

Name _____

Unveiling the Secrets of How Artificial Intelligence and Machine Learning Algorithms Learn

Short Answer Key

1. Answer: The feedback loop provides information to the algorithm about its mistakes and helps it make adjustments for improved performance. It guides the learning process.
2. Answer: A diverse and extensive dataset ensures that the algorithm encounters various examples and scenarios, making its learning more robust and accurate. It allows the algorithm to generalize better.
3. Answer: The algorithm fine-tunes itself by adjusting its internal settings or parameters when it makes incorrect predictions. It learns from its mistakes and gradually becomes better at making accurate predictions.
4. Answer: Testing and validation ensure that the algorithm can generalize its learning beyond the training data. It verifies that the algorithm can perform well on new, unseen data, which is essential for real-world applications.
5. Answer: Possible examples include facial recognition systems for security purposes, voice recognition for virtual assistants, or image classification for identifying objects in photos.

