

Gap-Fill: Agent Types Answer Key

Passage with Answers

1. **Reactive agents** are the simplest kind. They respond directly to the environment without planning ahead. A robot vacuum that turns when it hits a wall is an example.
2. **Goal-Based agents** think about future states and aim to reach a desired condition. A navigation app finding directions to a destination is a good example of this type.
3. **Utility-Based agents** go beyond just reaching a goal—they compare different options and choose the one that provides the greatest overall benefit. For instance, a ride-hailing app might compare several routes and choose the fastest and cheapest one.
4. **Learning agents** can improve their performance by learning from experience. A speech recognition system that gets better at understanding your voice over time is an example.

Reflection (Sample Teacher Guidance)

1. Which type of agent seems the most human-like? Why?

Sample Answer: A learning agent seems the most human-like because people also learn from experience and improve their skills over time.

2. Which type of agent do you think would be the most useful in everyday life? Explain your choice.

Sample Answer: A utility-based agent might be the most useful since it doesn't just meet a goal but also chooses the best option, like saving time or money.