



What Is AI?

Reading Worksheet — Level F | tahricteaches.com

Artificial intelligence — AI — is one of the most discussed technologies of our time, yet it remains widely misunderstood. At its core, AI refers to computer systems designed to perform tasks that normally require human **intelligence**: recognizing faces, understanding speech, translating languages, or making decisions based on complex data. Unlike traditional software, which follows rigid rules written by programmers, AI systems learn from **experience** and improve over time.

The field of AI is not new. Researchers began exploring machine intelligence in the 1950s, dreaming of computers that could think like humans. Early systems used **symbolic** reasoning — explicit rules encoded by experts. These rule-based systems were powerful but brittle, breaking down when faced with situations their creators had not anticipated. The modern AI revolution is built on a different approach: **machine learning**, where computers learn patterns from massive amounts of data rather than following pre-written instructions.

Today's AI excels at narrow, specific tasks. A chess-playing AI can defeat any human grandmaster, but it cannot hold a conversation or drive a car. This is called **narrow AI** or weak AI — systems designed for particular problems. The dream of **general AI** — a machine with human-like flexibility across all domains — remains unrealized and may be decades away, if it is possible at all.

AI is already embedded in daily life: search engines, social media feeds, voice assistants, fraud detection, medical **diagnostics**, and countless other applications. Its rapid spread raises important questions about **transparency** — understanding how AI systems make decisions — and **accountability** — who is responsible when AI causes harm.

Understanding what AI is, and what it is not, is the first step toward becoming an informed participant in a world increasingly shaped by intelligent machines. AI is neither magic nor conscious. It is a powerful tool, built by humans, with both remarkable capabilities and significant **limitations**.

A. Vocabulary

- | | |
|---------------------|---|
| 1. intelligence | a. AI designed for specific, limited tasks |
| 2. experience | b. hypothetical AI with human-like flexibility |
| 3. symbolic | c. AI that learns patterns from data |
| 4. machine learning | d. the process of identifying problems or diseases |
| 5. narrow AI | e. knowledge gained through doing or observing |
| 6. general AI | f. using symbols and rules to represent knowledge |
| 7. diagnostics | g. being open about how decisions are made |
| 8. transparency | h. restrictions on what something can do |
| 9. accountability | i. the ability to learn, reason, and solve problems |
| 10. limitations | j. being responsible for actions or decisions |



B. True or False

- | | |
|--|--|
| 1. <input type="checkbox"/> T <input type="checkbox"/> F AI follows rigid rules written by programmers, like traditional software. | 2. <input type="checkbox"/> T <input type="checkbox"/> F Researchers began exploring AI in the 1950s. |
| 3. <input type="checkbox"/> T <input type="checkbox"/> F Early AI systems used symbolic reasoning with explicit rules. | 4. <input type="checkbox"/> T <input type="checkbox"/> F Machine learning lets AI learn patterns from large amounts of data. |
| 5. <input type="checkbox"/> T <input type="checkbox"/> F A chess-playing AI can also easily hold a conversation. | 6. <input type="checkbox"/> T <input type="checkbox"/> F Narrow AI is designed for specific, limited tasks. |
| 7. <input type="checkbox"/> T <input type="checkbox"/> F General AI with human-like flexibility already exists. | 8. <input type="checkbox"/> T <input type="checkbox"/> F AI is used in medical diagnostics today. |
| 9. <input type="checkbox"/> T <input type="checkbox"/> F AI is conscious and can think like humans. | |



C. Fill in the Blanks

Word Bank: intelligence machine learning narrow AI transparency limitations

1. AI performs tasks that normally require human ____.
2. ____ lets computers learn patterns from data rather than follow fixed rules.
3. ____ refers to AI systems designed for specific, limited tasks.
4. ____ means being open about how AI systems make decisions.
5. AI is a powerful tool, but it also has significant ____.

D. Comprehension Questions

1. How is AI different from traditional software?
2. What was the problem with early symbolic AI systems?
3. What is the difference between narrow AI and general AI?
4. Why is transparency important when discussing AI?
5. What does the article mean when it says AI is "neither magic nor conscious"?

E. Discussion Questions

1. Should AI systems be required to explain their decisions?
2. Do you think general AI will ever be achieved? Why or why not?
3. How can understanding AI help you in your daily life?

Answer Key

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A. Vocabulary

1-i, 2-e, 3-f, 4-c, 5-a, 6-b, 7-d, 8-g, 9-j, 10-h

B. True or False

1-F, 2-T, 3-T, 4-T, 5-F, 6-T, 7-F, 8-T, 9-F

C. Fill in the Blanks

1-intelligence, 2-Machine learning, 3-Narrow AI, 4-Transparency, 5-limitations

D. Comprehension Questions

1. AI learns from experience and improves; traditional software follows rigid rules.
2. They were brittle and broke down in situations creators had not anticipated.
3. Narrow AI handles specific tasks; general AI would have human-like flexibility across all domains.
4. To understand how AI makes decisions and who is responsible when it causes harm.
5. AI is a tool built by humans, not magical or self-aware; it has capabilities but also limits.