

LESSON 6

Seeing the Story: Charts, Filters & IF

60 minutes

Working with Spreadsheets

WHAT THIS LESSON DOES

Learn to sort, filter, and chart your spreadsheet data to uncover patterns and make real decisions. You'll build formulas, highlight important values, and create charts that actually change something about your project.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Sort and filter data to answer specific questions about a dataset
- Create and format column and pie charts with clear titles and labels
- Choose the right chart type to tell the story your data needs to tell
- Apply conditional formatting to highlight values that matter
- Write an IF formula to categorise values automatically

BEFORE THE BELL

- Nothing to print: the bake sale data students type is in the picture in step 3's walkthrough.
- Ensure each student has access to a spreadsheet application and can open their Something Real project file.
- Students need access to a spreadsheet app (Excel Online or Google Sheets) via their school account.
- Students need their 05_numbers_sheet from Digital_Portfolio. If a student's sheet is too thin for a chart, let them expand it briefly before moving on.

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HOW THE LESSON RUNS

5 min	introduction	Introduction
5 min	content	Key Concepts
23 min	activity	Step-by-step Task
3 min	content	Common Issues
14 min	activity	Portfolio Build: Your Decision Chart
5 min	content	Reflection
5 min	summary	Lesson Summary

TEACHING MOVES

- Watch closely when students reach the Name Box (click 21 of the walkthrough): this is the main stall point. Students often click into a cell and type instead of using the Name Box. Model it first on the whole screen.
- Before students start the portfolio build, insist they write down the decision question first ('Which item should I order most of?' or 'Which survey answer came up most?'), then pick the chart shape. Many students pick the shape first and the question second, then their chart confirms bias rather than revealing truth.
- Circulate during the portfolio build. Check early that students have made a copy of their 05_numbers_sheet before editing it. If time is tight, keep the must-master skills (data entry, the revenue and IF formulas, sort, filter, the column chart and the decision sentence) and leave the pie chart and colour rule for home.
- Keep the reflection discussion-only: no typing into cells or documents. Two to three minutes of think-pair-share is enough.

WHAT TO WATCH FOR

- Sort scrambles the rows (item names no longer line up with prices): the student sorted only one column instead of selecting the whole data range first. Press Ctrl+Z to undo and re-select all columns before sorting.
- IF formula returns unexpected text or numbers: check that the formula syntax matches the example exactly, including quotation marks around text values and correct use of commas or semicolons depending on locale.
- Chart keeps its default title: double-click the title and rename it to say what the chart shows, as the walkthrough does. A chart without a clear title tells no story.

DIFFERENTIATION

- Support: The walkthrough in step 3 is the checklist, so have students tick each step as they go. Pair students who finish the step-by-step task early with those still working, focusing the early finisher on checking chart titles and labels rather than moving to the portfolio build.
- Support: If a student struggles with the IF formula, point them at the example in step 2, which has the condition and both outcomes written out; they only need to type it.
- Extension: Ask students who complete the portfolio build early to build a second chart answering a different decision question from their dataset, or to apply conditional formatting to highlight outliers or top performers.