

Anatomy of a Prompt

Choose Agent

Each has extensive "act instructions" to help them excel at data analytics for industry.

- o **No need to give instructions** such as "you are a chemical engineer."



Context

Industry, equipment, data, or process information, etc.

- o Give context at the **beginning** of a new chat.
- o If the context changes, consider starting a new chat.

Task/Question

The main question or task you want the AI to answer or do.

I want to calculate the cost of wasted reagent. Sum the Reagent Waste During Off-Spec signal over each month, then calculate the monthly cost, with units of \$. The reagent cost is 543 \$/kg.

Constraints

Rules or guidelines to follow.

Additional Info

Constants or other parameters or info the AI might need.

Pro Tips

Iterate Following up or rephrasing, as you would in a real conversation, can help refine both your & the AI's understanding of the analytics and approach.

Check AI's work Click Edit to check the underlying Formula; look up unfamiliar formulas in the Formula documentation.

Include units to help the assistant understand the desired math.

Follow links to Knowledge Source to learn more.

Specify item name(s) for new items, or for existing items if you have many similarly-named signals.

Ask "What can you do?" to get current AI skills.

Search for data Accepts regex; use 'Asset Name' to specify an asset.

logs its Actions in Journal at the bottom with Before & After workstep links.

Break complex analytics into steps especially if you need access to the 'intermediate' items produced.

New topic? Start new chat Click to see chat history.

Ask to outline how to do a task or calculate a given metric.

Ask "How do I (model, cleansing, etc.)?" to learn more about data analytics.

Troubleshooting

Incorrect Action

1. Click "Before" link in the AI's Journal entry at the bottom of the Journal to step back before the issue.
2. Start new chat using "+" button in AI window.

Start a new chat periodically to clear the AI's accumulation of references, metadata, etc.

Check agent choice e.g. is best for Data Lab/python.

(De)select items AI focuses on selected items in the Details pane. 'Un-select all' if it should 'see' all items.