

# What does it mean for AI to ‘know’ something? Quiz

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# Quiz ideas

1. What does the blog suggest about the relationship between embeddings and physical memory?

- A) Embeddings are stored in memory as symbolic representations
- B) Embeddings require physical space to be stored and processed
- C) Embeddings are stored in memory as high-resolution images
- D) Embeddings are stored in memory only when the model is asleep

2. What is a token in the context of AI language models?

- A) A distant cousin of cryptocurrency
- B) A complete sentence
- C) The smallest unit of text the model can process
- D) A unit of memory

3. Why might it be misleading to treat AI-generated text as evidence of comprehension?

- A) Because AI lacks access to real-time information
- B) Because AI is trained only on formal texts
- C) Because AI prefers short sentences
- D) Because AI does not interpret meaning, it predicts based on probability

4. If an AI chatbot generates a response that sounds profound and correct, how should we interpret that feeling as users?

- A) As a moment of emotional resonance between user and model
- B) As confirmation that the AI understands the topic
- C) As evidence of shared cultural values between yourself and the AI chatbot
- D) As a sign that the AI chatbot's response, while it may feel resonant, is shaped by patterns learned during training. Unlike humans, who may develop insights by talking with specialists, discussing with others, and researching, AI relies on statistical associations in language.

# Quiz ideas

5. What does the term “embedding space” refer to?

- A) A high-dimensional space where relationships between words are statistically encoded
- B) A dictionary of word meanings
- C) An edible semiconductor sold exclusively online
- D) A semantic map built from grammar rules

6. Why might a language model complete the sentence “The moral of Snow White is to never eat...” with “apples”?

- A) It understands the story’s symbolism
- B) It identifies statistical patterns in language
- C) It was trained on fairy tale morals
- D) It is trying to warn you about fruit that hasn’t been ethically sourced

7. How does the blog illustrate the evolution of word associations over time?

- A) By referencing Wikipedia
- B) By comparing dictionary definitions across decades
- C) By referencing historical texts and etymology
- D) By showing how the word “apple” develops new associations over time, notably beginning to co-occur with terms like “technology” and “Steve” around 1980, reflecting a shift in cultural context

8. What does the quote “You shall know a word by the company it keeps” imply in the blog?

- A) AI infers meaning from statistical proximity and co-occurrence of words in human language
- B) AI uses grammar to define meaning
- C) Words are secretly social creatures who have brunch together
- D) AI relies on dictionary definitions

# Quiz ideas

9. Why is it important to understand the physical infrastructure (like memory systems) behind AI predictions?

- A) It helps users write better prompts
- B) It reveals the emotional depth of AI
- C) It shows how hardware constraints shape what AI systems can store and process
- D) It allows users to upgrade their own memory

10. What philosophical shift does the blog highlight in how we interact with machines?

- A) Natural language like English has become a form of code
- B) Machines are now eligible to vote
- C) Machines can choose to ignore your questions
- D) Interacting with an AI system requires a user to have proficiency in coding languages like Python and C++

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