



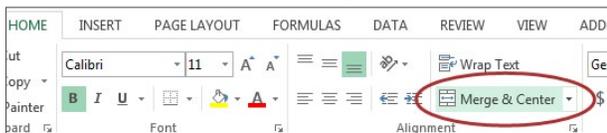
# CREATING ACCESSIBLE SPREADSHEETS IN MICROSOFT EXCEL 2010/13 (WINDOWS) & 2011 (MAC)



## Screen readers and Excel

Users who are blind rely on software called a screen reader to interact with spreadsheets.

- Screen readers will **read the cell number** as users navigate from cell to cell (e.g., "Grand Total A 23").
- Spanned cells will be identified by a screen reader (e.g., "Budget A1 through G1"). If content spans multiple cells visually, **these cells should be merged**. To merge cells, select **Home** and the **Merge** menu.



Merged cells should not be used in tables. They can be confusing for screen reader users who expect one row and/or column header for each cell.

- A screen reader user will usually **start with the first cell (A1)**, so this is a good place to put important information about the sheet.
- Be careful with **empty rows and columns**. While they may sometimes be necessary to visually separate data, **they can cause a screen reader user to think the sheet has ended**, even when it has not.

## Images and Charts

- While images can be given alternative text in the same way as other Office tools (see other cheatsheets), they can sometimes **introduce reading order issues** and should typically **not be added to spreadsheets**.
- **Charts cannot be given alternative text**. Ensure the data used to create the chart is available and clearly structured, and preferably precedes the chart.

## Other principles

- **Spell check is not automatic** as it is in Word/PowerPoint. Make sure to spell check each sheet.
- **Do not use color alone to convey information**.

Assignments (overdue in red)	
Introduction	Yes
Chapter 1	No

Inaccessible

Assignments	Overdue
Introduction	Yes
Chapter 1	No

Accessible

## Table 'Headers'

If your spreadsheet includes tables, there is a special way to **add table 'header' information** that will be read by the screen reader. Tables can be identified with formula names of **Title**, **TitleRegion**, and others.

- These formulas **do not update when the table changes**, so be sure your table is complete first.
- This **only works for a single level of headers**. Complex tables will need to be simplified or restructured.

## One table per sheet:

For sheets with one table only, select the cell in the **upper-left corner of the table** (not the table title).

	A	B	C
1	Contact Info		
2	HERE	Phone	Email
3	Ellen Hardy	812.168.1569	ellen.hardy@un
4	Jay Garrett	620.669.1752	jay.garrett@un
5	Steve Pratt	681.227.6247	steve.pratt@un

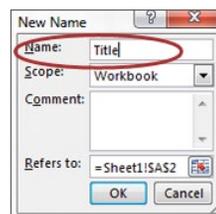
In **Windows**, select **Formulas > Define Name** and the **New Name** dialog opens. In **Mac**, select **Insert > Name > Define** and the **Define Name** dialog opens.

In the **Name** field, replace the existing text with **one of the following 3 values**, depending on your table layout:

If the table has **column and row headers**, enter **Title**

If the table has **row headers only**, enter **RowTitle**

If the table has **column headers only**, enter **ColumnTitle**



Don't Confuse "Column" and "Row" headers. Remember that **ColumnTitle** is for **vertical** headers and **RowTitle** is for **horizontal** headers. Also be sure to type **RowTitle** or **ColumnTitle** as one word, **without a space**.

After entering the correct value in the **Name** field, select **Ok**. Although the initial text is still visible, accessibility information has been added for a screen reader user.

Only add a **Name** to the first cell in the table. **Do not repeat this step** for other header cells within the same table.

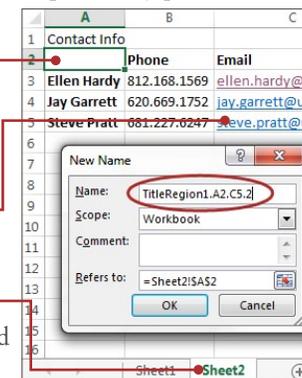
## Multiple tables per sheet:

If a single sheet has **multiple tables**, if the table has **sortable columns**, or if you want to specify an **explicit beginning and end** of a table, you need to use **TitleRegion**.

Select the cell in the **upper-left corner of the table** (not the table title). In **Windows**, select **Formulas > Define Name** and the **New Name** dialog opens. In **Mac**, select **Insert > Name > Define** and the **Define Name** dialog opens.

In the **Name** field, enter **TitleRegion** followed by the following 4 values (no spaces, separated by periods):

1. Unique number within the sheet (e.g., **1** for the first table)
2. First (upper-left) cell in the table (e.g., **A2**)
3. Last (lower-right) cell in the table (e.g., **C5**)
4. Sheet number (e.g., **2** for the second tab in the workbook)



The above table **Name** would be **TitleRegion1.A2.C5.2**

Note: **RowTitleRegion** or **ColumnTitleRegion** can be used for tables that only have row or column headers.

After entering the correct value in the **Name** field, select **Ok**. This table is now accessible. **Repeat this process** for every table on the sheet, remembering to select the **upper-left corner cell** of each new table.

## Deleting formula names

You may occasionally create a formula name for the wrong field or give a single cell more than one name. These unnecessary formula names should be removed.

1. To remove formula names in **Windows**, select **Formulas > Name Manager**. In **Mac** select **Insert > Name > Define**.
2. Then choose the **desired name** and select **Delete**.

