Name _____

What is Artificial Intelligence?

Artificial Intelligence, or AI, is when computers are designed to do tasks that usually need human intelligence. Instead of just following simple step-by-step instructions, AI can learn from data and improve over time.

One modern form of AI is **machine learning**, where a computer studies examples and finds patterns. For example, if you show a computer thousands of photos of cats and dogs, it can learn to tell them apart. Another form is **natural language processing**, which allows computers to understand and respond to human language. Chatbots and voice assistants, like Siri or Alexa, are examples of this.

AI is also used in **recommendation systems**-these are the programs that suggest movies on Netflix or songs on Spotify based on what you already like. In healthcare, AI helps doctors look at X-rays to spot diseases more quickly. In transportation, AI is the "brain" behind self-driving cars, helping them recognize traffic lights, road signs, and pedestrians.

Although AI is powerful, it is not human. It does not think or feel. It works by processing data and making predictions. People create and train AI systems, so the results depend on the information given to them. This is why it is important to use AI responsibly.

Questions

1. In your own words, what is Artificial Intelligence (AI)?

2. What does "machine learning" mean? Give an example from the passage.

3. How do chatbots or voice assistants use AI to help people?

4. List two different fields where AI is used today and explain how it helps.

5. Why is it important to use AI responsibly?