

Name: _____ **Date:** _____

Smart Machines AI Literacy 7th Grade Quiz

Decode how algorithms mimic biological neurons and predict patterns using real-world data science concepts beyond basic coding.

1. Which component of Artificial Intelligence is specifically designed to mimic the interconnected structure of the human brain to recognize complex patterns?

- A. Linear regression
- B. Neural networks
- C. Hard-coded loops
- D. Data storage drives

2. True or False: Machine learning requires a human to manually write a new rule for every single decision the computer makes.

- A. True
- B. False

3. When a computer uses logic to draw a conclusion or solve a riddle, it is demonstrating the AI concept of ____.

- A. Reasoning
- B. Hardware
- C. Social Media
- D. Electricity

4. A weather app that looks at ten years of atmospheric data to predict tomorrow's rain is an example of which AI subset?

- A. Virtual Reality
- B. Mechanical Engineering
- C. Machine Learning
- D. Circuit Design

5. The process of AI getting better at a task (like identifying different types of plants) as it looks at more images is called ____.

- A. Deleting
- B. Typing
- C. Formatting
- D. Learning

6. True or False: AI 'reasoning' allows a system to analyze a situation and pick a path to reach a specific goal.

- A. True

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B. False

7. Which of the following is a real-world application of AI in the field of transportation?

- A. A standard bicycle
- B. An autonomous delivery drone
- C. A manual gear shift
- D. A paper map

8. In healthcare, AI is often used to help doctors analyze medical scans to find ____.

- A. Old emails
- B. Social trends
- C. Early signs of disease
- D. Hospital bills

9. True or False: Facial recognition systems use neural networks to analyze the patterns of pixels in an image.

- A. True
- B. False

10. What makes AI different from a traditional computer program that follows a fixed list of instructions?

- A. It can adapt and learn from data
- B. It requires more batteries
- C. It only works on paper
- D. It does not use any electricity