**Summary:**

As a follow-up to what you learned in the previous video, here are a few best practices and helpful tips. These strategies will help you avoid spreadsheet errors to begin with, making your life in analytics a whole lot less stressful:

1. Filter data to make your spreadsheet less complex and busy.
2. Use and freeze headers so you know what is in each column, even when scrolling.
3. When multiplying numbers, use an asterisk (\*) not an X.
4. Start every formula and function with an equal sign (=).
5. Whenever you use an open parenthesis, make sure there is a closed parenthesis on the other end to match.
6. Change the font to something easy to read.
7. Set the border colors to white so that you are working in a blank sheet.
8. Create a tab with just the raw data, and a separate tab with just the data you need.

Now that you have learned some basic ways to avoid errors, you can focus on what to do when that dreaded pop-up does appear. The following table is a reference you can use to look up common spreadsheet errors and examples of each. Knowing what the errors mean takes some of the fear out of getting them.

| **Error** | **Description** | **Example** |
| --- | --- | --- |
| **#DIV/0!** | A formula is trying to divide a value in a cell by 0 (or an empty cell with no value) | =B2/B3, when the cell B3 contains the value 0 |
| **#ERROR!** | (Google Sheets only) Something can’t be interpreted as it has been input. This is also known as a parsing error. | =COUNT(B1:D1 C1:C10) is invalid because the cell ranges aren't separated by a comma |
| **#N/A** | A formula can't find the data | The cell being referenced can't be found |
| **#NAME?** | The name of a formula or function used isn't recognized | The name of a function is misspelled |
| **#NUM!** | The spreadsheet can't perform a formula calculation because a cell has an invalid numeric value | =DATEDIF(A4, B4, "M") is unable to calculate the number of months between two dates because the date in cell A4 falls after the date in cell B4 |
| **#REF!** | A formula is referencing a cell that isn't valid | A cell used in a formula was in a column that was deleted |
| **#VALUE!** | A general error indicating a problem with a formula or with referenced cells | There could be problems with spaces or text, or with referenced cells in a formula; you may have additional work to find the source of the problem. |

If you are working with Microsoft Excel, an interactive page, [How to correct a #VALUE! error](https://support.microsoft.com/en-us/office/how-to-correct-a-value-error-15e1b616-fbf2-4147-9c0b-0a11a20e409e), can help you narrow down the cause of this error. You can select a specific function from a drop-down list to display a link to tips to fix the error when using that function.

## **Pro tip: Spotting errors in spreadsheets with conditional formatting**

Conditional formatting can be used to highlight cells a different color based on their contents. This feature can be extremely helpful when you want to locate all errors in a large spreadsheet. For example, using conditional formatting, you can highlight in yellow all cells that contain an error, and then work to fix them.

### **Conditional formatting in Microsoft Excel**

To set up conditional formatting in Microsoft Excel to highlight all cells in a spreadsheet that contain errors, do the following:

1. Click the gray triangle above row number 1 and to the left of Column A to select all cells in the spreadsheet.
2. From the main menu, click **Home**, and then click **Conditional Formatting** to select **Highlight Cell Rules > More Rules**.
3. For Select a Rule Type, choose **Use a formula to determine which cells to format**.
4. For Format values where this formula is true, enter **=ISERROR(A1)**.
5. Click the **Format** button, select the Fill tab, select yellow (or any other color), and then click **OK**.
6. Click **OK** to close the format rule window.

To remove conditional formatting, click Home and select Conditional Formatting, and then click Manage Rules. Locate the format rule in the list, click Delete Rule, and then click OK.

### **Conditional formatting in Google Sheets**

To set up conditional formatting in Google Sheets to highlight all cells in a spreadsheet that contain errors, do the following:

1. Click the empty rectangle above row number 1 and to the left of Column A to select all cells in the spreadsheet. In the [Step-by-step in spreadsheets](https://www.coursera.org/learn/ask-questions-make-decisions/lecture/lpuHf/step-by-step-in-spreadsheets) video, this was called the Select All button.
2. From the main menu, click **Format** and select **Conditional Formatting** to open the Conditional format rules pane on the right.
3. While in the Single Color tab, under Format rules, use the drop-down to select **Custom formula is,** enter **=ISERROR(A1)**, select yellow (or any other color) for the formatting style, and then click **Done**.

To remove conditional formatting, click Format and select Conditional Formatting, and then click the Trash icon for the format rule.