

Logical Formulas with Standard Functions: Recap and Extend

60 minutes

ICT Specialism 3: Spreadsheets

Outcome M3.U1.4

WHAT THIS LESSON DOES

This lesson recaps the IF function and shows how to use it alongside SUMIF and COUNTIF on the same sheet. You will create labelled formulas that answer questions about your project data using decision-making logic.

CURRICULUM OUTCOMES

Outcome	What the specification asks for
M3.U1.4	Enter and manipulate data in worksheets and create logical formulas using standard functions.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Recap IF and use it to return a clear status from a condition
- Use IF alongside SUMIF and COUNTIF on the same sheet (AVERAGEIF and nested IF/IFS as stretch)
- Add at least one labelled IF-family formula that answers a real project question

BEFORE THE BELL

- Decide whether to share a starter file with A1:D6 already filled, which saves typing time if the room is slow; the full data table is on the step-by-step task itself.
- Write the three warm-up prompts and one project-style question such as 'Which products hit 50 sales?' on the board.
- Verify as many students as possible can open a prior sm3 workbook, and keep a minimal categories-and-numbers fallback sheet ready for anyone empty-handed.
- Write the three warm-up prompts and one sample project question on the board before the bell. Spot-check that students can open a prior sm3 workbook or plan the fallback sheet.
- Open a blank spreadsheet on the classroom screen for the live demo. Optional: prepare a starter file with A1:D6 filled for slower typists.
- Be ready to model one non-sales example (hours or budget) on the board in under three minutes.
- Before the lesson, confirm as many students as possible can open a prior sm3 workbook. Keep a minimal fallback sheet (categories + numbers) students can copy into sm3/ and still attach one labelled IF-family formula.

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HOW THE LESSON RUNS

5 min	introduction	Introduction
5 min	content	Key concepts
15 min	activity	Step-by-step task
3 min	content	Common issues
4 min	content	From Aoife to your project
18 min	activity	Independent practice
5 min	content	Reflection
5 min	summary	Lesson summary

TEACHING MOVES

- Model the first IF formula on the classroom screen before students begin.
- Make sure every student finishes revenue, IF, SUMIF and COUNTIF before anyone moves on, because nested IF, AVERAGEIF and IFS are stretch and a room that starts them early often lands neither.
- Before independent practice, model one non-sales transfer example and have every student name a sentence starter.
- Collect only files named sm3_from_template_v5.

WHAT TO WATCH FOR

- Formula displays as text: ensure the cell starts with an equals sign and remove any leading spaces.
- #NAME? error: check the function name spelling.
- Criteria mismatch: check spelling, extra spaces and criteria range (text match is not case-sensitive).

DIFFERENTIATION

- Support: share a starter file with A1:D6 filled; pair for the first IF only.
- Support: recovery path duplicates sm3_if_practice with project numbers if the prior workbook is missing.
- Extension: nested IF in column G, AVERAGEIF, IFS, or a three-formula decision block on the summary sheet.