Microsoft Excel 2010-2013

The National Center on Disability and Access to Education

NCDAE

http://ncdae.org/resources/cheatsheets/excel.php

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](http://ncdae.org/resources/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.***

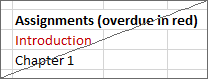
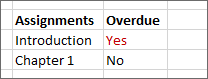
Inaccessible       Accessible

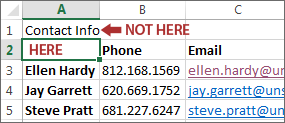
Table ‘Headers’

If your spreadsheet includes tables, there is a special way to ***add table ‘header’ information*** that will be read in some screen readers. Tables can be identified with formula names of ***Title, TitleRegion,*** and others.

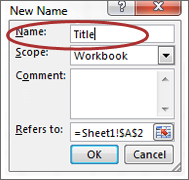
* These formulas ***do not update when the table changes,*** so be sure your table is complete first.
* This ***only works for a single level of headers.*** Complex tables will need to be simplified or restructured.

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).



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:

* http://ncdae.org/img/GOALS/cheatsheets/excel6a.pngIf the table has ***column and row headers,*** enter ***Title***
* http://ncdae.org/img/GOALS/cheatsheets/excel6b.pngIf the table has ***row headers only,*** enter ***RowTitle***
* http://ncdae.org/img/GOALS/cheatsheets/excel6c.pngIf 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.

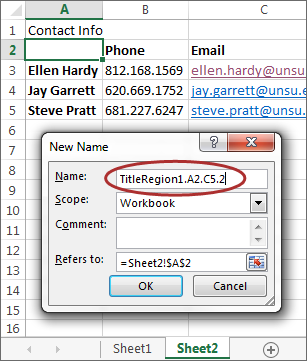
Multiple tables per sheet:

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.***