

# Unit 1 Using Microsoft Excel

The following video and activity provide an introduction on

- the basics of understanding Excel layout,
- how to enter and format data,
- how to use basic formulas to perform calculations, and
- how to filter and sort data.

## Watch

Click [here](#) or use the QR code provided to watch the Unit 1 video.



## Now You Try It!

Open the Excel file named **Student\_Data** and follow along with the following instructions.

### Understanding Excel Layout

Excel is made up of rows (horizontal), columns (vertical), and cells (individual boxes). Each column is identified by a letter, and each row is identified by a number. Each cell is identified by a column letter and row number (e.g., B2 represents the cell at the intersection of column B and row 2).

Navigate through the file and identify rows, columns, and cells.

1. Locate cell C3. What does it say?
2. What is the label at the top of column B?
3. Which student's data is listed in row 5?

### Entering and Formatting Data

To enter data, click on a cell and type to input data. To format, use the toolbar to change font style, size, and color.

4. Enter your name in cell A17 and format it with bold and blue font.
5. In row 17, complete your student data by filling in subject: Math; score: 98.

## Using Basic Formulas

Excel formulas start with the equal sign, =. Basic formulas can be used in Excel to calculate values. Standard symbols like +, -, \*, and / can be used to indicate mathematical operations.

- + for addition
- - for subtraction
- \* for multiplication
- / for division

Just like with calculators, parentheses should be used to ensure that Excel correctly performs a series of operations.

6. Let's use a formula to recalculate Alice's math score. Her score should be the average of three assignments: 76, 94, and 85. In cell C2, replace the value with a formula using +, /, and parentheses to recalculate Alice's math score. State the formula as it appears in Excel. What is her updated score? (**Hint:** the average of a set of values is found by adding the values and dividing by the number of values.)

## Filtering and Sorting Data

Filtering in Excel lets you hide rows that don't meet certain criteria. Sorting lets you rearrange data in a column, like putting names in alphabetical order or ordering numbers from smallest to largest. Both filtering and sorting help you quickly organize and focus on the most relevant information in your spreadsheet.

7. Select the cells in row 1, A1, B1, and C1. On the Home tab, click "Sort & Filter", and select "Filter". Each column header will show a drop-down menu that can be used to sort or filter.
8. Using the drop-down arrow in cell A1, sort the data by Student to be in alphabetical order. Why might this be helpful?
9. Sort the data by Score in descending order. What is the name, subject, and score that is now in the top row?
10. Filter column A to only see scores for students Alice and Ethan (using the checkboxes). How many rows are listed after filtering?
11. Remove the filter from column A so that all rows are displayed again.
12. Apply a filter to column C to show only scores greater than 90 (under Number Filters, select Greater Than). How many are there?

## Save Your File

Go to File > Save As to save your file. Change the name of the file to contain your name, so change the file name to **Student\_Data\_[Your\_Name]**.