter workbook with all required sheets, sample data, formulas, a dropdown, and a simple chart.

It saves dates_time_practice.xlsx in the same folder you run it from.

```
python
# create_dates_time_workbook.py
# Builds an Excel practice file for N Level: Dates & Time
# Sheets: Instructions, Data, Tasks, Hints, Answers, Checklist, Lookup

from openpyxl import Workbook
from openpyxl.styles import Font, Alignment, PatternFill, Border, Side, NamedStyle
from openpyxl.worksheet.datavalidation import DataValidation
from openpyxl.chart import BarChart, Reference
from openpyxl.utils import get_column_letter
from datetime import datetime

# ----- Helpers -----
thin = Side(style="thin", color="CCCCCC")
border_thin = Border(left=thin, right=thin, top=thin, bottom=thin)

def set_col_width(ws, widths):
    for col, w in widths.items():
        ws.column_dimensions[col].width = w

def style_header(ws, row=1):
    for cell in ws[row]:
        cell.font = Font(bold=True)
        cell.fill = PatternFill("solid", fgColor="F2F2F2")
        cell.border = border_thin
        cell.alignment = Alignment(horizontal="center", vertical="center")

def apply_border(ws, cell_range):
    for row in ws[cell_range]:
        for c in row:
            c.border = border_thin

# ----- Workbook -----
wb = Workbook()

# 1) Instructions
wsI = wb.active
```