

What Can AI Do

Textbook

What Can AI Do



What Is Artificial Intelligence (AI)?

Artificial Intelligence, or AI, is when computers or machines are designed to think and learn like humans. Instead of just following simple commands, AI systems can make decisions, recognize patterns, and even improve over time. For example, voice assistants like Siri or Alexa learn how to better answer your questions the more you use them.

What Makes AI Different?

AI systems have special characteristics that make them unique. They can process large amounts of data quickly, learn from examples (like showing a computer lots of cat photos so it can recognize cats), and adapt to new situations. Unlike regular programs that only do what they're told, AI can change how it responds based on what it learns.

Why Are Computers Sometimes Faster Than Humans?

Some tasks—like solving math problems, searching huge amounts of information, or scanning thousands of photos—can be done much faster by computers. That's because computers don't get tired, and they can follow instructions or calculations at super speed. AI helps them do even more complex work, like identifying patterns in data that would take humans a long time to figure out.

Benefits of AI Today

AI is already helping in many areas. In healthcare, it helps doctors find diseases faster. In education, AI-powered tools can give students extra help. Self-driving cars use AI to understand their surroundings. AI can also help reduce repetitive work, making people's jobs easier or safer.

The Future of AI

As technology grows, AI will become even more powerful. It may help solve big problems like climate change, improve public transportation, or even help design new inventions. But it's important to use AI responsibly. Humans must decide how and when to use AI in ways that are fair, safe, and helpful for everyone.

Critical Thinking Questions

1. What are some tasks you think AI could do better than people? What are some things humans will always do better than AI?
2. How might AI change the way people work, learn, or live in the future?

Questions (5)

1. What does Artificial Intelligence (AI) do?

MULTIPLE CHOICE

Choose the correct answer:

- A. Stores files on a computer
- B. Sends emails faster
- C. Allows computers to think and learn like humans
- D. Makes phone screens brighter

2. Why can AI sometimes complete tasks faster than people?

MULTIPLE CHOICE

Choose the correct answer:

- A. It takes breaks more often
- B. It copies other computers
- C. It never makes mistakes
- D. It processes information very quickly

3. Which of these is an example of AI helping people?

Choose the correct answer:

- A. A robot vacuum that learns the shape of your room
- B. A calculator adding numbers
- C. A fan turning on when it's hot
- D. A flashlight shining light

4. What is one possible future use of AI?

Choose the correct answer:

- A. Writing with a pencil
- B. Controlling the weather
- C. Solving big problems like traffic or pollution
- D. Reading your mind

5. What is one important thing to remember about using AI?

Choose the correct answer:

- A. It must be used responsibly and fairly
- B. It should only be used at home
- C. It should replace all human workers
- D. It can make people lazy

Answer Keys & Solutions

Questions

1. What does Artificial Intelligence (AI) do?

MULTIPLE CHOICE

Correct Answer:

- A. Stores files on a computer ✗ Incorrect
- B. Sends emails faster ✗ Incorrect
- C. Allows computers to think and learn like humans ✓ Correct
- D. Makes phone screens brighter ✗ Incorrect

2. Why can AI sometimes complete tasks faster than people?

MULTIPLE CHOICE

Correct Answer:

- A. It takes breaks more often ✗ Incorrect
- B. It copies other computers ✗ Incorrect
- C. It never makes mistakes ✗ Incorrect
- D. It processes information very quickly ✓ Correct

3. Which of these is an example of AI helping people?

MULTIPLE CHOICE

Correct Answer:

- A. A robot vacuum that learns the shape of your room ✓ Correct
- B. A calculator adding numbers ✗ Incorrect
- C. A fan turning on when it's hot ✗ Incorrect
- D. A flashlight shining light ✗ Incorrect

MULTIPLE CHOICE

4. What is one possible future use of AI?

Correct Answer:

- | | |
|---|-------------|
| A. Writing with a pencil | ✗ Incorrect |
| B. Controlling the weather | ✗ Incorrect |
| C. Solving big problems like traffic or pollution | ✓ Correct |
| D. Reading your mind | ✗ Incorrect |

5. What is one important thing to remember about using AI?

MULTIPLE CHOICE

Correct Answer:

- | | |
|---|-------------|
| A. It must be used responsibly and fairly | ✓ Correct |
| B. It should only be used at home | ✗ Incorrect |
| C. It should replace all human workers | ✗ Incorrect |
| D. It can make people lazy | ✗ Incorrect |