

Charts from Data: Going Deeper, With Real Data

60 minutes

ICT Specialism 3: Spreadsheets

Outcome M3.U2.2

WHAT THIS LESSON DOES

Discover how to choose the right chart type for your data and identify when charts might mislead. Create column, line, scatter and combination views from sample data before building one from your own project data.

CURRICULUM OUTCOMES

Outcome	What the specification asks for
M3.U2.2	Generate and interpret charts, graphs and data tables appropriate to the data, to effectively communicate information from a spreadsheet.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Choose column, line, scatter, or combination charts for a given data type
- Judge which chart informs and which misleads for the same dataset
- Create one chart type that is new to you from project or public data

BEFORE THE BELL

- Review the sample weather table; optional pre-filled sm3_chart_types_demo starter in sm3.
- Know Excel for the web has no true Combo chart; plan the side-by-side combination view.
- Pre-check which students already have usable Something Real numbers for independent practice.
- Read through the chart-to-job matching questions in the step-by-step notes so you can put them to the class from memory in the last two minutes.
- Have a way of keeping the stuck-tips table from the step-by-step notes visible on the board while students build scatter and the combination view.
- Load the sample weather table and chart-choice diagram on the classroom screen; optional starter workbook with rows pre-filled in sm3.
- Display sample table; optional chart thumbnails for column/line/scatter/combo
- Confirm spreadsheet logins; optional pre-filled sm3_chart_types_demo; matching worksheet ready; board stuck-tips card; know Excel for the web has no true Combo chart.
- Pre-check who has project numbers; mini-datasets on board or handout; KA checklist ready for end-of-slot gate.
- KA checklist for sm3_advanced_chart spot-check

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HOW THE LESSON RUNS

5 min	introduction	Introduction
6 min	content	Key concepts
20 min	activity	Step-by-step task
15 min	activity	Independent practice
5 min	content	Reflection
9 min	summary	Lesson summary

TEACHING MOVES

- Demonstrate column and line live, then let students drive scatter and combination themselves.
- Circulate constantly during scatter and combination, stopping the class to re-select ranges on screen if several students hit the same wall, and point them at the stuck-tips table on the board as they work rather than saving those fixes for the end.
- Pause once the charts exist for the honesty critique, then spend two minutes on the chart-to-job matching questions.
- Model one project-shaped chart choice aloud before independent practice begins.
- Keep the reflection oral or silent; students should not be typing it into the spreadsheet.

WHAT TO WATCH FOR

- Scatter appears as labels: select only the two numeric columns.
- Students hunt for Combo in Excel for the web: use paired column + line combination view.
- Combo temperature line looks flat in Sheets: enable secondary (right) axis for temp.

DIFFERENTIATION

- Support: pairs during step-by-step; starter file with data pre-filled.
- Support: mini-dataset or teacher-approved weather fallback for independent practice.
- Extension: second chart type plus second decision sentence in sm3_advanced_chart.