Top 10 Excel Questions

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WHY A TECHTORIAL?

What will I learn today?
You will get answers to the 10 most common questions teachers ask about the spreadsheet program Microsoft Excel.

What hardware and/or software does the techtorial apply to?
The techtorial applies to Microsoft Excel.

## Which National Educational Technology Standards for Teachers does the techtorial address?
The techtorial will help teachers accomplish standard Ia in particular.

The International Society for Technology in Education (ISTE) has developed a set of National Educational Technology Standards for Teachers. Standards or Performance Indicators are included for each techtorial to help teachers and administrators improve technology proficiency. For a complete description of the standards indicated, go to NETS for Teachers.

QUESTION ONE

I'm entering my students' grades into an Excel spreadsheet, but the name of one of my students -- Thomas Sassafras -- is too long; it keeps running into the next box. What do I do?

First, a quick refresher: Each of the boxes in an Excel spreadsheet is called a cell. Cells are identified by column letter (A, B, C…) and row number (1, 2, 3…). In the graphic below, for example, the name Thomas Sassafras is in cell A1 (column A, row 1).
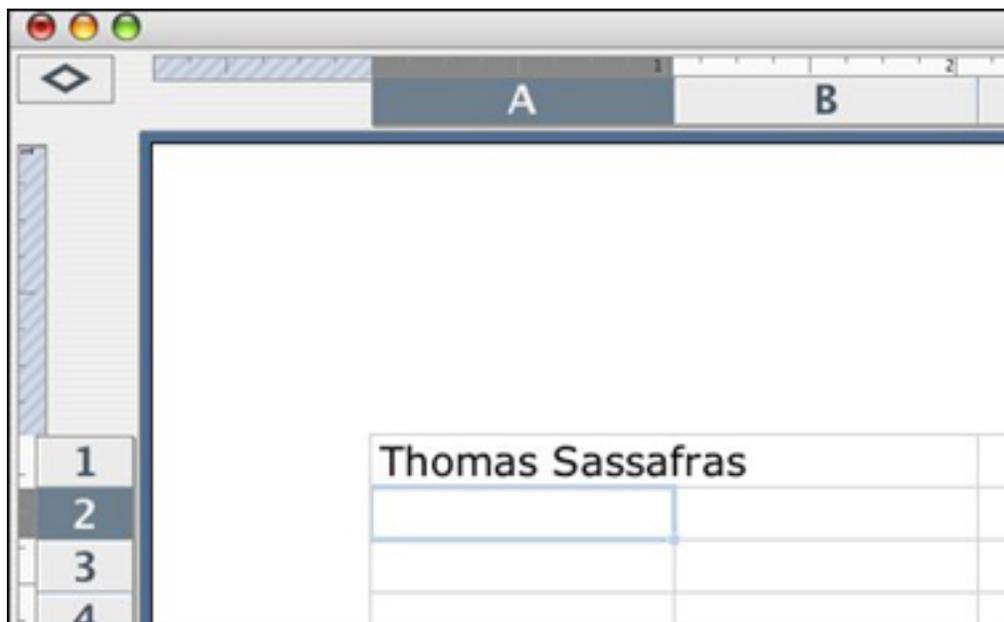
Notice, however, that Sassafras is hanging over into column B. So, you need to widen column A. To do that, you can:

- Double click the line between cells A and B (just below the number 1 on the ruler at the top of the spreadsheet). Column A should automatically adjust to fit the name; or
- Click, hold, and drag the line between cells A and B to make the column as big as you'd like; or
- Click Format > Column > Width and type in exactly how wide you want the column to be. This tip also can be used to increase row height -- good for when you've increased the font size on your classroom spreadsheet and now the text looks scrunched!

QUESTION TWO

I'm entering my students' grades into Excel, and I've decided I want student names to be displayed vertically, not horizontally. How do I do that?

Great question! In the example below,

	Thomas Sassafras	Anna Terrance	Maria Woods	Max Young
Vocab Test 10/15	95	92	100	89

if the teacher continues typing names horizontally across the top of the page, she'll end up with five or more pages! Let's change the direction of students' names from horizontal to vertical. To do that,

- Click the number 1 (row number) on the left side of the page. All students' names will be highlighted.

- Click Format > Cells and click the Alignment tab. Notice the half circle in the Orientation box.
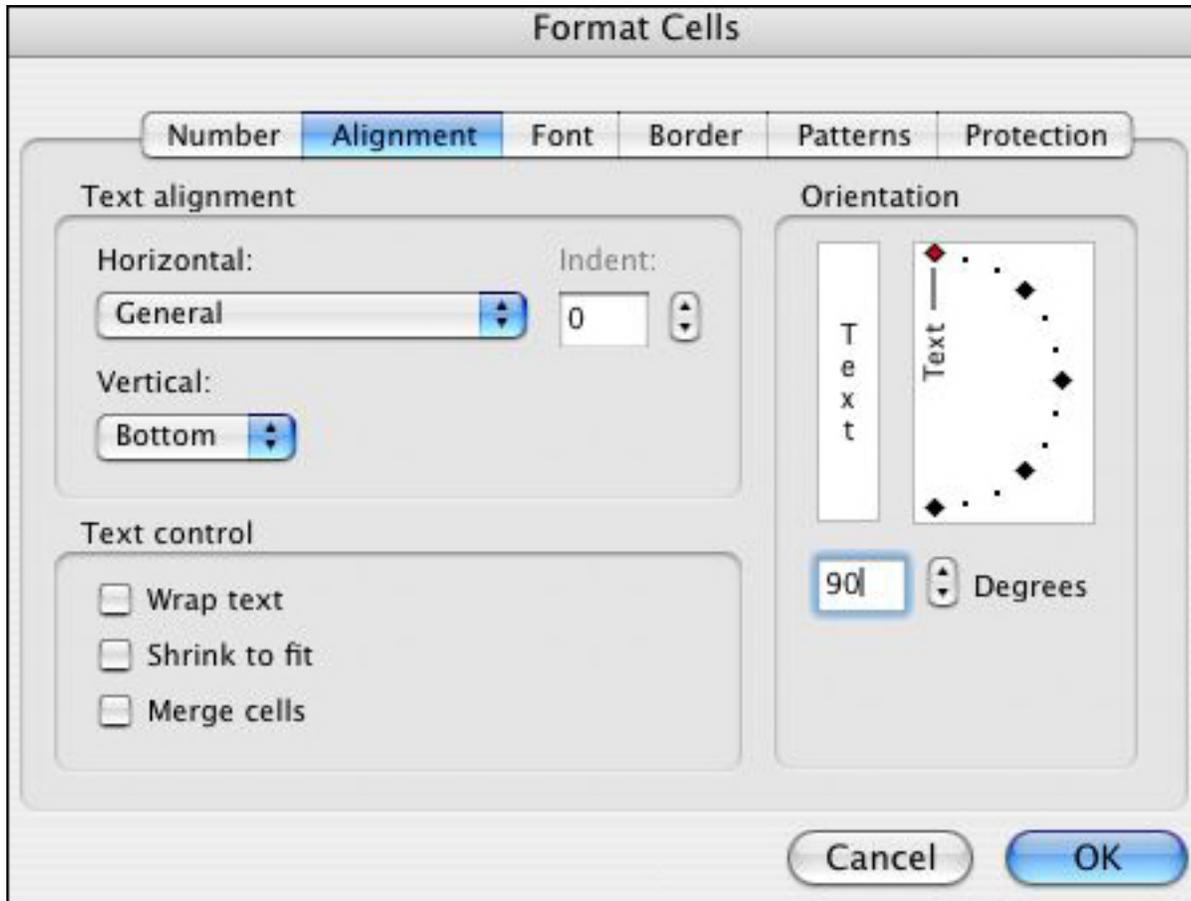
- Click the Text line in the half circle, hold down the mouse button, and drag the line until it points straight up (to noon on a clock).
- Click OK. The names on the spreadsheet now should be displayed vertically.

Now use answer #1 to reduce the column width. You also might want to go to File > Page Set up and change the page orientation to Landscape instead of Portrait.

QUESTION THREE

We're conducting a classroom experiment that has given us a lot of data. I'm now on the second page of data, and I want the headings on the first page to transfer to the second page. How do I do that?

Easy! Look at the sample spreadsheet below.

| Seed Containers	Trial A	Trial B	Trial C
Thomas	0	2	1
Elisa	4	2	1
Kaitlyn T.	2	0	1
Shelby	1	0	NA
David	2	1	0
Timothy	1	4	2
Chase	1	0	2
Orlando	1	1	1
Michael	0	1	4
Dante	4	1	1

Students' names are in column A, with data to the right. Let's say you also want to be able to see those names when you go to page 2 of the spreadsheet. To do that, click Cell B1 (at the top of the column containing Trial A), and then click Window > Freeze Panes. Now, when you go to the next page, students' names will stay on the left side of the page and you can continue to enter data without having to reenter names.

QUESTION FOUR

I want students' names to print on every page of the spreadsheet. Sometimes, I also want to print (or not print) column letters and row numbers. How do I do that?

The problem with answer #3 (freezing panes) is that students' names will *not* print on each page of the spreadsheet. To change that, you need to:

- Click Page > Print Set-up (or File > Page Set up > Sheet on a Mac).
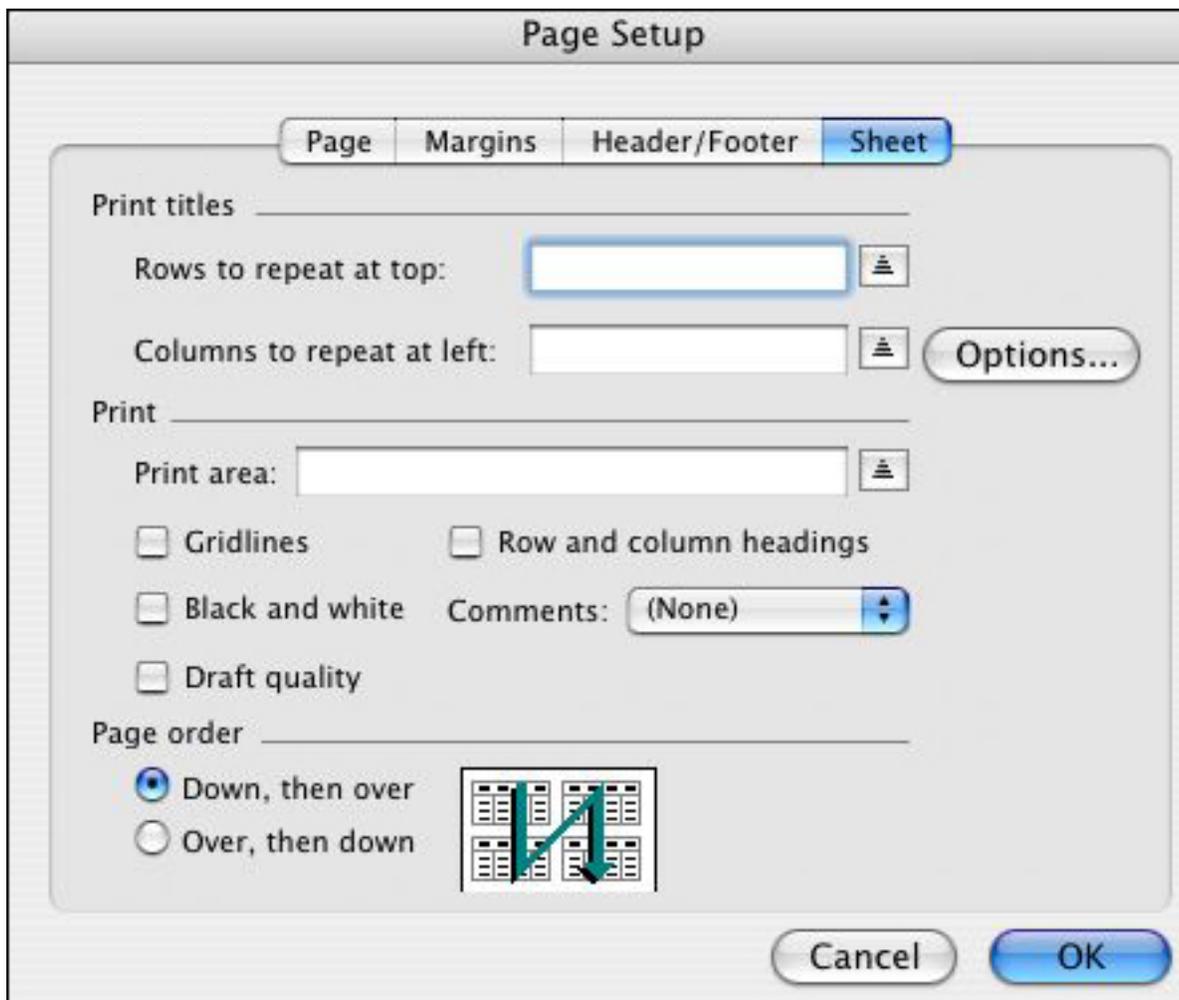
Notice the choices you have. You can print gridlines (those little cells on the spreadsheet don't show up in print documents unless you tell them to!) and/or row/column headings (A1, B2...) In addition, the Print titles area allows you to select a row/column to print at the top or left of each page. You might need to play around with how to indicate which row/column you want, because it can be a bit tricky at first -- but you'll get it!

• Make your choices and click OK.

QUESTION FIVE

I'm putting my grades on a spreadsheet, and I want the average grade on an assignment. How can I do that quickly?

Formulas and functions can sound scary to teachers new to Excel, but learning just a few of them will make averaging -- and a few other class tasks -- a cinch.

Look at the graphic below:

Students'grades are in cells b2, b3, b4, b5, b6, b7, and b8, and we want to average those grades. To do that, click in any cell (b9 for this example but anywhere is fine!). Type an equal sign and the word *average*, and then type the cell range in parentheses. (The cell range is the first cell and the last cell in a series with a colon between them. Hit enter/return and the average will appear.

=average(b2:b8) is a "formula." It also could have been written =(b2+b3+b4+b5+b6+b7+b8)/6 -- the way we learned to average in school! That also is a formula.

The word *average* is "function." It tells Excel, "Hey, add up these cells and then divide by the total number of cells to get the average." Other Excel functions include *max* for maximum (What's the largest value among these cells?); *min* for minimum (What's the smallest value among these cells?); and *sum* to simply add up all cells.

Try formulas and functions yourself sometime, and see how easy they can make your life!

QUESTION SIX

How do I combine several cells into one?

That is called merging. For example, next to Elisa's name in the graph below,

Seed Containers	Trial A	Trial B	Trial C	Trial D
Thomas	0	2	1	0
Elisa	excused absent - surgery			
Kaitlyn T.	2	0	1	1

appears the phrase "excused absent-surgery" -- which combines (merges) four cells into one. To do that:

- Highlight the cells you want to merge (before or after you type in them).
- Click Format > Cells > Alignment, and then click Merge Cells and OK.

That's it! If you change your mind, repeat those steps and *uncheck* Merge Cells.

QUESTION SEVEN

I want to type an entire sentence into one cell, but I don't want to widen the column or merge several cells. I want the sentence to appear in paragraph form. How do I do that?

In the example below, we see that, during Trial C, Shelby's container was jostled, tainting her results. The incident is recorded in a single column with the sentence, "Container was tampered with by another student."

Seed Containers	Trial A	Trial B	Trial C	Trial D
Thomas	0	2	1	0
Elisa	excused absent - surgery			
Kaitlyn T.	2	0	1	1
Shelby	1	0	Container was tampered with by another student.	2

To do that, Shelby's teacher

- Typed the sentence.
- Clicked Format > Cells > Alignment.
- Checked Wrap Cells, and clicked OK.
- Followed answer #1 to adjust the column for readability. You can do it too!

QUESTION EIGHT

How do I sort student's grades to see who had the highest score on a test.

Simple!

- Highlight the data and any headings, and then click Data > Sort.

- Indicate in the Sort by blank the data you want to sort. Be sure to sort data by the correct heading -- Vocab test 10/15, in this case -- and not last week's Lit test.)
- To see scores from highest to lowest, click Descending and then click OK.
- Be sure to click "Header row" if your chart has one, or Excel will sort headers along with data.
- If you make a mistake, click Edit > Undo to try again.

QUESTION NINE

A new student has transferred into my class. I want to add her to my grade book alphabetically, but I need a new row. How do I do that?

Let's say you want to insert Amanda's name above Dante's in the graph below.

Seed Containers	Vocab 10/15
Thomas	⁻80
Kaitlyn T.	85
Shelby	92
David	95
Timothy	99
Chase	100
Orlando	92
Michael	77
Dante	87
Anna-Beth	83
Sara	98
Jakob	91
Terra	84

Sort

Sort by

Vocab 10/15   ● Ascending
              ○ Descending

Then by

              ● Ascending
              ○ Descending

Then by

              ● Ascending
              ○ Descending

My list has

● Header row   ○ No header row

Options...   Cancel   OK

You *could* type her name at the bottom of the list, and then sort the names as in question #7, *or* you can just insert a new row into the graph. To do that, click Dante's name, and then click Insert > Column. That's it! The same tool also works for rows and individual cells.

But what of Dante now moves to another state and you want to delete him from your grade book. Click Dante's name, then click Edit>Delete. A small window/pane will open, asking if you want to delete a row/column or just cells. In this case, you want to delete Dante's whole row, so click Entire Row > Ok.

Delete

Delete

○ Shift cells left
● Shift cells up
○ Entire row
○ Entire column

Cancel   OK

QUESTION TEN

I'm confused. If I click Edit, I see the options "Cut" and "Delete." If I right-click I see the option "Clear Contents." Which does what?

That can be confusing. We're used to the Cut option in Word, but Cut works differently in Excel. These explanations should help:

- Cut: This tool actually copies text for you to paste somewhere else. It then cuts -- erases -- the text from the original spot. Like Word's Copy-Cut-Paste in a single step.
- Delete: This tool deletes entire cells, rows, or columns, along with the text in those cells, rows, or columns.
- Clear Contents: You like the cells/rows/columns as they are and you don't need to move text (pasting as in the Cut feature). You just need to erase some of the text. Highlight the text to be deleted, right click, and select Clear Contents.

Note: If you've typed text in the wrong row or column, instead of cutting (copying/pasting), highlight the text and drag it to the correct location. It's the fastest way to get from there to here!

LEARN MORE

Where can I find more information about Excel?
The Techtorials Table of Contents is a great starting point for tips and tricks for using Excel!