



POWER BI CHEAT SHEET



PRAGMATIC
WORKS

The Merge Guide for the Power Query Editor

Left Outer	Right Outer	Full Outer
What it selects: All rows from the left table, matching rows from the right table	What it selects: All rows from the right table, matching rows from the left table	What it selects: All rows from both tables
Example: Suppose you have a table of customers and a table of orders. A left outer join would return all customers and their associated orders, including those customers who have not placed any orders.	Example: Continuing with the customer and orders example, a right outer join would return all orders and their associated customers, including those orders that are not linked to any customers.	Example: In the context of customer and orders, a full outer join would return all customers and their orders, as well as all orders and their associated customers. It includes all rows from both tables, filling in with null values where there is no match
Inner	Left Anti	Right Anti
What it selects: Only matching rows from both tables	What it selects: Only rows from the left table.	What it selects: Only rows from the right table.
Example: If you only want to retrieve rows where there is a match in both tables, you would use an inner join. For example, if you want to get a list of customers who have placed orders, you would use an inner join between the customers and orders tables.	Example: An anti join is used to find records in the left table for which there is no corresponding match in the right table. For example, if you want to find customers who have not placed any orders, you would use a left anti join between the customers and orders tables..	Example: Similar to the left anti join, a right anti join is used to find records in the right table for which there is no corresponding match in the left table. For instance, finding orders that have no associated customers.

You can use fuzzy merge to apply fuzzy matching algorithms when comparing columns!

Power BI Data Types

Decimal Number	Fixed Decimal Number	Whole Number
Decimal Number	Fixed decimal number	Whole Number
Example: 2319.99	Example: 2,319.99	Example: 2320
Use Case: Average Product Price	Use Case: Currency Values	Use Case: Number of Units Sold
Percentage	Date/Time	Date
Percentage	Date/Time	Date
Example: 231999.00%	Example: 1/1/2005 12:00:00 AM	Example: 1/1/2005
Use Case: Market Share Percentage	Use Case: Timestamp of Customer Purchases	Use Case: Sales Date
Time	Date/Time/Timezone	Duration
Time	Date/Time/Timezone	Duration
Example: 12:00:00 AM	Example: 1/1/2005 12:00:00 AM -05:00	Example: Years/Months/Days/ Hours/ Minutes/ Seconds
Use Case: Duration of a customer support call	Use Case: Timestamps with varied Timezones	Use Case: Time taken for a manufacturing process
Text	True/False	Binary
Text	True/False	Binary
Example: Atlas	Example: TRUE / FALSE	Example: BINARY
Use Case: Product Names	Use Case: Purchase Status, TRUE if customer made a purchase, FALSE if not.	Use Case: Only for Legacy purposes. If you try to load binary columns into Power BI, you might run into errors.
Any		
Example: ???		
Use Case: The status given to a column that doesn't have an explicit data type definition.		

Power BI Visuals

Comparison	Trends	Status	Geographic Location	Parts-of-a-Whole
Highlight relative differences and similarities between data points.	The Merge Guide for the Power Query Editor	Conveys the current state or performance of a metric.	Represents data spatially, showing patterns across regions.	Illustrates how individual components contribute to the whole.
Use Case: Compare monthly sales performance between different products using a column chart to identify top-performing items.	Use Case: Analyze quarterly revenue trends using a line chart to identify growth or decline patterns over time.	Use Case: Display the current sales performance against the target using a gauge visual for a quick status check.	Use Case: Analyze regional sales performance using a filled map to identify high and low-performing areas.	Use Case: Visualize the percentage distribution of product categories in total sales using a treemap.
Stacked Bar Chart	Line	Card	Map	Pie Chart
Clustered Bar/Column Chart	Stacked Column Chart	Gauge	Filled Map	Treemap
100% Stacked Bar Chart	Line and Stacked Column Chart	KPI	Shape Map	Area Chart
Scatter Plot		Multi-Row Card	Azure Map	Stacked Area Chart
		Card (new)	ArcGIS Maps	Ribbon
		Metrics (Preview)		Donut Chart
				100% Stacked Column Chart
Tabular	Flow	Filters		
Presents data in a structured, row-and-column format for detailed information.	Visualizes the flow or progression of data or processes.	Enables interactive control to refine displayed data.		
Use Case: Display detailed information about employee performance, such as sales figures and targets, using a table visual.	Use Case: Visualize the workflow of a sales process using a flowchart to understand the stages and bottlenecks.	Use Case: Allow users to dynamically explore sales data by product category using slicers for interactive filtering.		
Table	Waterfall	Slicer		
Matrix	Funnel	Slicer (New)		
		Artificial Intelligence		
		Leverages A.I for automated insights, predictions, or recommendations		
		Use Case: Implement sentiment analysis on customer feedback using an AI-powered visual to identify positive and negative sentiments.		
		Q&A	Smart Narrative	
		Key Influencers	Decomposition Tree	