

Topic Summary Cheat Sheet: Filter

What: A Filter is a feature that allows the user to temporarily hide certain rows from a table or range of data.

Why: A filter is a powerful data analysis tool, allowing users to temporarily remove potentially hundreds or even hundreds of thousands of rows of irrelevant information for the specific task at hand.

When: Apply a filter to temporarily remove irrelevant information from view, help find the answer to specific questions, help create data for a report or chart, etc. (e.g. only show rows for items in "blue" instead of all colors).

How:

1. Add Filter
 - a. Select desired table or range containing the data you want to filter.
 - b. Click the "Data" tab on the Ribbon.
 - c. Click the "Filter" option.
 - d. Click the dropdown button for the desired column.
 - e. Click on checkboxes for list values to uncheck them and temporarily hide all rows with those values.
 - f. Press "OK" button.
 - g. Repeat steps d-f as needed to apply additional filters to other columns.
2. Clear Individual Filter
 - a. Click the dropdown button for the column that has the filter you want to clear.
 - b. Click the "Clear Filter From [Field_Name]" option.
3. Clear All Filters
 - a. Click the "Data" tab on Ribbon.
 - b. Click the "Clear" option (right next to "Filter" option).
4. Turn Off Filter (i.e. Remove the ability to filter data)
 - a. Click the "Data" tab on Ribbon.
 - b. Click the "Filter" option to turn off the filter.

Topic Summary Cheat Sheet: Pie Chart

What

A Pie Chart is a visual representation of information, in which individual values are shown to be sections of a circle (i.e. "slices of a pie").

Why

A Pie Chart is a powerful data visualization tool, allowing users to convey information in a concise and compelling manner.

When

Use a Pie Chart to show parts as they relate to the whole (e.g. quarterly sales, as they relate to annual sales).

How

1. Prep Chart Data

- a. Ensure all columns have clear & succinct headers.
- b. Ensure no empty rows or columns within the desired chart data.

2. Create Chart

- a. Select desired range (including headers) containing the data you want to use for the Pie Chart.
- b. Click the "Insert" tab on the Ribbon.
- c. Click the "Insert Pie or Doughnut Chart" option (pie icon).
- d. Click the desired Pie Chart type (2-D Pie is recommended)

3. Format Chart

- a. Ensure the chart is highlighted (small white circles on corners and edges). If not highlighted, click anywhere on the chart to highlight it.
- b. Click the "Chart Design" tab on the Ribbon.
- c. Click the desired style from "Chart Styles" section.
- d. Press CTRL + 1 to open Format pane on right of screen.
- e. Click on different components of the chart (e.g. Chart Title, Data Series, Legend, etc.) to update the Format pane with options for that specific chart component.

4. Add Chart Elements

- a. Ensure the chart is highlighted (small white circles on corners and edges). If not highlighted, click anywhere on the chart to highlight it.
- b. Click the "Chart Design" tab on the Ribbon.
- c. Click the "Add Chart Element" option.
- d. Select the desired chart element (e.g. "Legend" --> "Right").
- e. Repeat steps a-d as needed to add more Chart Elements.

Topic Summary Cheat Sheet: Column Chart

What

A Column Chart is a visual representation of information, in which individual values are shown to be vertical columns alongside a vertical Y Axis.

Why

A Column Chart is a powerful data visualization tool, allowing users to convey information in a concise and compelling manner.

When

Use a Column Chart to show precise numerical values (e.g. sales per region).

How

1. Prep Chart Data

- a. Ensure all columns have clear & succinct headers.
- b. Ensure no empty rows or columns within the desired chart data.

2. Create Chart

- a. Select desired range (including headers) containing the data you want to use for the Column Chart.
- b. Click the "Insert" tab on the Ribbon.
- c. Click the "Insert Column or Bar Chart" option (column cluster icon).
- d. Click the desired Column Chart type (2-D Clustered Column is recommended)

3. Format Chart

- a. Ensure the chart is highlighted (small white circles on corners and edges). If not highlighted, click anywhere on the chart to highlight it.
- b. Click the "Chart Design" tab on the Ribbon.
- c. Click the desired style from "Chart Styles" section.
- d. Press CTRL + 1 to open Format pane on right of screen.
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- c. Click the "Add Chart Element" option.
- d. Select the desired chart element (e.g. "Legend" --> "Right").
- e. Repeat steps a-d as needed to add more Chart Elements.

Topic Summary Cheat Sheet: VLOOKUP Function

What

The VLOOKUP Function is a Lookup & Reference Function, which allows the user to look up a specific value from the leftmost column of a table, and return a different value in the same row of the table, from a column chosen by the user.

Why

The VLOOKUP Function eliminates the need to manually look up additional information about a specific record of data. When set up correctly, VLOOKUP is instantaneous, effortless, 100% accurate, and dynamic (result of VLOOKUP is updated if the data is updated).

When

Use a VLOOKUP Function to automatically look up additional information about a specific record of data (e.g. look up a product's color based on its Product ID).

How

1. Function Syntax (Arguments)
 - a. **lookup_value** - the value you want to look up.
 - b. **table_array** - where you want to look for the value.
 - c. **col_index_num** - the column number in the range containing the value to return.
 - d. **[range_lookup]** - return an Exact Match (FALSE or 0) or Approximate Match (TRUE or 1).
2. Notes
 - a. Prep data to ensure the lookup value is contained within the leftmost column of the source data table.

Topic Summary Cheat Sheet: Pivot Table

What: A Pivot Table is a tool that summarizes data in a dynamic & customizable way.

Why: A Pivot Table is one of the most powerful spreadsheet features, allowing users to quickly & effortlessly summarize hundreds of thousands of rows or more of data into a concise, dynamic, and completely customizable format.

When: Use a Pivot Table to summarize data, help answer a specific question, discover trends or insights, and create reports or dashboards (e.g. show a breakdown of total sales by region, year, and product type).

How:

1. Prep Data for Pivot Table
 - a. Within the data for Pivot Tables, ensure all columns have clear & succinct headers.
 - b. Within the data for Pivot tables, ensure no empty rows or columns.
2. Insert/Create Pivot Table
 - a. Select desired range (including headers) or table containing the data you want to use for the Pivot Table.
 - b. Click the "Insert" tab on the Ribbon.
 - c. Click the "Pivot Table" dropdown option and then click the "From Table/Range" option.
 - d. In the "PivotTable from table or range" pop-up window, choose where you want the PivotTable to be placed (New Worksheet or Existing Worksheet).
 - e. Click the "OK" button.
3. Build/Modify Pivot Table
 - a. Ensure the blank Pivot Table is selected to see "PivotTable Fields" pane on the right of the screen.
 - b. Experiment with different Pivot Table layouts by clicking and dragging desired fields to the 4 boxes at the bottom of the "PivotTable Fields" pane: Rows, Columns, Values, and Filters.
 - c. Experiment with various options in the "PivotTable Analyze" and "Design" tabs on the Ribbon.
4. Understand Pivot Table Builder Boxes
 - a. Rows - Group the data (displayed in rows).
 - b. Columns - Group the data (displayed in columns).
 - c. Values - Summarize the data (e.g. Sum, Average, Count, etc.).
 - d. Filters - Exclude/Include parts of the data based on desired criteria.
5. Explore Value Field Settings
 - a. Click on the dropdown of the desired field inside the "Values" box of the "PivotTable Fields" pane on the right of the screen.
 - b. Select the "Value Field Settings..." option.
 - c. Summarize values by desired type of calculation (e.g. Sum, Average, Count, etc.).
 - d. Click the "Number Format" button.
 - e. Select the desired Number format to best represent the current data.
 - f. Click the "OK" button of the "Format Cells" window.
 - g. [Optional: Assign a different Custom Name of the current field.]
 - h. Click the "OK" button of the "Value Field Settings" window.