defaults to a relative reference; it pastes in cell A4 from COMPANIES, not A3 again.

6. The right company code only appears in cell A3 of COMPANIES, so you need to use an absolute reference.
7. To fix it, edit cell B3 of PEOPLE to read **=COMPANIES!A3** to turn it into an absolute reference.
8. Now copy and paste B3 into B4 again. It should show the company code you want.
9. Repeat for the last four people of your six, putting **=COMPANIES!A*x*** in cells B5-B8.

TASK 4.2.2: Joining TITLES and PEOPLE

1. Next, go to worksheet TITLES. Find the descriptors and job titles that describe the people in column B and note the cell references.
2. Back on PEOPLE, **write =TITLES!xy** in cells D3-D8, where x and y are the cell reference of the relevant TITLE descriptor from worksheet TITLES.
3. Again on PEOPLE, write **=TITLES!xy** in cells J3-J8 where x and y are the column and row numbers of the cells containing the right job title in worksheet TITLES. You'll see all six people now have the right job title next to them.

TASK 4.2.3: Joining DEPARTMENTS and PEOPLE

1. Now go to worksheet DEPARTMENTS. Find the departments and Department descriptors relevant to each person (they may be the same) and note the cell reference(s).
2. Back on PEOPLE, write **=DEPARTMENTS!xy** in cells C3-C8, where x and y are the cell reference of the relevant DEPARTMENT CODE descriptor from worksheet DEPARTMENTS.
3. Again on PEOPLE, **write =DEPARTMENTS!xy** in K3-K8, where x and y are again the references of the cells containing the right DEPARTMENT name from worksheet DEPARTMENTS. You should see the department appear next to each person.

SIDEBAR: Why do this?

Most lists keep all their data on a single worksheet. Why separate them? First, because it creates that **single version of the truth**, avoiding duplication and

bloat. Your list of departments will reach a certain size, then tail off. (There are only so many different names for departments.) Your list of job titles will do the same.

As you gain more customers and add more contacts, you'll develop an instinctive understanding for which job titles and departments find you most useful. Making them more useful to *you*.

Second, collecting together different departments and titles with a descriptor gives your list **structure**. The keycode 1-FINANCE-VP (combining keycodes for a contact's company, the department he works in, and his position in that department) fully describes his function within the company, without asking your spreadsheet to guess what myriad job titles actually *mean*.

Third, when you kick off your **Campaign** in **Part 7**, defining people's functions in this way lets you **analyse the results**. Maybe your best potential customers share a job title you hadn't heard of before. If so, you'll know to look for more of them. This is the value of keycodes.

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TASK 4.3: DIFFERENT WAYS OF COUNTING

Now you've got some data on your spreadsheet, let's learn the basics of doing something with it.

TASK 4.3.1: COUNTing values

The COUNT function tells you how many cells contain what you're looking for. (It *doesn't* add them together; that's SUM.)

1. Go to your COMPANIES worksheet.
2. In cell B1, write **=COUNT(A3:A10000)**. You've told your spreadsheet to look at cells A3 and down and count how many contain numbers.
3. You'll see 6, the number of companies you've added so far.
4. That's how COUNT works for numbers: one argument to count. Practice it.

TASK 4.3.2: Including criteria with COUNTIF

1. Erase cell B1.
2. Replace it with **=COUNTIF(A3:A10000,">3")**. It'll look for cells with a value higher than 3, with the operator more than, >, in quotes.
3. You'll see it totals 3. Not 4, because only 3 of your Company Codes have a value more than 3.

4. Edit cell B1 to a different formula: **=COUNTIF(A3:A10000,“>=3”)**.
5. Now it totals 4, because you've told it to count cells more than or equal to 3 with the operator more than or equal to, >=.
6. That's how COUNTIF works: two arguments, the first the one to count, with operators in quotes after a comma. Practice some variations.

TASK 4.3.3: Selecting text with wild cards

1. Erase cell B1. Replace it with **=COUNTIF(B3:B10000,“Ltd”)**.
2. You'll see a nil result (0), even if one or more of your companies in the same column had Ltd as part of its name.
3. Edit the function to **=COUNTIF(B3:B10000,“*Ltd”)** with an asterisk before the Ltd.
4. You'll now see a positive result, if one or more of your companies so far had a Ltd after its name. The asterisk is a wild card that means “anything preceding Ltd” here.
5. That's another use of COUNTIF: two arguments, with the first being the range to sum. Practice with other wild card values.

TASK 4.3.4: Using multiple criteria with COUNTIFS

1. Erase cell B1. Replace it with a different formula: **=COUNTIFS(B3:B10000,“*Ltd”,A3:A100,“>3”)**.
2. You've asked it to count cells where the company name includes a Ltd and the company code is also higher than 3.
3. You can enter as many criteria, from as many columns, as you want (within reason) using COUNTIFS—and you'll use it a lot later on in your 100 Days plan.
4. That's how COUNTIFS works: four arguments, with the operators in quotes. Practice some variations.

TASK 4.4: DIFFERENT WAYS OF SUMMING

SUM is the other simple function commonly used in spreadsheets. It adds stuff up—and not just numbers.

TASK 4.4.1: Simple SUMming

1. Go to COMPANIES again. Erase cell B1.
2. In cell B1 write **=SUM(A3:A10000)**. Since the company codes are just a set of numbers at the moment, their SUM is

simply what you get when you add them up.

3. You'll see a total of 21 or over if column A reads 1-6.
4. That's how SUM works: one argument to sum. Practice with other columns of figures, or try changing some figures in column A.

TASK 4.4.2: Adding criteria with SUMIF

1. Erase cell B1. Replace it with **=SUMIF(A3:A10000,">3")**.
2. You'll see a total again, but only of the cells whose value is more than 3.
3. That's how SUMIF works: two arguments, the first being the range to sum. Practice by changing figures in column A.

TASK 4.4.3: Contrasting columns with SUMIF

1. Erase cell B1. Replace it with a different formula: **=SUMIF(B3:B10000,"*Ltd",A3:A10000)**.
2. You'll see another number. What it's done is take all the cells in column B that contained a Ltd . . . then added together only the cells in column A that were on the same rows.
3. That's how SUMIF can compare and contrast two (or more!) columns: three arguments, with the last being the range to sum. You'll find it very useful in Parts **5**-**6**.

TASK 4.4.4: Adding multiple criteria with SUMIFS

1. Erase cell B1. Replace it with a different formula: **=SUMIFS(A3:A10000,B3:B10000,"*Ltd",J3:J10000,"United Kingdom")**.
2. It's a little less intuitive, but what you've done is ask it to add up the company code values where a company name ended with Ltd and its address was in the United Kingdom.
3. That's how SUMIFS works: five arguments, with the first being the range to sum. Practice by changing some values in the columns or column ranges in the function.

TASK 4.5: USING IF, AND, AND OR

These functions are one way to add the **extreme personalisation** you'll build into your **Letter** later: they're how you'll select the most appropriate bits of text to slot into your letter's structure.

TASK 4.5.1: Choosing with IF

1. Erase cell B1. In cell N3 (the first blank column) put