Lesson 1: Talking to Machines

Word	Definition	Example or Image
artificial Intelligence (AI)	a _____ that mimics human _____, performing tasks such as understanding _____, recognizing _____, and making _____	
probability	the _____ that a specific _____ might _____	
abstraction	the process of _____ on only the _____ details of a problem and _____ everything else	
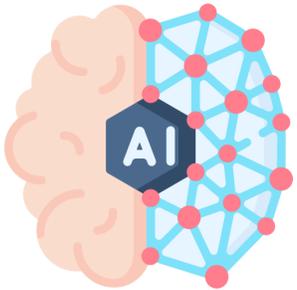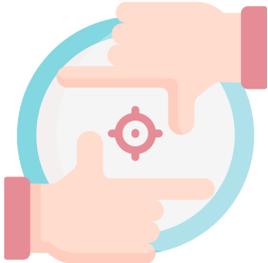
Word	Definition	Example or Image
prompt	a _____, instruction, scenario, or _____ provided by the _____ to guide the AI's _____	

Question of the Day

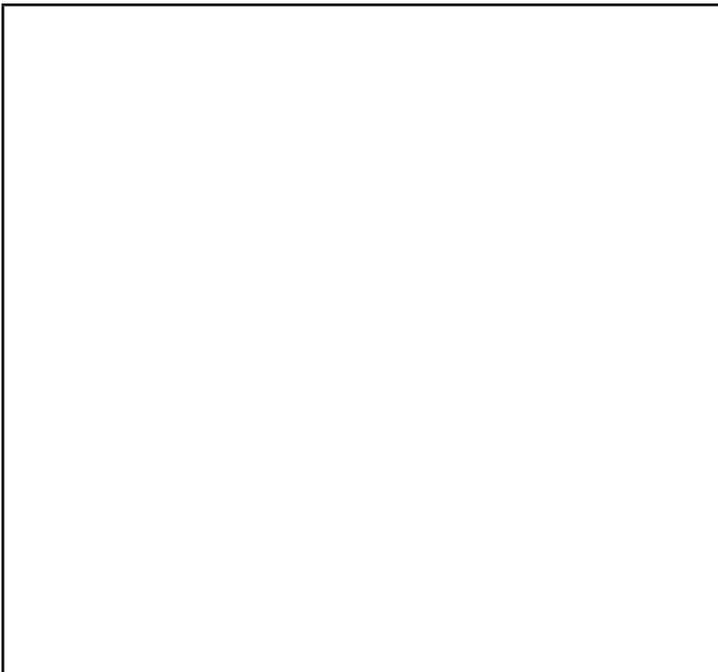**How can I use AI effectively?**

Hint: Think about what prompting strategies you used to get the most helpful AI chatbot output.

Lesson 2: Beyond Words

Word	Definition	Example or Image
multimodal model	an AI _ _ _ _ _ _ _ _ _ _ _ _ that can process information from _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ types of input	

What's in an image?

1. List as many things as you can that you see in the image.

2. Go to Lesson 2, Level 2 and upload this image into AI Chat. Ask the AI to describe the uploaded image and record its answer below.

3. Compare AI's observations to your own.

Things Only I Noticed	Things AI and I BOTH Noticed	Things Only AI Noticed

Privacy and Ethical Concerns

What unexpected details did AI pull from the image description?

Could someone's location, identity, or background information be inferred?

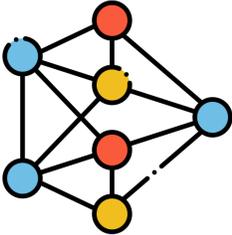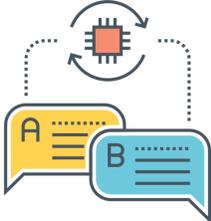How does this relate to privacy risks in AI applications?

Question of the Day

What is the effect of using multimodal inputs with AI?

Hint: Use one or more of these sentence starters to help answer this question.
- One way I saw AI process text and images differently today was...
- I was surprised when AI responded to the image by...
- Comparing text-only inputs versus text and image inputs, I noticed that...
- I think using an image with AI is (more/less) useful because...
- This connects to what we learned about effective prompting because...
- A privacy or ethical concern I noticed when AI analyzed images is...

Lesson 3: The AI's Brain

Word	Definition	Example or Image
neural network	an _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ network that _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ using weights and hidden layers. It is used to represent the _ _ _ _ _ _ _ _ _ _ _ _ _ between _ _ _ _ _ _ _	
large language model	a _ form of AI that is _ _ _ _ _ _ _ _ _ _ _ on a very, very _	
training data	the structured or unstructured _ _ _ _ _ _ _, such as text, images, or code, used to _ _ _ _ _ _ _ an AI model and shape its ability to _ _ _ _ _ _ patterns and _ _ _ _ _ _ accurate responses	
training	the process of _ _ _ _ _ _ an AI model by exposing it to _ _ _ _ _ _ amounts of data, allowing it to learn _ _ _ _ _ _ , improve _ _ _ _ _ _ , and refine its _ _ _ _ _ _ over time	
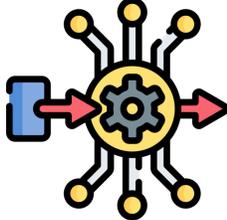
Prompting Challenge

AI responds differently based on how much detail you provide in your prompt. In this activity, you'll test three levels of prompting — zero-shot, one-shot, and multi-shot — to see how more context improves AI's responses.

Your Task:

1. Choose a career scenario: Sports Journalist, Video Game Developer, or Travel Agent
2. At each level, write and test a prompt.
3. Answer the reflection question using the sentence frames provided.

Level 1: Minimal Context Given

Question:

What kind of response does AI give when you don't provide much detail?

Use these sentence frames:

- The AI's response was mostly about _____.

- I noticed the response felt _____ (e.g., vague, specific, repetitive, creative).

- I think the AI made assumptions like _____.

Level 2: Providing a Single Example

Question:

How does adding one example change the AI's response?

Use these sentence frames:

- Compared to before, the AI's response was more _____ because _____.

- The example I included helped the AI _____ (e.g., change tone, add detail, focus the topic).

- Adding one example made the result feel _____.

Level 3: Providing Multiple Examples for Refinement

Question:

*How does more structure or multiple examples improve the AI's response?*

Use these sentence frames:

- With more structure/examples, the AI's response became _____.

- One new thing the AI did this time was _____.

- This shows that AI responds better when you _____.

Question of the Day

How do AI models learn?

Create a short comic strip that shows something you learned about how AI learns, predicts, or responds to prompts—make it funny, insightful, or even a little weird!

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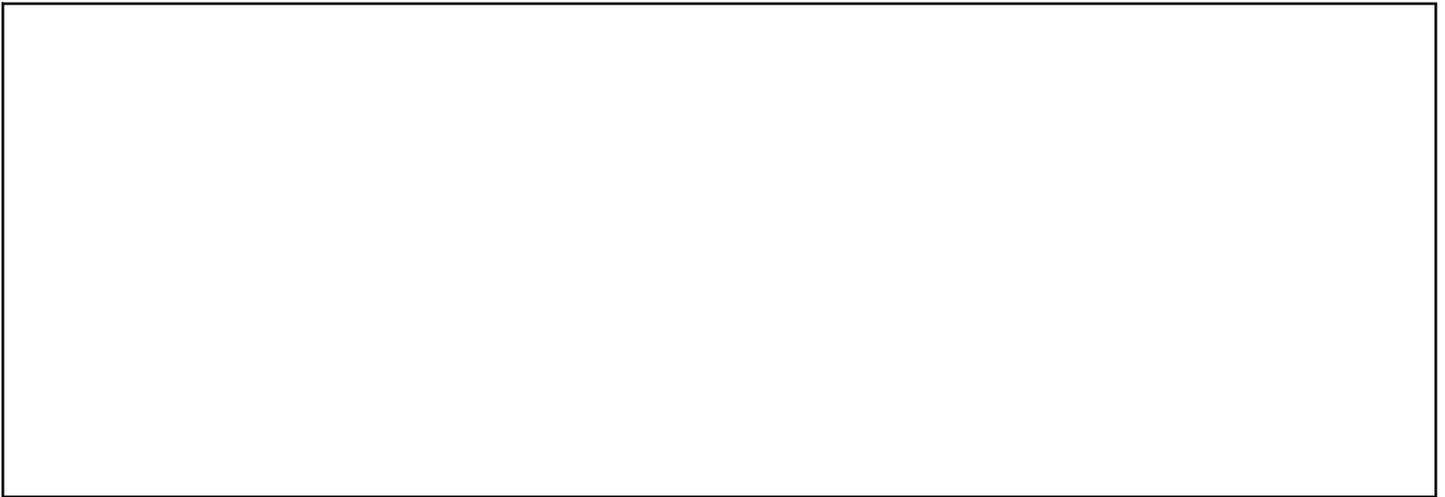
Lesson 4: Smart or Just Predictable?

Word	Definition	Example or Image
hallucination	When the _ _ _ _ _ _ _ _ makes up _ _ _ _ _ _ _ or _ _ _ _ _ _ _ _ _ _ _ _ _ _ information that sounds _ _ _ _ _ _ _ _ _ but isn't _ _ _ _ _ _ _ _	

Human vs AI Response Comparison

For each task, think about how a human would do compared to AI. Rank each on the following categories:

- **Speed**: 1 (extremely slow) - 5 (extremely fast)
- **Accuracy**: 1 (extremely inaccurate) - 5 (extremely accurate)
- **Creativity**: 1 (not at all creative) - 5 (extremely creative)

Then explain whether or not you would recommend using AI for a similar task in the future.

Solving a Math Problem			
	Speed (1 - 5)	Accuracy (1 - 5)	Creativity (1 - 5)	Is this a task you would recommend using AI for? Why or why not?
Human				
AI				

Answering a Creative Question			
	Speed (1 – 5)	Accuracy (1 – 5)	Creativity (1 – 5)	Is this a task you would recommend using AI for? Why or why not?
Human				
AI				

Providing Historical or Technical Information			
	Speed (1 – 5)	Accuracy (1 – 5)	Creativity (1 – 5)	Is this a task you would recommend using AI for? Why or why not?
Human				
AI				

Question of the Day

Where does AI excel vs struggle?

Hint: Think about when and why you would use AI as a collaborator and when you wouldn't.

Lesson 5: Uncovering Contradictions

Word	Definition	Example or Image
contradiction	when an AI generates _____ responses based on a similar _____, making it _____ for both responses to be _____ at the same time	
context	additional _____ surrounding a _____ that helps the AI generate _____ responses	
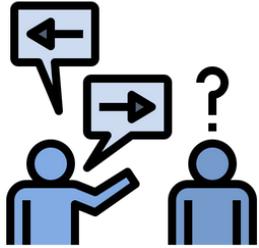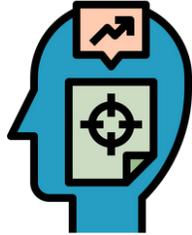
Question of the Day

Can AI contradict itself?

How do you think your response to the previous question will evolve in 10 years?

Lesson 6: Understanding Bias

Word	Definition	Example or Image
bias	when a model _ over _	
alignment	ensuring an AI system's _ _ _ _ _ _ _ _ _ _ _ _ _ and _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ match human _	

Question of the Day

What is AI bias and how does it emerge?

3 examples where you saw AI bias in this lesson:

2 things we can do to help reduce bias:

1 reason bias might exist:

Lesson 7: AI's Wild Imagination

Question of the Day

What are some examples of AI hallucinations? What are their impacts?

Hint: List 2-3 examples you heard about today and the impact for each.

AI Hallucination	Impact

Lesson 8: Debugging and Refining Outputs

Word	Definition	Example or Image
prompt engineering	the process of creating _____ and _____ prompts to guide _____ _____	

Five Key Elements of a Prompt

Practice refining a prompt using each element, then explain how it improved the AI's output.

1. **Task** - Specific and actionable instructions
2. **Context** - Relevant background details
3. **Format** - How the response should be structured
4. **Reference** - Additional examples or resources
5. **Tone** - The style in which the output is given

Task	
Original prompt	Help me clean my room.
1. Revise the prompt: what **task** did you add to the original prompt?	
2. How did refining the prompt improve AI's output?	

Context	
Original prompt	You are a marketing executive at a sportswear company. Come up with a slogan for a new running sneaker.
1. Revise the prompt: what **context** did you add to the original prompt?	
2. How did refining the prompt improve AI's output?	

Format	
Original prompt	You are a professional food critic. Generate some ideas for how to evaluate a new restaurant.
1. Revise the prompt: what **format** did you add to the original prompt?	
2. How did refining the prompt improve AI's output?	

Reference	
Original prompt	You are an architect planning a building downtown. Figure out how many shops can fit on the ground floor of the new building, which is the size of a football field.
1. Revise the prompt: what **reference** did you add to the original prompt?	
2. How did refining the prompt improve AI's output?	

Tone	
Original prompt	You have been selected as a host for an awards ceremony. Prepare your opening speech.
1. Revise the prompt: what **tone** did you add to the original prompt?	
2. How did refining the prompt improve AI's output?	

Question of the Day

How can we improve AI's responses?

Do This: Choose one of the five prompt elements above. Write an example of how to refine a prompt using this element.

Lesson 9: AI as a Co-Creator

AI Essay Critique

Read the following AI-created essay and then note things the essay does well and what it is lacking in the table below.

Ever since I was young, I have faced many challenges that have helped shape who I am today. Life is full of ups and downs, and each experience teaches us something important. One particular moment taught me the value of hard work and determination. It was not easy, but I learned that staying positive can make a big difference. This experience showed me how to overcome obstacles and become a stronger person.

What does this essay do well?	What is it lacking?

Word	Definition	Example or Image
co-creating	humans and AI working _____, with humans providing _____ and direction, while AI assists by processing _____, generating _____, or _____ tasks	

Question of the Day

How can AI enhance creativity?

Stand and Swap:

1. Stand and discuss the Question of the Day within your project group.

2. "Swap" by joining your group with another group nearby to share insights.

3. Compare experiences and discuss how AI helped shape or improve your creative process.

Lesson 10: Remixing, Creativity, and Originality

Question of the Day

How do human strengths and AI capabilities interact?

You'll answer this question today by deciding how you feel about the statements below. <u>Circle</u> a thumbs up if you agree, thumbs down if you disagree, or thumbs sideways if you're unsure.

Thumbs Up: I agree
Thumbs Down: I disagree
Thumbs Sideways: I'm unsure

Statement #1

AI is just as creative as humans

Statement #2

I would use AI again for a creative project.

Statement #3

AI and humans working together create better results than AI or humans working alone.

Lesson 11: Ownership, Ethics, and Creativity

Word	Definition	Example or Image
ethics	a guide for _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ choices about emerging technologies, ensuring _ _ _ _ _ _ _ _ _ _, _ _ _ _ _ _ _ _ _ _ _ _, and _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ for everyone	
copyright	the _ _ _ _ _ _ _ _ _ _ _ _ right granted to the _ _ _ _ _ _ _ _ _ _ _ of an original work to use, distribute, and modify it	
attribution	the act of giving _ _ _ _ _ _ _ _ _ _ _ _ _ to the original _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ of a work, especially in the context of using or referencing their material	
transparency	the practice of _ _ _ _ _ _ _ _ _ _ _ disclosing how something works, especially in terms of _,	

	data use, or AI processes	

Question of the Day

What are the ethical considerations of AI collaboration?

Lesson 12: AI's Role in Society

Question of the Day

How should AI be used in solving real-world problems?

Hint: Think about the what you learned about today that you should consider when using AI to solve problems