



AI Masterclass: Prompt Engineering

Write better prompts, spot hallucinations, use AI honestly

The Anatomy of a Great Prompt

A **prompt** is the instruction you give an AI like ChatGPT. A basic prompt gets a basic answer. A great prompt uses the **R.T.C. Framework**:

R = Role

Tell the AI who to act like. "Act like a science teacher..."

T = Task

What exactly should it do? "...explain how black holes form..."

C = Constraints

Rules it must follow. "...in exactly 3 sentences for a 7th grader."

1 Upgrade This Prompt

Basic prompt: "Tell me about the American Revolution."

a. Plan an upgraded prompt using the R.T.C. Framework. Write one part on each line.

R • Role: _____

T • Task: _____

C • Constraints: _____

b. Now put it all together. Write your full upgraded prompt as one request:

c. Which part of your prompt (R, T or C) do you think will improve the answer the most? Why?



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2 The Hallucination Hunt

AI programs don't "know" facts; they predict which words are likely to come next. Sometimes they make up information that sounds confident but is completely wrong. This is called a **hallucination**.

A student asked an AI chatbot: "*Who was the first person to walk on Mars?*" Here is the answer it gave:

AI'S ANSWER

"The first person to walk on Mars was NASA astronaut Michael Collins, who stepped onto the Martian surface in 1984 during the Ares I mission."

a. What is wrong with this answer? (Hint: has any human ever traveled to Mars?)

b. Why might someone believe this answer? Name one detail that makes it *sound* true.

c. Name one trusted source you could use to fact-check it.

3 Brainstorming vs. Cheating

Put a **check (✓)** in the box if it is a **good, responsible way** to use AI for schoolwork. Put an **X** if it is cheating.

☐ **A** Asking the AI to write your whole history essay and turning it in as your own work.

☐ **B** Asking the AI for a list of 5 possible topics you could write your history essay about.

☐ **C** Pasting your finished essay into ChatGPT and asking it to point out spelling and grammar errors so you can fix them yourself.

d. Rewrite scenario A so it becomes a responsible use of AI:
