

Character, Field, Record, File, Data Type, Key Field

60 minutes

ICT Specialism 3: Spreadsheets

Outcome M3.U1.1

WHAT THIS LESSON DOES

Learn the six terms professionals use to describe spreadsheet data: character, field, record, file, data type and key field. Map columns and rows to these terms and apply them to your project sheets.

CURRICULUM OUTCOMES

Outcome	What the specification asks for
M3.U1.1	Understand the uses and functions of spreadsheets.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Define character, field, record, file, data type, and key field in a spreadsheet context
- Map spreadsheet columns and rows to database terminology
- Give one personal example of each term from project sheets

BEFORE THE BELL

- Project the labelled terms-map diagram (img_terms_map) as students enter, or draw a 4-column mini grid on the board and label Field, Record, Key field, Character, Data type and File, so that the class has a labelled grid in front of them when the introduction asks them to read one.
- Write the six terms on the board as bare words beside the labelled grid, undefined for now.
- Prepare the drag-sort interactive on the classroom screen, plus paper snippet cards and whiteboard bucket labels as a backup.
- Have one anonymised Module 3 sheet ready for the warm-up and for the live model before the portfolio build.
- Have img_terms_map ready to project (or a sketched 4×4 labelled mini grid as backup). Have one anonymised Module 3 sheet ready to open on the board for the warm-up.
- Open the drag-sort on the board before this step. Keep a paper backup ready: six printed snippet cards and six whiteboard bucket labels so the talk-through-then-place sequence still runs if the interactive fails.
- Print or load the definition sentence-starter template for support students. Have a 5-row sample stock sheet (with Order ID) ready for anyone without project files. Plan one live board model of a single term before independent work.

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HOW THE LESSON RUNS

5 min	introduction	Introduction
8 min	content	Key concepts
15 min	activity	Sort the spreadsheet terms
4 min	content	Common issues
18 min	activity	Portfolio Build
5 min	content	Reflection
5 min	summary	Lesson summary

TEACHING MOVES

- Have the labelled grid on screen before students read the introduction, because the first thing they are asked to do is find the column that never repeats.
- Stress the three mappings, field equals column, record equals row, key field equals unique ID, before you walk the full six-term table.
- In the sort, talk the placements through with the class before anyone drags a card, so the reasoning happens out loud.
- Model one full own-words section on the board from a volunteer's sheet before the portfolio build starts.
- Circulate during the portfolio build to make sure examples come from real project sheets or from the sample sheet on the students' own page, labelled as such.
- Keep the common issues step to about four minutes so the writing block stays whole.

WHAT TO WATCH FOR

- Swapping field and record: remind students that field is the column and record is the row.
- Using name columns as key fields: explain that a key field must have values that never repeat.
- Copying table definitions word for word: point students at the Field remodel in Common issues.

DIFFERENTIATION

- Support: pair students for the sorting activity so they can talk each placement through with someone.
- Support: point students who stall at the writing stage back to the sentence stems already on their portfolio build page, and do one aloud with them.
- Extension: ask students to map the terms across several sheets in one workbook.
- Access: students without earlier Module 3 files use the sample stock sheet in the portfolio build task and label their examples accordingly.