

Quick Guide for Creating Accessible Microsoft Excel Workbooks

Set a Descriptive Document Title

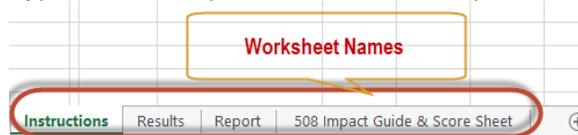
Document titles help users know what document they are viewing.

1. Navigate to and select **File > Info > Properties**
2. Select **Show Document Panel** or **Advanced Properties**
3. Enter a meaningful title in the **Title** field.
4. **Optional:** Enter an Author (i.e. individual or organization name)

Give Worksheets Unique Names

Sheet names should provide information about what is found on the worksheet, making it easier to navigate through a workbook. Any blank sheets in a workbook should be removed.

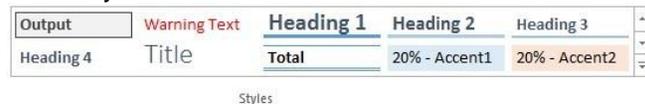
1. Right-click the sheet tab, and then click **Rename**.
2. Type a brief, unique name that is descriptive of the sheet contents.



Style Sections as Headings

Headings indicate the beginning of a new document or major section. Headings should be selected based on their hierarchy, or importance, in the document. Excel offers four levels of headings - Heading 1 - Heading 4. It is best to only use Heading 1 once such as for the title of the document.

1. Highlight the cell that contains the desired phrase to be a heading
2. Navigate to the **Home** ribbon and locate the **Styles** pane
3. Select **Heading 1 – Heading 4** for the phrase respective to its hierarchy in the document.



Design Tables Properly

There are several things to keep in mind when designing tables.

- Keep tables simple and only have one (1) table per worksheet. Complex tables (those that have data cells that relate to two or more row and/or column headers) are difficult for users of assistive technology to understand the relationships.
 - This also includes avoiding merged cells.
 - If you have a complex table either split it into multiple simple tables or provide instruction on accessing an alternate version.
- Never use spaces or the tab key to simulate the appearance of a table.
- Avoid blank rows and columns
- Avoid blank cells, especially table header cells.
- Any tables that break across pages must repeat the table header at the top of each page.
- All data needs to be rendered in separate cells within the rows and columns.
- Avoid placing paragraph text around tables.
- Table captions can be helpful in identifying the purpose of the table.

Mark Data Cells as a Table:

1. Highlight the cells that are to be a table.
2. Navigate to the **Insert** ribbon and in the **Tables** group activate **Table**.
3. In the **Create Table** dialog, confirm the **My table has headers** checkbox is checked.
4. Navigate to and activate the **OK** button.



Use Effective Color and Contrast

Effective use of color will ensure that content is readable, accessible, and appealing.

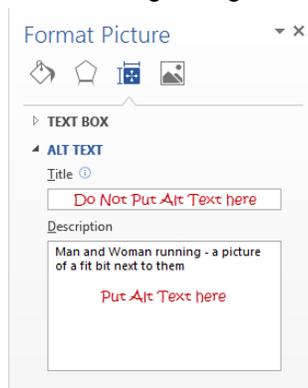
1. Color should not be used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
 - a. Example: graphs may need textured patterns to represent data sets. Or important information should have an additional textual representation such as an asterisk (*).
2. Verify the text color provides enough contrast against the background color. There must be a minimum contrast ratio of 4.5:1.
 - a. Use the **Font Color** picker from the **Home** ribbon to choose an appropriate color against the background.

Add Alternative Text to Graphics

Alternate (ALT) text should be added for pictures, clip art, charts, and shapes. Keep alternate text to 250 characters or less.

Note: For complex images such as process flows and charts, additional description needs to be provided in an appendix or in surrounding text. The alternate text should direct users to the longer description.

1. *Pre-step for Complex Images:* If there are multiple pieces of an image, select all the pieces of the image. From the context (or right click) menu select **Group > Group** to create one large image.
2. Activate the context (or right click) menu of the image or object and activate **Format**.
3. Navigate to **Layout & Properties > Alt Text**.
4. Type a description of the image or object into the **Description** field. The image description should focus on the purpose of the image. **Note:** **Title** may not be read by all assistive technologies. It is important to convey the meaning in the **Description** field.



Inserting Hyperlinks

Ensure the link text sufficiently describes the purpose of the link.

1. Place the cursor where a hyperlink is to be added.
2. On the **Insert** ribbon, in the **Links** group, activate **Hyperlink** or press **CTRL+K** to open the **Insert Hyperlink** dialog box.
3. In the **Text to display** field, briefly describe the link destination.
4. In the **Address** field, insert the link URL.
5. Navigate to and activate **OK**.

Protecting Data

Protecting a worksheet can be necessary but it is important that users have access to all the cells.

1. On the **Review** ribbon, in the **Protect** group select **Protect Sheet**.
2. In the **Protect Sheet** dialog, confirm **Select Locked Cells** and **Select Unlocked cells** are checked in the **Allow all users of this worksheet to** section.
3. Navigate to and activate the **OK** button.

