

Standard Functions: SUM, AVERAGE, MIN, MAX, COUNT, ROUND

60 minutes

ICT Specialism 3: Spreadsheets

Outcome M3.U3.2

WHAT THIS LESSON DOES

Learn how to apply standard spreadsheet functions like SUM, AVERAGE, MIN, MAX, COUNT and ROUND. Discover how to nest functions and choose the correct COUNT variant before creating a summary statistics block with at least six formulas for your project.

CURRICULUM OUTCOMES

Outcome	What the specification asks for
M3.U3.2	Create and apply formulas using standard spreadsheet functions such as sum, average, minimum, maximum, count and round functions.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Use standard functions and nested forms such as ROUND(AVERAGE(...), 2)
- Choose COUNT, COUNTA, or COUNTIF appropriately
- Add a summary statistics block with at least six formulas

BEFORE THE BELL

- Prepare the COUNT vs COUNTA board demo (five text labels).
- Optional but recommended: starter market-stall sheet with headings and six product rows (Revenue empty) for students to copy as sm3_functions_practice.
- Have one blank spreadsheet ready on the classroom screen for the COUNT vs COUNTA demo. Optional: prepare a starter market-stall sheet (headings + six product rows, Revenue empty) to share before step 3.
- No prep needed beyond the board demo spreadsheet from step 1.
- Confirm student spreadsheet logins. Optional but strongly recommended: share a starter workbook with headings and six product rows (Revenue empty) named for copy-as sm3_functions_practice.
- Have one realistic sample sheet ready for the 2-minute range-choice board model. Know which students need the fallback path.

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HOW THE LESSON RUNS

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

TEACHING MOVES

- Lead with the live COUNT vs COUNTA contrast, because the 0 on a column of names is the surprise that makes the rest of the lesson make sense.
- Model nested ROUND and COUNTIF quotes on the board before those cells.
- Point students at Common issues while you circulate, so fixes happen at the moment the error appears rather than in one block afterwards.
- Before independent practice, spend two minutes choosing label and numeric columns on a real-style sheet, using a student's own sheet if one is open or a realistic sample of your own.

WHAT TO WATCH FOR

- COUNT on text columns returns 0: switch to COUNTA.
- #NAME?: check spelling and syntax.
- COUNTIF without quotes on the condition, or pointed at the wrong column.
- Leaving practice market-stall numbers unchanged as "project" data.

DIFFERENTIATION

- Support: starter file; template summary labels; pair on nesting.
- Fallback: duplicate practice, relabel six to eight realistic rows, save as sm3_summary_block.
- Extension: second COUNTIF and average revenue per product nested form in the lesson summary.