

Name: _____ Date: _____

Answer Key: Smart AI Patterns for 3rd Grade Scholars

Learners identify how machines use data to spot patterns and make choices during this engaging computer science technology assessment.

1. If an AI is learning to identify different types of fruit, what does it need to see many examples of first?

Answer: B) Pictures of various fruits

Machine learning works by looking at data, like pictures, to find patterns that help the AI recognize objects.

2. AI can help a robot vacuum cleaner decide which path to take to avoid bumping into a sleeping dog.

Answer: A) True

AI is used for problem-solving in real-time, such as navigating around obstacles in a room.

3. When an AI gets better at a task after practicing with more information, we call this _____.

Answer: C) Machine learning

Machine learning is the specific part of AI where systems improve their performance as they are given more data.

4. Which of these is an example of an AI using a 'pattern' to help a human?

Answer: B) A music app suggesting a song you might like

Recommendation systems analyze the patterns in what you usually listen to so they can predict other songs you will enjoy.

5. An AI 'neural network' is a computer system that is inspired by how the human brain works.

Answer: A) True

Neural networks are designed to mimic the way neurons in a human brain connect to process complex information.

6. An AI that can group photos of 'cats' and 'dogs' is using _____ recognition.

Answer: B) Image

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Image recognition is the ability of an AI to look at pixels and identify what is shown in a picture.

7. Think about a weather app that uses AI. How does it know if it might rain tomorrow?

Answer: C) It analyzes data from past storms and current wind

AI makes predictions by looking at historical data and finding similarities with what is happening now.

8. AI is only found in giant robots and cannot be used on a regular tablet or phone.

Answer: B) False

AI is found in many everyday devices, including smartphone apps, games, and website helpers.

9. If you are teaching an AI to recognize a 'square,' what is the most important data to give it?

Answer: C) Many examples of shapes with four equal sides

To teach an AI a specific concept, you must provide accurate data that represents the features of that concept.

10. AI uses _____ to solve problems, which is like a very smart set of instructions.

Answer: B) Algorithms

Algorithms are the step-by-step rules or instructions that a computer follows to finish a task or solve a problem.