

Prompting patterns are structured approaches to designing prompts that guide a large language model (LLM) to produce a specific type of output.¹ They act as reusable templates or strategies to solve common problems and elicit more effective and consistent responses from AI.²

Key Prompting Patterns

Pattern Name	Description	Example Prompt
Persona Pattern 🎭	Assigns the model a specific role or character to influence the tone, style, and content of its response. This is effective for generating content tailored to a particular audience or perspective.	"You are a seasoned travel agent. Suggest a five-day itinerary for a family of four visiting Paris, France."
Recipe Pattern 🔍	Breaks a complex task into a series of explicit, ordered steps. This is useful for multi-stage processes or when you want the model to show its reasoning.	"Provide a step-by-step guide on how to bake a chocolate cake. Start with a list of ingredients, then detail the preparation, baking, and decorating steps."
Zero-shot Prompting 🎯	Asks the model to perform a task without providing any examples. It relies solely on the model's pre-existing knowledge.	"Translate the following sentence into Spanish: 'The cat sat on the mat.'"
Few-shot Prompting 📊	Provides the model with a small number of examples to guide its response. This is excellent for demonstrating the desired format or style for a specific task.	"Here's how to classify movie sentiments: 'I loved this movie! -> Positive', 'This was a complete waste of time. -> Negative'. Classify the following: 'The acting was great, but the plot was weak.'"
Chain-of-Thought (CoT) 🧠	Instructs the model to think step-by-step before providing a final answer. This improves the model's ability to handle complex reasoning and problem-solving tasks.	"The final answer is [answer]. Let's break down the logic of this word problem: [word problem]. Show your work and reasoning step-by-step."

Pattern Name	Description	Example Prompt
Instruction Pattern 📄✍️	Uses direct and specific commands to tell the model exactly what to do. This is the most basic form of prompting.	"Summarize the key findings from the provided text in three bullet points."

Comparative Analysis and Test Scenarios

Scenario 1: Generating a Product Description 🛒

This scenario tests the model's ability to create marketing content with a specific tone and structure.

1. Broad/Unstructured Prompt:

- "Write a product description for a new smartphone."
- **Analysis:** The model's response is often generic. It might list basic features like "fast processor" and "great camera" without a clear marketing angle, target audience, or brand voice. The output is informative but lacks personality and specific details.

2. Refined/Pattern-based Prompts:

- **Persona Pattern:** "You are a witty, enthusiastic tech blogger. Write a product description for a new smartphone, the 'Aura X,' highlighting its revolutionary camera and sleek design. Use a fun, engaging tone."
- **Analysis:** The model adopts the specified persona, using playful language and focusing on the requested features. The response is much more creative and tailored, feeling like a genuine tech review rather than a bland description. It's more likely to resonate with a specific audience.
- **Instruction Pattern:** "Write a product description for the 'Aura X' smartphone.³ The description must be under 100 words and include the phrases 'cinematic photography' and 'ergonomic design'."
- **Analysis:** The model follows all instructions precisely. The response is concise and contains the exact phrases requested. This pattern excels at constraining the output to meet strict requirements, ensuring a predictable and structured result.

Scenario 2: Solving a Math Word Problem 🧮

This scenario evaluates the model's reasoning capabilities, particularly with multi-step logical tasks.

1. Broad/Unstructured Prompt:

- "John has 5 apples, and he buys 3 more. He gives 2 to his friend. How many apples does he have now?"
- **Analysis:** For simple problems, the model usually gives the correct answer directly ("6 apples"). However, it often fails on more complex problems, providing an incorrect final answer without showing any work.

2. Refined/Pattern-based Prompts:

- **Chain-of-Thought (CoT) Pattern:** "John has 5 apples, and he buys 3 more. He gives 2 to his friend. How many apples does he have now? Think step-by-step to arrive at the solution."
- **Analysis:** The model breaks the problem down into a logical sequence:
 1. John starts with 5 apples.
 2. He adds 3 more apples ($5+3=8$).
 3. He gives away 2 apples ($8-2=6$).
 4. Final Answer: 6 apples.
- This approach significantly increases the accuracy of the answer by forcing the model to process the problem sequentially and explicitly show its work. This reduces the chance of errors and makes the solution transparent.

Scenario 3: Summarizing a Research Article

This scenario tests the model's ability to extract and synthesize information from a provided text.

1. Broad/Unstructured Prompt:

- "Summarize the key points of this article: [insert full article text here]."
- **Analysis:** The model may produce a summary, but its quality is unpredictable. It might be too long, miss critical details, or focus on minor points. The output may lack coherence or proper structure.

2. Refined/Pattern-based Prompts:

- **Few-shot Prompting:** "Here is an example of a good summary: [Example Summary]. Now, summarize the following article: [insert full article text here]."
- **Analysis:** By providing a high-quality example, the model learns the desired style, length, and level of detail.⁴ The resulting summary is more likely to match the quality of the example, as the model is conditioned on the provided "shot" of information.⁵
- **Instruction Pattern:** "Summarize the following article in exactly three sentences, focusing only on the main conclusion and the primary evidence. [insert full article text here]."

- **Analysis:** The model's response adheres to the strict constraints of the prompt, resulting in a concise and focused summary. It successfully extracts the core information and presents it in the specified format, avoiding irrelevant details.

Conclusion

The quality of AI responses is directly proportional to the quality of the prompt.⁶ While broad prompts may work for simple tasks, they often yield generic and inconsistent results.

Prompting patterns are a crucial tool for prompt engineering, providing the necessary structure and context for LLMs to generate high-quality, accurate, and relevant outputs.⁷

By applying patterns like the **Persona Pattern** for creative tasks, **Chain-of-Thought** for reasoning, and **Instruction Pattern** for precision, users can significantly enhance the effectiveness of their interactions with AI. This iterative process of refining prompts based on desired outcomes is essential for unlocking the full potential of these powerful models.