r5Unit 15 Test

The "instance" relationship shows that something is an object of a ____.

- class

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A ____ is an aircraft under autonomous control via a computer system on board or controlled by a human controller at a remote site.

- drone

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The algorithmic approach called ____ has been used commercially in vehicle routing, job scheduling, and sensing biological or chemical contaminants.

- ACO

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A ____ approach for finding a solution path traces all branches of the state-space graph so that all possible choices are tested and no test cases are repeated.

- brute force

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Information can be stored in ____ form as an image, which is a grid of pixels that have attributes of shading and color.

- pictorial

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____ technology can download updates to personalized information, such as the weather conditions in your geographic area, to your cell phone.

- Push

The human brain uses a _____ architecture, characterized by a large number of simple "processors" with multiple interconnections.

- ⦿ connectionist

A _____ for a binary search reflects the fact that if the current item is not the target, there are only two next choices: the midpoint of the sublist before the node or the midpoint of the sublist after the node.

- ⦿ decision tree

When reading a _____ language, we use our understanding of the richness of the language's vocabulary to extract the meaning.

- ⦿ natural

All of the following are characteristics that must be contained in any knowledge representation scheme EXCEPT _____.

- ⦿ comprehensiveness

Artificial intelligence seeks ways to improve a computer's capabilities in _____ and reasoning tasks.

- ⦿ recognition

_____ is the branch of computer science that explores techniques for incorporating aspects of intelligence into computer systems.

- ⦿ Artificial intelligence

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IBM recently announced a new computer chip, called _____, that mimics the way the brain works through the use of "neurosynaptic" cores.

- ◉ TrueNorth

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A(n) _____ must contain the following components: a knowledge base and an inference engine.

- ◉ rule-based system

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The term _____ implies a device that can gather sensory information from its surroundings and to autonomously perform mechanical actions in response.

- ◉ robot

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A _____ network can learn from experience by modifying the weights on its connections.

- ◉ neural

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The _____ intelligence model captures the behavior of an ant colony by using simple agents that operate independently.

- ◉ swarm

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A _____ is a graph with nodes and connecting arcs.

- ◉ semantic net

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At the end of its training, the _____ is ready to go to work on new recognition problems that are similar to the training data but for which the answers are unknown.

- ⦿ neural network

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The axon of a neuron sends signals over small gaps called _____.

- ⦿ synapses