

Name _____

How Do Autonomous Vehicles Navigate and Sense Their Surroundings?

Open-Ended Response Answer Key

1. Possible challenges in complex urban environments could include heavy traffic, unpredictable pedestrian behavior, and intricate road layouts.
2. Self-driving cars can improve road safety by reducing human errors, such as distracted driving and impaired driving, which are leading causes of accidents.
3. Answers may vary but could include factors like technology advancements, regulatory changes, and societal acceptance.
4. Ethical considerations could involve scenarios where the car needs to decide between different courses of action, such as protecting the occupants or pedestrians in emergency situations.

