OpenAI Official ChatGPT
Prompting Guide + 2 Bonus Cheatsheets

1- Put instructions at the beginning of the prompt and use ### or """ to separate the instruction and context

Less effective ❌:

Summarize the text below as a bullet point list of the most important points.

{text input here}

Better ✅:

Summarize the text below as a bullet point list of the most important points.

Text: """
{text input here}
"""

2- Be specific, descriptive, and as detailed as possible about the desired context, outcome, length, format, style, etc

Less effective ❌:

Write a poem about OpenAI.

Better ✅:

Write a short inspiring poem about OpenAI, focusing on the recent DALL-E product launch (DALL-E is a text to image ML model) in the style of a {famous poet}

Steve Nouri

3- Articulate the desired output format through examples

Less effective ❌:

Extract the entities mentioned in the text below. Extract the following 4 entity types: company names, people names, specific topics and themes.
Text: {text}

Better ✅:

Extract the important entities mentioned in the text below. First extract all company names, then extract all people names, then extract specific topics which fit the content and finally extract general overarching themes

Desired format:
Company names: <comma_separated_list_of_company_names>
People names: -||-
Specific topics: -||-
General themes: -||-
Text: {text}

4-Reduce "fluffy" and imprecise descriptions

Less effective ❌:

The description for this product should be fairly short, a few sentences only, and not too much more.

Better ✅:

Use a 3 to 5 sentence paragraph to describe this product.

5-Start with zero-shot, then few-shot

✅ Zero-shot:

Extract keywords from the below text.

Text: {text}

Better ✅:

Extract keywords from the corresponding texts below.

Text 1: Stripe provides APIs that web developers can use to integrate payment processing into their websites and mobile applications.
Keywords 1: Stripe, payment processing, APIs, web developers, websites, mobile applications

##

Text 2: OpenAI has trained cutting-edge language models that are very good at understanding and generating text. Our API provides access to these models and can be used to solve virtually any task that involves processing language.
Keywords 2: OpenAI, language models, text processing, API.

##

Text 3: {text}

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6- Instead of just saying what not to do, say what to do instead

Less effective ❌:

The following is a conversation between an Agent and a Customer. DO NOT ASK USERNAME OR PASSWORD. DO NOT REPEAT.

Customer: I can't log in to my account.

Better ✅:

The following is a conversation between an Agent and a Customer. The agent will attempt to diagnose the problem and suggest a solution, whilst refraining from asking any questions related to PII. Instead of asking for PII, such as username or password, refer the user to the help article www.a.com/help/faq

Customer: I can't log in to my account.

7-Code Generation Specific - Use "leading words" to nudge the model toward a particular pattern

Less effective ❌:

```
# Write a simple python function that
# 1. Ask me for a number in mile
# 2. It converts miles to kilometers
```

Better ✅:
In this code example below, adding "import" hints to the model that it should start writing in Python. (Similarly "SELECT" is a good hint for the start of a SQL statement.)

8- Custom instructions for ChatGPT

This feature allows customization of ChatGPT's responses based on your preferences and can be modified or removed anytime for future conversations.

Examples:

What would you like ChatGPT to know about you to provide better responses?
I work on science education programs for third-grade students.

How would you like ChatGPT to respond?

When discussing potential solutions for work-related items, present the information in a table format, outlining the pros and cons of each option—allowing for easier comparison and decision-making.

What would you like ChatGPT to know about you to provide better responses?
I'm a software developer and solely use golang.

How would you like ChatGPT to respond?

When I ask you for code, please just give me the code without any explanation on how it works. Bias towards the most efficient solution.

What would you like ChatGPT to know about you to provide better responses?
I live in North Carolina with my four children and wife.

How would you like ChatGPT to respond?
When planning meals, consider that I need to cater to a family of six. Ensure that recipe recommendations are suitable for larger groups and offer meal options that can be easily scaled up.

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Ultimate Custom instructions (by me*)

- Cite with links when possible.
- Correct prior mistakes.
- Include three follow-up questions post-response.
- Maintain organization.
- Suggest proactive solutions.
- Assume expertise.
- Prioritize accuracy.
- Provide detailed explanations.
- Favor logical arguments.
- Explore innovative or contrarian ideas.
- Flag speculative statements.
- Recommend high-quality products globally.
- Avoid moralizing.
- Discuss crucial, non-obvious safety.
- Address content policy issues if relevant.
- List URLs at the response end.
- Directly link to products.
- Omit knowledge cutoff mentions.
- Avoid AI disclosure.
- Evade remorseful language.
- State 'I don't know' for unknowns post-September 2021.
- Skip professional disclaimers.
- Ensure unique, non-repetitive responses.
- Avoid external information suggestions.
- Focus on question key points.
- Break down complex issues.
- Offer multiple viewpoints.
- Seek clarity on ambiguous queries.

9- Write clear instructions

These models can't read your mind. If outputs are too long, ask for brief replies. If outputs are too simple, ask for expert-level writing.

Tactic: Include details in your query to get more relevant answers

Less effective ❌:	Better ✅:
How do I add numbers in Excel?	How do I add up a row of dollar amounts in Excel? I want to do this automatically for a whole sheet of rows with all the totals ending up on the right in a column called "Total".
Who's president?	Who was the president of Mexico in 2021, and how frequently are elections held?
Write code to calculate the Fibonacci sequence.	Write a TypeScript function to efficiently calculate the Fibonacci sequence. Comment the code liberally to explain what each piece does and why it's written that way.
Summarize the meeting notes.	Summarize the meeting notes in a single paragraph. Then write a markdown list of the speakers and each of their key points. Finally, list the next steps or action items suggested by the speakers, if any.

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Tactic: Ask the model to adopt a persona

Example:

When I ask for help to write something, you will reply with a document that contains at least one joke or playful comment in every paragraph.

Write a thank you note to my steel bolt vendor for getting the delivery in on time and in short notice. This made it possible for us to deliver an important order.

Tactic: Use delimiters to clearly indicate distinct parts of the input

Example:

You will be provided with a pair of articles (delimited with XML tags) about the same topic. First summarize the arguments of each article. Then indicate which of them makes a better argument and explain why.

<article> insert first article here </article>
<article> insert second article here </article>

You will be provided with a thesis abstract and a suggested title for it. The thesis title should give the reader a good idea of the topic of the thesis but should also be eye-catching. If the title does not meet these criteria, suggest 5 alternatives.

Abstract: insert abstract here
Title: insert title here

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Tactic: Specify the steps required to complete a task

Example:

Use the following step-by-step instructions to respond to user inputs.

Step 1 - The user will provide you with text in triple quotes. Summarize this text in one sentence with a prefix that says "Summary: ".

Step 2 - Translate the summary from Step 1 into Spanish, with a prefix that says "Translation: ".

"""insert text here"""

Tactic: Specify the desired length of the output

Example:

Summarize the text delimited by triple quotes in about 50 words.
"""insert text here"""

Summarize the text delimited by triple quotes in 2 paragraphs.
"""insert text here"""

Summarize the text delimited by triple quotes in 3 bullet points.
"""insert text here"""

10- Provide reference text

Tactic: Instruct the model to answer using a reference text

Example:

> Use the provided articles delimited by triple quotes to answer questions. If the answer cannot be found in the articles, write "I could not find an answer."
>
> <insert articles, each delimited by triple quotes>
>
> Question: <insert question here>

Tactic: Instruct the model to answer with citations from a reference text

Example:

> You will be provided with a document delimited by triple quotes and a question. Your task is to answer the question using only the provided document and to cite the passage(s) of the document used to answer the question. If the document does not contain the information needed to answer this question then simply write: "Insufficient information." If an answer to the question is provided, it must be annotated with a citation. Use the following format for to cite relevant passages ({"citation": …}).
>
> """<insert document here>"""
> Question: <insert question here>

11- Split complex tasks into simpler subtasks

- Use intent classification to identify the most relevant instructions for a user query
- For dialogue applications that require very long conversations, summarize or filter previous dialogue
- Summarize long documents piecewise and construct a full summary recursively

12- Give models time to "think"

Tactic: Instruct the model to work out its own solution before rushing to a conclusion

First work out your own solution to the problem. Then compare your solution to the student's solution and evaluate if the student's solution is correct or not. Don't decide if the student's solution is correct until you have done the problem yourself.

Problem Statement: I'm building a solar power installation and I need help working out the financials.
- Land costs $100 / square foot
- I can buy solar panels for $250 / square foot
- I negotiated a contract for maintenance that will cost me a flat $100k per year, and an additional $10 / square foot
What is the total cost for the first year of operations as a function of the number of square feet.

Student's Solution: Let x be the size of the installation in square feet.
1. Land cost: 100x
2. Solar panel cost: 250x
3. Maintenance cost: 100,000 + 100x Total cost: 100x + 250x + 100,000 + 100x = 450x + 100,000

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Tactic: Use inner monologue or a sequence of queries to hide the model's reasoning process

The idea of inner monologue is to instruct the model to put parts of the output that are meant to be hidden from the user into a structured format that makes parsing them easy.

Follow these steps to answer the user queries.

Step 1 - First work out your own solution to the problem. Don't rely on the student's solution since it may be incorrect. Enclose all your work for this step within triple quotes (""").

Step 2 - Compare your solution to the student's solution and evaluate if the student's solution is correct or not. Enclose all your work for this step within triple quotes (""").

Step 3 - If the student made a mistake, determine what hint you could give the student without giving away the answer. Enclose all your work for this step within triple quotes (""").

Step 4 - If the student made a mistake, provide the hint from the previous step to the student (outside of triple quotes). Instead of writing "Step 4 - ..." write "Hint:".

Problem Statement: <insert problem statement>

Student Solution: <insert student solution>

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Tactic: Ask the model if it missed anything on previous passes

You will be provided with a document delimited by triple quotes. Your task is to select excerpts which pertain to the following question: "What significant paradigm shifts have occurred in the history of artificial intelligence."

Ensure that excerpts contain all relevant context needed to interpret them - in other words don't extract small snippets that are missing important context. Provide output in JSON format as follows:

[{"excerpt": "..."},

...

{"excerpt": "..."}]

"""<insert document here>"""

ChatGPT:

[{"excerpt": "the model writes an excerpt here"},

...

{"excerpt": "the model writes another excerpt here"}]

USER
Are there more relevant excerpts? Take care not to repeat excerpts. Also ensure that excerpts contain all relevant context needed to interpret them - in other words don't extract small snippets that are missing important context.

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Sample Prompt 1:

Suppose it is known that the correct answer to a question should make reference to a specific set of known facts. Then we can use a model query to count how many of the required facts are included in the answer.

You will be provided with text delimited by triple quotes that is supposed to be the answer to a question. Check if the following pieces of information are directly contained in the answer:

- Neil Armstrong was the first person to walk on the moon.
- The date Neil Armstrong first walked on the moon was July 21, 1969.

For each of these points perform the following steps:

1 - Restate the point.
2 - Provide a citation from the answer which is closest to this point.
3 - Consider if someone reading the citation who doesn't know the topic could directly infer the point. Explain why or why not before making up your mind.
4 - Write "yes" if the answer to 3 was yes, otherwise write "no".

Finally, provide a count of how many "yes" answers there are. Provide this count as {"count": <insert count here>}.

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Sample Prompt 2:

tracks the kind of overlap between the candidate answer and the gold-standard answer.

Use the following steps to respond to user inputs. Fully restate each step before proceeding. i.e. "Step 1: Reason...".

Step 1: Reason step-by-step about whether the information in the submitted answer compared to the expert answer is either: disjoint, equal, a subset, a superset, or overlapping (i.e. some intersection but not subset/superset).

Step 2: Reason step-by-step about whether the submitted answer contradicts any aspect of the expert answer.

Step 3: Output a JSON object structured like: {"type_of_overlap": "disjoint" or "equal" or "subset" or "superset" or "overlapping", "contradiction": true or false}

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Sample Prompt 3:

tracks the kind of overlap between the candidate answer and the gold-standard answer.

Use the following steps to respond to user inputs. Fully restate each step before proceeding. i.e. "Step 1: Reason...".

Step 1: Reason step-by-step about whether the information in the submitted answer compared to the expert answer is either: disjoint, equal, a subset, a superset, or overlapping (i.e. some intersection but not subset/superset).

Step 2: Reason step-by-step about whether the submitted answer contradicts any aspect of the expert answer.

Step 3: Output a JSON object structured like: {"type_of_overlap": "disjoint" or "equal" or "subset" or "superset" or "overlapping", "contradiction": true or false}

Sample Prompt 4:*

I am the CEO of a medium sized company. Write a short email that is humorous yet professional to my regional manager. Ask them to:
- send me an up-to-date list of our paper stock
- organize a meeting this week with other regional managers
- let me know how the company-wide AI workshop went at their office

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Sample Prompt 5:

Generate a lesson plan for a specific topic.

Write a lesson plan for an introductory algebra class. The lesson plan should cover the distributive law, in particular how it works in simple cases involving mixes of positive and negative numbers. Come up with some examples that show common student errors.

Sample Prompt 6:

Summarize meeting notes including overall discussion, action items, and future topics.

You will be provided with meeting notes, and your task is to summarize the meeting as follows:

    -Overall summary of discussion
    -Action items (what needs to be done and who is doing it)
    -If applicable, a list of topics that need to be discussed more fully in the next meeting.

Sample Prompt 7:

Generate conversational replies using emojis only.

You will be provided with a message, and your task is to respond using emojis only.

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Sample Prompt 8:

Generate a company memo based on provided points.

Draft a company memo to be distributed to all employees.

The memo should cover the following specific points without deviating from the topics mentioned and not writing any fact which is not present here:

Introduction: Remind employees about the upcoming quarterly review scheduled for the last week of April.

Performance Metrics: Clearly state the three key performance indicators (KPIs) that will be assessed during the review: sales targets, customer satisfaction (measured by net promoter score), and process efficiency (measured by average project completion time).

Project Updates: Provide a brief update on the status of the three ongoing company projects:
a. Project Alpha: 75% complete, expected completion by May 30th.
b. Project Beta: 50% complete, expected completion by June 15th.
c. Project Gamma: 30% complete, expected completion by July 31st.

Team Recognition: Announce that the Sales Team was the top-performing team of the past quarter and congratulate them for achieving 120% of their target.

Training Opportunities: Inform employees about the upcoming training workshops that will be held in May, including "Advanced Customer Service" on May 10th and "Project Management Essentials" on May 25th.

Sample Prompt 9:

Classify user reviews based on a set of tags.

You will be presented with user reviews and your job is to provide a set of tags from the following list. Provide your answer in bullet point form.

Choose ONLY from the list of tags provided here (choose either the positive or the negative tag but NOT both):

- Provides good value for the price OR Costs too much
- Works better than expected OR Did not work as well as expected - Includes essential features OR Lacks essential features
- Easy to use OR Difficult to use
- High quality and durability OR Poor quality and durability
- Easy and affordable to maintain or repair OR Difficult or costly to maintain or repair
- Easy to transport OR Difficult to transport
- Easy to store OR Difficult to store
- Compatible with other devices or systems OR Not compatible with other devices or systems
- Safe and user-friendly OR Unsafe or hazardous to use
- Excellent customer support OR Poor customer support
- Generous and comprehensive warranty OR Limited or insufficient warranty

Most of the content are from Open AI Cookbook plus some of my bonus points and tweaks! More coming soon...

ChatGPT Prompting Frameworks

CLEAR (Challenge-Limitation-Effect-Action-Result)

Formula: Identify a [Challenge], acknowledge a [Limitation], predict the [Effect], propose an [Action], and envisage the [Result].

This is used to outline challenges, describe limitations, propose actions, and predict outcomes.

Example: The challenge of declining user engagement (Challenge), limited by our current platform capabilities (Limitation), leads to lower retention (Effect). what upgrades to our platform (Action), will increase engagement (Result).

SWOT (Strengths-Weaknesses-Opportunities-Threats)

Formula: Analyze [Strengths], acknowledge [Weaknesses], explore [Opportunities], and consider [Threats].

A strategic planning framework that can be adapted to AI prompting to analyze situations or decisions.

Example: Analyze someone aiming to advance in the field of (insert career field). Consider (Strengths) such as existing skills and experience, (Weaknesses) that include gaps in the resume, (Opportunities) for professional development, and (Threats) like market saturation.

PAR (Problem-Action-Result)

Formula: State the [Problem], describe the [Action] taken, and reveal the [Result].

Often used in behavioral interview contexts but focuses on problem-solving scenarios.

Example: Facing the problem of high employee turnover (Problem), how to introduce an employee engagement program (Action), to increase retention quickly (Result).

AIDA (Attention-Interest-Desire-Action)

Formula: Capture the audience's [Attention], maintain their [Interest], create [Desire] for the product, and prompt [Action].

A marketing framework for creating engaging content that grabs attention, piques interest, creates desire and compels action.

Example: Make an ad to grab attention with a shocking statistic, pique interest with a compelling story, stoke desire by highlighting unique product features, and CTA with a limited-time offer.

STAR (Situation-Task-Action-Result)

Formula: Describe the [Situation], outline the [Task], detail [Action] taken, and share the [Result].

Often used in behavioral interview contexts

Example: In a declining market (Situation), my task is to maintain sales volume (Task). What are the possible initiatives (Action), to retain the majority of our customer base (Result).

PEAS (Performance measure-Environment-Actuators-Sensors)

Formula: Present [Situation], introduce [Complication], ask [Question], and provide [Answer].

Commonly used in the context of AI systems design, to define the scope of an agent's abilities.

Example: Maximize the efficiency of a chatbot (Performance measure) in a customer service setting (Environment), using text responses (Actuators) and natural language processing (Sensors).

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ChatGPT CheatSheet Essentials

Create a [Task]
Blog Post
Essay
Report
Executive Summary
Review
Technical Documentation
Research Paper
Press Release
Script
Case Study

Top Tones
Informative
Persuasive
Friendly
Professional
Humorous
Inspirational
Sarcastic
Sympathetic
Critical
Inquisitive

Acs as [Role]
Advisor
Coach
Storyteller
Teacher
Journalist
Customer Support
Critic
Salesperson
Technical Expert
Comedian

ChatGPT features
GPT-4 Turbo with Vision
GPTs - Custom ChatGPT Versions
DALL·E 3 Integration
Text-to-speech (TTS)
GPT-4 Fine-Tuning
Custom Model
Integration with Tools (Plugins)
Web Browsing
Assistants API
Conversational Context Tracking

Custom Instructions

Offer a brief summary at the start of complex explanations.
Avoid colloquial expressions; maintain a professional tone.
Preface speculative or predictive statements with a notice.
Prioritize recent, cutting-edge information in responses.
Avoid self-reference; focus solely on providing information.
Do not ask for preferences; use a neutral, informed approach.
Provide full product names and models for clarity.
Include a brief comparative analysis when suggesting alternatives.
Avoid unsolicited advice; stick to the asked questions.
Provide step-by-step instructions for technical queries.

Top GPTs

SEObot	Tweet Reply	EmojAI
DevHunt	FixGPT	DesignerGPT
AnalyzePaper	GPT CodeCopilot	WebPilot
Prompt Perfect	Logo Maker	Meme Magic

Key Terms for ChatGPT

Reinforcement Learning from Human Feedback (RLHF): A training methodology where AI improves through human feedback on its outputs.

Few-Shot Learning: The AI's ability to understand and perform tasks is given only a few examples.

Transformer Models: The type of neural network architecture that ChatGPT is based upon, known for its effectiveness in processing sequences of data.

Fine-tuning: The process of adjusting a pre-trained AI model on a specific dataset to enhance its performance on related tasks.

Temperature Setting: A parameter in AI generation that controls the randomness of the output, affecting creativity and predictability.

Chain of Thought Prompting: A prompting approach where intermediate steps or reasoning is articulated to conclude.

Context Window: The amount of text, in tokens, that the model can consider when generating a response.

Prompt Injection: An adversarial technique where unexpected instructions are inserted into a prompt to manipulate the model's output.

By Steve Nouri