

Sorting and Filtering Data

60 minutes

ICT2: Introduction to other software packages and applications

WHAT THIS LESSON DOES

Learn how to sort and filter data in a spreadsheet to quickly identify the highest costs and view specific categories in your project budget. Practise selecting the full data range to keep formulas intact while creating a useful decision-making view.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Sort ascending or descending by a chosen column using the full row range
- Apply filters to show only matching rows
- Avoid breaking row links and formulas when sorting a formatted sheet
- Sort budget by cost, filter by one category, and screenshot the filtered view as portfolio evidence

BEFORE THE BELL

- Review student portfolios to ensure Category and Cost columns are present in the budget file.
- Have Ciara's five-row starter sample ready to paste for students whose 05_project_budget is missing or incomplete.
- Confirm Project Portfolio (and 05_budget if used) locations on both OneDrive and Google Drive.
- Check cloud access. Have Ciara's five-row Item/Category/Cost sample ready to paste for anyone without a usable 05_project_budget. Confirm students know their Project Portfolio location. Plan 3-4 silent open minutes before any warm-up talk.
- Have Ciara's five-row sample ready on the board or projector for the wrong-sort vs right-sort demo before the table.
- Students need 05_project_budget open in Excel Online or Google Sheets with multiple rows and at least two Category values (use the starter paste if not). Be ready to model Filter on the projector if the sort step runs long.
- Know Undo and clear-filter locations in both apps (Filter toggle in Excel Online; Remove filter in Google Sheets). Be ready to spotlight only the top two issues if time is tight.
- Demo OS screenshot shortcuts once before capture: Win+Shift+S (Windows), Shift+Cmd+4 (Mac), Ctrl+Show windows or Shift+Ctrl+Show windows (Chromebook). Collect or tick 05_filtered_view.png with correct filename for each student before the end of the double period.
- No prep needed unless offering the multi-level stretch demo.

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HOW THE LESSON RUNS

8 min	introduction	Introduction
6 min	content	Key concepts
22 min	activity	Step-by-step task
4 min	content	Common issues
10 min	activity	Portfolio evidence
5 min	content	Reflection
5 min	summary	Lesson summary

TEACHING MOVES

- Protect 3-4 silent open-and-check minutes before any warm-up talk; starter-paste students skip the warm-up question.
- Model wrong-sort vs right-sort on the projector before the key concepts table; say watch the board first, do not sort yet.
- Model full data range selection on a non-sample layout once.
- After verify-sort, if under 6 minutes remain, model Filter on + one Category for the class to mirror.
- Demo screenshot shortcuts and rename to 05_filtered_view.png before students capture.
- Treat Portfolio evidence as teacher-paced verify-screenshot-save, not a second full self-paced task.
- Highlight Undo as the recovery habit when rows misalign; note that Total may hide under a filter without being deleted.

WHAT TO WATCH FOR

- Sorting only one column instead of the full range: Press undo and reselect all columns before sorting again.
- Including the total row in the sort range: Exclude the total row when selecting the data range.
- Rows misaligned after sort while the total still looks fine: Undo immediately and reselect the entire data block including headings.
- Screenshot saved as Screenshot.png: rename to 05_filtered_view.png before banking.

DIFFERENTIATION

- Support: Offer a printed step-by-step checklist for the sorting and filtering process.
- Support: Pair students with a peer for the first sort attempt.
- Extension (teacher-supported): Demo multi-level sort briefly, then invite students to try Category then Cost.