



# Glossary

## Google Prompting Essentials

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Terms and definitions from all modules:

### A

**Analogous task:** Prompting a gen AI tool with a similar or related problem as a guide to solving a new problem

### C

**Chain-of-density prompting:** An iterative prompting technique used to generate increasingly detailed summaries of text, starting with a broad overview and gradually incorporating more specific information

**Chain-of-thought prompting:** A prompting technique where a gen AI tool retraces its path from input to output, listing out the reasoning behind its response step by step

**Constraints:** Specific parameters or limitations that direct a gen AI tool's output towards a particular result

**Context:** Background information, details, or guidelines that inform a gen AI tool's output, specifically its audience, goal, tone, and structure

**Contextual understanding:** A gen AI tool's ability to comprehend and interpret information within a specific context

### D

**Data validation:** The process of ensuring data is accurate, complete, consistent, and meets specific criteria before it's used



**Delimiters:** Special symbols (like "", <>, or \*\*) that help differentiate various pieces of your input such as task or context, keeping prompts tidy and increasing the likelihood of a useful output

## E

**Evaluation:** The processes of critically assessing an output to confirm it's accurate, unbiased, sufficient, relevant, and consistent to any context or prompt provided

## F

**Few-shot prompting:** A technique that provides two or more examples or references in a prompt

**Format:** The structure, layout, or presentation of an output

## G

**Generative AI:** A type of artificial intelligence that can create new content, such as text, images, or music, by learning patterns from existing data

**Greedy decoding:** Prompting in which the sampling parameters have been set to ensure the most likely outcome

## H

**Hallucinations:** When a gen AI tool provides an output with false information

**Human-in-the-loop approach:** When a human thinks critically about how they use, verify, and refine gen AI tools and their outputs

## I

**Image generation:** When a gen AI tool produces images from textual descriptions or other input data

**Input:** The data or information provided to the AI model to generate a desired response, or output



**Iteration:** The continuous refinement of prompts to enhance the quality of AI-generated outputs

## L

**Long-context window:** Allows gen AI tools to retain and utilize more information from past interactions when generating a response

## M

**Meta-prompting:** The practice of prompting gen AI to assist in the design of more successful, effective prompts

**Modalities:** Different mediums for conveying information, including text, image, video, or sound, that you can mix and match in both inputs and outputs

**Multimodal prompting:** A technique that includes multiple modalities, such as text, audio, and images, in the same prompt, used to transform one modality into another, like generating images from text, or text from video

## O

**One-shot prompting:** A technique that provides a single example or reference in a prompt

**Output:** The response provided by an AI model based on the provided data and information, or input

## P

**Persona:** The role or character you assign to a gen AI tool while prompting, guiding its behavior, tone, and knowledge base to generate tailored responses that meet your specific needs and objectives

**Prompt:** Input that provides instructions to the gen AI tool on how to generate output

**Prompt chaining:** The process of building on interconnected prompts to tap into a wider more complex array of capabilities



**Prompt framework:** The prompting best practices formula comprised of the following components: ***Task, Context, Reference, Evaluate, Iterate***

**Prompt generation strategies:** Strategies to help generate a meta-prompt from square one

**Prompt refinement strategies:** Strategies to improve upon meta-prompts that have already been designed

**Prompt versioning:** Keeping track of different versions of a prompt, providing the opportunity to compare or refine them to improve their effectiveness

## R

**References:** Supplementary resources provided to a gen AI tool that resemble or relate to a desired output

## S

**Sampling parameters:** Variables that expand or limit the pool of data that a gen AI tool chooses from, and dictates the probability of individual options within that pool

## T

**Task:** The action or objective a gen AI tool is meant to accomplish

**Temperature:** The sampling parameter that determines the degree of randomness in gen AI's selection process, a higher temperature encouraging greater variation in gen AI's random selection

**Tokens:** The fundamental building blocks of text that AI models use to process and understand language, which can be as small as a single character, a part of a word, or even multiple words

**Top-k value:** The sampling parameter that dictates the total number of tokens from which gen AI makes its selections

**Top-p value:** The sampling parameter that dictates the total combined probability of tokens from which AI selects

**Tree-of-thought prompting:** A prompting technique in which gen AI shows multiple possible outcomes to a prompt at once