

Self-Driving Cars

Non-Fiction Article

PDF & Digital Formats



2 Peas and a Dog

Middle School Teaching Resources

RESOURCE INCLUDES

- Lesson Plan
- Teacher Instructions
- Individual PDFs for Google Drive
- Google Slides for 1:1 Schools
- Audio files of the articles
- Pre-reading K-W-L chart
- Non-fiction article (modified and regular text)
- 3 Post reading activities
 - ✓ Comprehension questions
 - ✓ Grammar questions
 - ✓ Long response writing

EXAMPLE PAGES

K-W-L CHART

Topic:		
K	W	L
What do I already know about this topic?	What do I want to know about this topic?	What new things did I learn about this topic from the article?

SELF-DRIVING CARS

What is a Self-Driving Car?

A self-driving car is a vehicle that can drive itself without any human assistance.

Self-driving technology is already used in many vehicles, but full driverless cars are not widespread.

Currently, some cars already have partial self-driving features. There are cars that can park themselves, keep you driving at one speed without your foot on the gas (cruise control) or brake automatically.

These cars have a level of self-driving, but driverless cars, where the car operates itself for you, are still being developed.

Today's models of driverless cars are not fully autonomous. Some require the driver's hands to be on the wheel to ensure they are ready to take over in case of emergency.

Level Up

Vehicles have different levels of self-driving, ranging from 0 to 5. For a Level 0, all major systems in a car are controlled by humans. For a Level 5, none are controlled by humans - artificial intelligence runs the show.

The levels in between are what we have in various forms right now, with some functions being fully automated and others not. The more automated things a vehicle does, the higher level number it gets until it gets to Five.

How It Works

Companies such as Tesla, Google and Uber have already developed self-driving technology, but no one has perfected it.

To be driverless, vehicles must have artificial intelligence (it must be able to think and learn on its own).

They also must be able to map out a way to get somewhere, avoid all obstacles on the way and park itself - all without a human getting involved.

THINKING QUESTION

Assessment	Below Expectations	Meets Expectations	Above Expectations
	✓-	✓	✓+

Are self-driving vehicles a good idea? Explain your thinking.

K-W-L CHART

Topic:

K

W

L

What do I already know about this topic?

What do I want to know about this topic?

What new things did I learn about the topic from the article?

PREVIEW

SELF-DRIVING CARS

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Self-driving technology is already used in many vehicles, but full driverless cars are not widespread.

Currently, some cars already have partial self-driving features. There are cars that can park themselves, keep you driving at one speed without your foot on the gas (cruise control) or take over automatically. The cars have some self-driving ability, but they still need the car to be controlled by you, are still being developed.

Today's models of driverless cars are not fully autonomous. Some require the driver's hands to be on the wheel to ensure they are ready to take over in case of emergency.

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Sharon and Self-Driving Bus
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PREVIEW

SAMPLE ANSWERS

Name: _____

Instructions: Answer the following questions on this paper.

1. What does artificial intelligence mean?

- An evil robot.
- A brain made from plastic.
- Technology that has the ability to think and learn on its own.
- All of the above.

2. Why should more testing be done on self-driving cars?

- To ensure the models are as comfortable for people to use.
- Accidents are still occurring as the technology is not yet perfect.
- To find out how to increase gas mileage.
- To find out how to make the cars cheaper.

3. Why is it important to include a source below the statistic?

- It is important to be able to find out more information about the topic.
- To provide credit to the source of the information.
- To show the credibility of the information.
- All of the above.

4. Which sentence has the correct spelling and punctuation?

- there have been examples where driverless cars have failed, even after being tested
- There have been examples where Driver-less cars have failed, even after being tested.
- There have been examples where driverless cars have failed! even after being tested.
- There have been examples where driverless cars have failed, even after being tested.