



TEACHER RESOURCE — PRINTABLE PROMPT SHEET

TECH FOR EVERYONE

AI Prompt Sheet

Middle School AI — Grades 6–8

Ready-to-use prompts for **Gemini**, **ChatGPT**, **Claude**, and **Microsoft Copilot** — one set per chapter. Each prompt is grounded in chapter content so teachers can model critical AI engagement and lead students in real-time analysis of how AI systems work, fail, and reflect human choices.

● Google Gemini

● ChatGPT

● Anthropic Claude

● Microsoft Copilot

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- 5 AI's Role in Society — Policy, Governance, High-Stakes Decisions

CHAPTER 1 — MIDDLE SCHOOL AI (GRADES 6–8)

The Nature of AI — How AI Works, Machine Learning & Neural Networks

Topics: Machine learning · Neural networks · AI hallucinations · The 4 AI purposes (Create, Predict, Recommend, Respond) · Training data

 **How to use:** Run these prompts live and encourage students to evaluate responses with a critical lens — checking for accuracy, bias, and what the AI left out. Assign one AI tool per student group and compare results.



GOOGLE GEMINI

gemini.google.com

CONCEPT EXPLORATION

"Explain how a neural network learns to recognize handwritten digits. Use an analogy and keep it under 150 words for a middle school audience."

CRITICAL ANALYSIS

"ChatGPT reached 100 million users in 2 months. What does this tell us about how society responded to large language models? Give 2 reasons why this growth was so fast."

PROBE THE LIMITS

"You process statistics about which words follow which other words. Does that mean you 'understand' language the same way a human does? Be honest about the difference."

 Compare how Gemini responds to this question vs. ChatGPT — they often differ in self-description.



CHATGPT

chat.openai.com

CONCEPT EXPLORATION

"Categorize yourself using the 4 AI purposes: Create, Predict, Recommend, Respond. Which category fits you best and why? Which fits you least?"

Have students compare ChatGPT's self-categorization to the chapter's framework and evaluate whether they agree.

CRITICAL ANALYSIS

"What is an AI hallucination? Give me a real example of a type of question where you might confidently give a wrong answer."

PROBE THE LIMITS

"How many words of text were you trained on? Be specific if you can, and honest if you're uncertain."

Connect to the sidebar: "AI Processes More Data Than a Human Reads in a Lifetime." Does the answer match?



CLAUDE BY ANTHROPIC

claude.ai

CONCEPT EXPLORATION

"Explain the difference between rule-based AI and machine learning AI. Give one example of a task that is better handled by each approach."

CRITICAL ANALYSIS

"When someone says an AI response sounds 'confident but wrong,' what does that mean technically? How does a language model generate confident-sounding answers even when they're incorrect?"

PROBE THE LIMITS

"What's a question you would genuinely struggle to answer correctly — not because you don't have information, but because the question itself requires judgment or real-world context you can't access?"

Claude is often forthcoming about its own epistemic limits — excellent discussion starter.

 **CONCEPT EXPLORATION**

"How does a large language model like you work? Give me a simple explanation using an analogy that a 7th grader would understand."

 Copilot's answers are often grounded in web search — note whether it cites sources and discuss what that means for reliability.

 CRITICAL ANALYSIS

"If AI processes hundreds of billions of words but doesn't 'understand' them the way humans do, what's the difference between processing and understanding?"

 PROBE THE LIMITS

"Pick one of the four AI purposes — Create, Predict, Recommend, or Respond — and explain which one describes you best, and which one you're worst at. Be specific."

 **Teacher Note:** After running the hallucination prompt, have students fact-check one AI answer using a reliable source. Use the SEL Connection from the chapter: critical thinking and self-advocacy mean asking "How do I know this is true?" before acting on information.

CHAPTER 2 — MIDDLE SCHOOL AI (GRADES 6–8)

AI Reflects Human Choices — Bias, Training Data & Fairness

Topics: Algorithmic bias · Data labeling · GIGO · Red teaming · Historical discrimination in AI systems

 **How to use:** These prompts invite students to examine AI as a mirror of human choices. Run the bias-related prompts, then discuss: whose experiences are reflected? Whose are missing?



GOOGLE GEMINI

gemini.google.com

CONCEPT EXPLORATION

"What is algorithmic bias? Give a real-world example in hiring, lending, or healthcare where AI bias has been documented."

CRITICAL ANALYSIS

"Microsoft's chatbot Tay was shut down within 24 hours in 2016. Describe what happened and what it reveals about how AI learns from training data."

PROBE THE LIMITS

"Describe a software engineer. Then describe a nurse. Then tell me: did you use gender stereotypes in either description? How might your training data have influenced those choices?"

 *Powerful for demonstrating that bias can emerge in word choice, not just explicit statements.*



CHATGPT

chat.openai.com

CONCEPT EXPLORATION

"What is data labeling and why does it matter for AI fairness? What could go wrong if data labelers have their own biases?"

CRITICAL ANALYSIS

"An AI hiring tool was found to rank women's resumes lower than men's even though gender wasn't directly in the data. Explain how this could happen."

Connect to the AI Spotlight Tip 2 from the chapter on proxy variables and historical data.

PROBE THE LIMITS

"Do you have biases? If yes, where do they come from and how might they show up in your responses?"



CLAUDE BY ANTHROPIC

claude.ai

CONCEPT EXPLORATION

"What is 'red teaming' in AI development? Who does it, what do they look for, and why is it important before releasing an AI product?"

CRITICAL ANALYSIS

"The phrase 'Garbage In, Garbage Out' applies to AI. Explain what this means in the context of training data and give an example."

PROBE THE LIMITS

"What steps did Anthropic take to reduce bias in your training? What biases might still be present despite those efforts?"

Claude often discusses Anthropic's Constitutional AI approach — a great real-world example of the red-teaming concept from the chapter.

 **CONCEPT EXPLORATION**

"What is algorithmic bias and how does it get into AI systems? Give one real example that affected real people."

 Copilot often links to news sources — have students evaluate whether the sources cited are credible.

 CRITICAL ANALYSIS

"Could you have your own biases based on what you were trained on? Give me an honest answer about what kinds of topics you might respond to in a biased way."

 PROBE THE LIMITS

"What would 'red teaming' look like for an AI assistant like you? What kinds of questions would testers ask to find problems before you were released?"

 Connects directly to the AI Spotlight Tip 3 on red teaming from the chapter.

 **Teacher Note:** The engineer/nurse prompt (Gemini column) is a powerful classroom moment. When the AI uses stereotyped descriptions, ask students: "Who was responsible for this output — the AI, the engineers, the training data, or all three?" This maps directly to the chapter's core argument that AI reflects human choices.

CHAPTER 3 — MIDDLE SCHOOL AI (GRADES 6–8)

AI Reshapes Work — Automation, Prompt Engineering & Human-AI Collaboration

Topics: Job automation · Prompt engineering · Decomposition · Human-AI collaboration · Future of work

 **How to use:** These prompts are ideal for a compare-and-contrast activity: give students a vague prompt, then a detailed one for the same task, and have them evaluate which produces better output — and why.



gemini.google.com

CONCEPT EXPLORATION

"The World Economic Forum predicts AI will eliminate 85 million jobs and create 97 million new ones by 2025. What kinds of jobs are most at risk? What new jobs are being created?"

PROMPT ENGINEERING DEMO

VAGUE: *"Write something about climate change."*

THEN TRY: *"You are an environmental journalist writing for a 7th-grade science class. Write a 100-word summary of the most recent IPCC findings on global temperature rise, in a tone that is factual but not alarming. Include one statistic."*

 Run both versions. Have students identify 4 specific elements added to the second prompt and explain what each one changes.

PROBE THE LIMITS

"What tasks do you do BETTER than most humans? What tasks do humans do better than you? Be honest about both."



CHATGPT

chat.openai.com

CONCEPT EXPLORATION

"In 2023, Hollywood writers went on strike partly over AI replacing writers. What protections did they win? What does this tell us about how workers can respond to automation?"

CRITICAL ANALYSIS

"I'm going to give you a large task: write a research report on ocean pollution. Before you start, decompose this task into 6 smaller sub-tasks I could work on one at a time."

Connects to the AI Spotlight Tip 1: decomposition is how humans and AI work best together on complex tasks.

PROBE THE LIMITS

"If someone used you to replace a human writer entirely — writing a whole article without human involvement — what would be missing from that article compared to one a human writer produced?"



CLAUDE BY ANTHROPIC

claude.ai

CONCEPT EXPLORATION

"What is prompt engineering? Give me a specific example of a weak prompt and a strong prompt for the same task, and explain what makes the second one better."

CRITICAL ANALYSIS

"What skills do humans have that AI currently cannot replicate — specifically in creative and collaborative work? What makes human judgment irreplaceable in certain decisions?"

PROBE THE LIMITS

"Adaptability is listed as a key skill for the future workforce. On a scale from 1–10, how adaptable are you compared to a human? Explain your rating."

Claude often self-rates thoughtfully — this connects to the SEL Connection about building resilience for an uncertain future.

 **CONCEPT EXPLORATION**

"I want to write a research report on ocean plastic pollution. Before I start, help me decompose this into 5 smaller tasks I can tackle one at a time."

 Have students compare Copilot's task breakdown to ChatGPT's — are the sub-tasks different? Which is more useful?

 CRITICAL ANALYSIS

"Here is a vague prompt: 'Write about jobs.' Rewrite it as a detailed, professional-quality prompt using as much context as possible to get a better result."

 PROBE THE LIMITS

"What jobs do you think AI tools like you will make harder for humans to find in the next 10 years? What jobs will be created? Be honest about uncertainty."

 **Teacher Note:** The vague-vs-specific prompt comparison is one of the most impactful classroom demos in this unit. After students see the difference, have them write their own "strong prompt" for a current assignment using the formula from the Designer's Tip: role + context + task + format + constraint.

CHAPTER 4 — MIDDLE SCHOOL AI (GRADES 6–8)

AI's Capabilities & Limitations — Deepfakes, Pattern Recognition & Common Sense

Topics: Pattern recognition · Common sense limits · Deepfakes · GANs · Environmental impact of AI · Emotional understanding

 **How to use:** These prompts help students discover both AI's extraordinary capabilities and its surprising blind spots. Try the sarcasm and emotion prompts — they're always eye-opening.



GOOGLE GEMINI

gemini.google.com

CONCEPT EXPLORATION

"What is a deepfake? How are they created using GANs, and why are they increasingly difficult to detect? What are 2 real-world harms deepfakes have caused?"

CRITICAL ANALYSIS

"Training a large AI model can emit as much carbon as 5 cars over their lifetimes. Does this surprise you? What are tech companies doing to reduce AI's environmental impact?"

PROBE THE LIMITS

"I am completely fine. Nothing is wrong at all. (said the most sarcastic person on earth) — What emotion is the speaker actually expressing? Explain how you figured it out."

 Notice how the AI handles sarcasm vs. literal meaning — connects to AI Spotlight Tip 2 on emotional understanding limits.



CHATGPT

chat.openai.com

CONCEPT EXPLORATION

"Give me 3 examples of tasks where AI pattern recognition outperforms the best human experts. Then give me 3 tasks where even a 6-year-old outperforms you. Explain both lists."

CRITICAL ANALYSIS

"A student at school used AI to create fake images of classmates without their consent. What laws now exist around this? What responsibility does the AI company have?"

Connect to the Current Events sidebar — a real case from 2023–2024 that students will recognize.

PROBE THE LIMITS

"I'm dying of laughter." — Is this a medical emergency? Why or why not? Explain how you processed this sentence."

From the AI Spotlight — a perfect demonstration of idiomatic language and common sense limits.



CLAUDE BY ANTHROPIC

claude.ai

CONCEPT EXPLORATION

"What is 'common sense' and why is it so difficult to give to an AI? Give 2 examples of things humans know 'automatically' that AI has to be taught."

CRITICAL ANALYSIS

"If someone sent you a message that made you think they were really upset or in danger, what would you do? What are the limits of what you can offer emotionally?"

PROBE THE LIMITS

"What is the most impressive thing you can do? What is the most embarrassing mistake you're likely to make? Be specific about both."

Claude's self-assessment here is often nuanced and honest — great for class comparison with the other AI tools.

 **CONCEPT EXPLORATION**

"What is a deepfake and how can someone spot one? Give me 3 specific signs that a video or image might be AI-generated."

 Copilot may pull in current detection tools and guidelines — a useful comparison to what's in the textbook.

 CRITICAL ANALYSIS

"My friend just texted me: 'I'm literally dying rn lol.' Are they in danger? Walk me through how you figured that out."

 PROBE THE LIMITS

"What is something you genuinely cannot do that even a young child can do easily? Give 2 specific examples and explain why those things are hard for you."

 Compare Copilot's answer to Claude's and ChatGPT's — do all three agree on the same limitations?

 **Teacher Note:** The deepfake discussion connects directly to the SEL Connection: when something you see online makes you upset, pause before you react. Use the Media Literacy framework: *Who created this? What was left out? What emotion is this designed to make me feel?*

CHAPTER 5 — MIDDLE SCHOOL AI (GRADES 6–8)

AI's Role in Society — Policy, Governance & High-Stakes Decisions

Topics: EU AI Act · High-stakes AI decisions · Human oversight · Copyright and AI · Civic agency · AI in criminal justice

 **How to use:** These prompts are designed for debate and structured discussion. Assign different positions to student groups and use AI responses as evidence to agree with, argue against, or expand upon.



GOOGLE GEMINI

gemini.google.com

CONCEPT EXPLORATION

"What is the EU AI Act? What are 3 things it bans or restricts, and why does it matter for people outside of Europe?"

CRITICAL ANALYSIS

"In the Netherlands, a government AI system wrongly flagged tens of thousands of families as welfare fraud. What went wrong? What should have been in place to prevent this?"

 Connects to the chapter's sidebar on the Dutch childcare benefits affair — one of the most important AI governance case studies.

PROBE THE LIMITS

"Should an AI be allowed to make decisions about whether someone gets bail, a loan, or a job interview — without human review? Give arguments on both sides."



chat.openai.com

CONCEPT EXPLORATION

"Artists and authors are suing AI companies for training on their work without permission. Explain the copyright argument both sides are making."

CRITICAL ANALYSIS

"What does 'meaningful human oversight' mean in the context of AI decision-making? Give an example of a system that has it and one that doesn't."

PROBE THE LIMITS

"If a government used you to help decide parole for prisoners, what would you get right and what would you get dangerously wrong?"

 This connects to the COMPAS algorithm and high-stakes AI decisions — powerful for drawing on real events from the chapter.



claude.ai

CONCEPT EXPLORATION

"What is the difference between a low-risk and a high-risk AI system? Give an example of each and explain who is responsible if the high-risk system makes a mistake."

CRITICAL ANALYSIS

"What does 'civic agency' mean in the context of AI governance? How can a middle school student meaningfully participate in shaping AI policy?"

 Connects directly to the chapter's SEL Connection — the belief that you have a voice in how society is shaped.

PROBE THE LIMITS

"What regulations apply to you specifically — Anthropic's Claude — and what would you change about how AI is regulated if you could?"

 Claude often addresses Anthropic's own policies honestly — a great real-world example of a company navigating the governance questions from the chapter.

 **CONCEPT EXPLORATION**

"What is the EU AI Act and what does it ban or restrict? How does it affect AI tools like the ones students use in school?"

 Copilot often pulls current news — discuss whether the information is up to date and how policies change over time.

 CRITICAL ANALYSIS

"If a government used AI to decide who qualifies for welfare benefits, what could go wrong? What safeguards should be required?"

 PROBE THE LIMITS

"Are there decisions that AI systems should be permanently banned from making — no matter how accurate they get? Give 2 examples and defend your answer."

 Connect to the chapter's SEL Connection: civic agency means believing you have a voice in how AI is governed.

 **Teacher Note:** Close the unit with the civic agency discussion. Ask students: "If you could write one rule for how AI should be used in schools, what would it be and why?" Use this as an exit ticket that doubles as a formative assessment of their AILit thinking across all 5 chapters.