

Introduction to Prompt Engineering

Prompt Lab | Module worksheet | Audience: Teen

Theory Summary

{'heading': 'What prompt engineering means', 'body': 'A prompt is the instruction or question you give an AI. Prompt engineering means improving that message so the answer is clearer, safer, and more useful.'}

{'heading': 'Why wording matters', 'body': 'AI models respond to language patterns. A vague prompt can lead to a broad answer, while a specific prompt usually leads to a better one.'}

{'heading': 'Start with the goal', 'body': 'Before typing, think about the task, the audience, the output, and what success should look like.'}

{'heading': 'AI is powerful but limited', 'body': 'AI can help with ideas, summaries, drafts, and explanations, but even a clear prompt can produce mistakes. Check important facts before you use the answer.'}

Example Prompts

Example 1: Simple ask

Explain fractions in simple words.

Example 2: Goal-based prompt

Explain climate change in simple words for a 13-year-old student using 5 bullet points.

Example 3: Study helper

Help me understand photosynthesis like I am in middle school. Use short paragraphs and one example.

Exercises & Practice

Guided Practice

{'title': 'AI Communication Fundamentals', 'focus': 'Evolution, goal setting, capability assessment', 'steps': ['Name the task.', 'Name the audience.', 'Add one goal or success rule.', 'Choose the answer format.'], 'prompt_template': 'Help me with [task] for [audience]. My goal is [goal]. Please answer in [format].'}

Write your answer below:

Fill in the Blanks

1. Choose the better prompt: A. Tell me about sharks. B. Explain 5 interesting facts about sharks for a school science poster.

2. Improve: Help with homework.

3. What is missing from: Write a speech.

4. Which prompt is most likely to produce bullet points?

Challenge

{'title': 'AI Strategy Development', 'focus': 'Business implementation planning with risk assessment', 'brief': 'Design a safe AI plan for a small school club or pretend business.', 'prompt_template': 'Act like a friendly strategy helper. Help a [club/business] use AI for [task]. Give 3 benefits, 3 risks, and 3 safety rules.'}

Quiz Questions

- 1.
- 2.
- 3.

ANSWER KEY (Instructor copy -- detach before distributing)

Fill in the Blanks -- Answers

1. Choose the better prompt: A. Tell me about sharks. B. Explain 5 interesting facts about sharks for a school science poster.
2. Improve: Help with homework.
3. What is missing from: Write a speech.
4. Which prompt is most likely to produce bullet points?

Answer: B

Answer: B

Answer: T

Answer: B

Quiz -- Correct Answers & Explanations

- 1.
- 2.
- 3.

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