**Navigation and Selection**

<table>
<thead>
<tr>
<th>Selection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clicking a cell</td>
<td>Start typing to modify the contents of a cell (clearing previous content).</td>
</tr>
<tr>
<td>Double-clicking a cell</td>
<td>Start typing to modify the existing text or formula of the cell.</td>
</tr>
<tr>
<td>Clicking row numbers</td>
<td>Select one or more rows.</td>
</tr>
<tr>
<td>Clicking column letters</td>
<td>Select one or more columns.</td>
</tr>
<tr>
<td>Click-hold and then moving your mouse</td>
<td>Select adjacent elements.</td>
</tr>
<tr>
<td>Ctrl-hold and clicking</td>
<td>Select non-adjacent elements.</td>
</tr>
<tr>
<td>Ctrl-A</td>
<td>If in a range, select all cells in a range (do it again to select all cells in worksheet). If not in a range, select all cells in the worksheet.</td>
</tr>
<tr>
<td>Clicking (in corner of worksheet)</td>
<td>Select all cells in worksheet.</td>
</tr>
<tr>
<td>Note</td>
<td>Clicking away from an active selection executes the contents (if applicable) and then escapes the selection before selecting your target.</td>
</tr>
</tbody>
</table>

**Navigation**

| Ctrl-Home                                                                | Select the first cell in your worksheet (or the first cell under a freeze panes). |
| Ctrl-End                                                                | Reach the last cell (lower right corner) where data exists or has existed in a worksheet. |
| Ctrl-[Arrow]                                                            | Move from the active cell to the last cell before a blank, in the direction of the chosen arrow. |
| Ctrl-Shift-[Arrow]                                                     | Select cells, starting from the active cell and selecting cells until there is a blank, in the direction of the chosen arrow. |
| Ctrl-Shift-Home                                                         | Select cells, starting from the active cell and selecting cells all the way to the first cell in your worksheet (or the first cell under a freeze pane). |
| Ctrl-Shift-End                                                          | Select cells, starting from the active cell and selecting cells all the way to the last cell (lower right corner) where data exists or has existed in a worksheet. |

**Freeze Panes**

Click under the row you want to freeze and/or to the right of the column you want to freeze. Click "Freeze Panes". Click "Unfreeze Panes" (same position in the menu) to restablish the standard view. Allows you to freeze rows and/or columns in place, so they are displayed even if you scroll away. Useful to keep table headers visible.

View – Window – Freeze Panes

![Freeze Panes](image)
Cell Formats

Copy Formatting of a Cell, Row, or Column

Select the cell, row, or column containing the desired formatting.

**Home - Clipboard**
Click on "Format Painter".

Select all cells, rows, or columns where the formatting should be pasted. The "paste" action will execute and terminate as soon as you let go of the mouse.

Align Cell Text Horizontally or Vertically

Select desired cells, rows, or columns.

**Home - Alignment**

Add a border to a cell

Select desired cells, rows, or columns.

**Home - Font**

The tool directly available in the Font section of the Home ribbon does not allow you as much control as this method.

Modify the Color of a Cell

Select desired cells, rows, or columns.

**Home - Font**

Wrap text (adjust height of rows to see text)

**Home – Alignment**
After changing the width of columns, click twice on "Wrap Text" to deactivate it and reactivate it. Height of rows will be recalculated.
Change Direction of Text

Select desired cells, rows, or columns.

**Home - Alignment**

Format of a Cell

**Option 1 – Right click on a cell, row, or column**

![Format Cells dialog box](image)

It's very important to select the appropriate format, especially when dealing with numbers, dates, and times.

**Option 2 – Home - Number**

![General format option](image)

If a formula won't work, the culprit is sometimes an incorrect cell format.

Merge Cells

Select desired cells

**Home - Alignment**

Only merge cells when completely finished with a worksheet.

Consider making a copy of the worksheet and merging cells there instead.

Insert and Delete Rows and Columns

Select one (or more) rows or columns after where you want to make an insertion.

**Option 1 – Right click on a row or column**

![Format Painter tool](image)

After rows or columns have been inserted, you can choose to copy the format of rows and columns surrounding it. Click on the Format Painter tool that temporarily appears and select the best option.
Hide and Unhide Rows and Columns

Select rows or columns you wish to hide. To unhide, select rows or columns behind AND after the hidden rows or columns. To unhide everything, select all cells in the worksheet and unhide.

Option 1 - Home – Cells

<table>
<thead>
<tr>
<th>Option 2 – Right click on a row or column</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Contents</td>
</tr>
<tr>
<td>Format Cells...</td>
</tr>
<tr>
<td>Row Height...</td>
</tr>
<tr>
<td>Hide</td>
</tr>
<tr>
<td>Unhide</td>
</tr>
</tbody>
</table>

Cell and Worksheet Styles

Select desired cells

Home – Style (for cells)

Page Layout - Themes (for worksheets)

Allows you to apply pre-established fonts, colors, and other formatting options to your cells or worksheets.
## Conditional Formatting

*Emphasize cells containing data according to specific criteria.*

### Home – Styles

<table>
<thead>
<tr>
<th>Normal</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

### Use your own criteria to emphasize certain cells.

![Highlight Cells Rules](image1)

### Emphasize cells containing specific text.

![Highlight Cells Rules](image2)

### Let Excel add emphasis to cells.

![Highlight Cells Rules](image3)

### Use a formula to create emphasis such as:

\[ =\text{mod}(\text{row}(),#) = 0 \]

Where '#' is a number for which every '#' row is formatted.
### Sort

<table>
<thead>
<tr>
<th>Select any cell in a range of cells</th>
<th>Add a level to sort using more than one criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data – Sort &amp; Filter</strong></td>
<td><img src="image1.png" alt="Sort Options" /></td>
</tr>
<tr>
<td><img src="image2.png" alt="Sort Options" /></td>
<td><img src="image3.png" alt="Sort Options" /></td>
</tr>
</tbody>
</table>

You can sort data by row instead of columns.

It's possible to sort using cell colors. Use in conjunction with conditional formatting.

Enter the column to sort – if the suggestions seem strange, check if "data has headers" is correctly applied and check if the entire data range is selected.
Filters

Data – Sort & Filter
Select any cell in a range, and then click on the filter tool.
Apply filters at the top of the column to temporarily view only rows of data that fit with specific criteria.

Make sure to explore the possibilities of text, data, number, and color filters.

Click on "Clear" to remove the filter and reveal all data.

Advanced Filter

Harder to use than the regular filter, but offers some interesting possibilities.

Create a 'table' using the exact same column titles as the ones in the range that you wish to filter.

Enter criteria for each column.
Enter on the same row for 'AND'.Enter on a different row for 'OR'.

For example, the above 'table' finds all paper books published after 2015, or books published by Routledge regardless of year and binding.

Select any cell in a range, and then click on the advanced filter tool

Select your 'table' of criterias.

Data – Sort & Filter

Select if you want to send the filtered data somewhere else or filter in place.
### Pivot Table Basics

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>Select a cell in a range containing ordered data: each row should be an observation and each column a variable.</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Drag an ID field or any other field from the top section of the menu to &quot;Sum of Values&quot; in the bottom of the menu.</td>
</tr>
</tbody>
</table>

#### Insert – Pivot Chart – Pivot Chart

Either options will get you both a pivot chart and a pivot table.

In older versions of Excel, the pivot table may be located elsewhere in the Insert ribbon.

#### 3 - If you selected a numerical variable, you may want to toggle from "Sum of {your field}" to "Count of {your field}" depending on your analysis.

Other options are also available and might be appropriate to specific situations - use with caution.

Click on the drop-down arrow besides your field.

#### 4 – Drag other fields into the "Rows" or "Axis" and "Columns" or "Legend" areas of the bottom menu to generate charts.

Explore other possibilities from the pivotchart tools contextual ribbon: changing the type of graphic, formatting the graphic, adding slicers or timelines for better analysis, etc.
Try the following steps to prepare a worksheet for printing.

Select the area of the worksheet that contains data you wish to print.

1 – Page Layout – Page Setup
- Select the area of the worksheet that contains data you wish to print.

2 – Page Layout – Scale to Fit
- Select the area of the worksheet that contains data you wish to print.
- Set Print Area.
- Use narrow margins to make contents bigger.

3 – File - Print
- Use File – Print to find the print preview. Use narrow margins to make contents bigger.

To add page numbers or headers/footers
- Use File – Print to find the print preview. Use narrow margins to make contents bigger.

Page Layout – Page Setup
- If you want a row or column to repeat on each printed page.

File – Print – Page Setup
- To add page numbers or headers/footers
- Use narrow margins to make contents bigger.

Page Setup
- Add page numbers or headers/footers
- Use narrow margins to make contents bigger.