Unit 3 Test A

Name: _____ Date: _____

Unit 3 Test Purposes

- Identify ideas (facts and opinions) in a text (Reading comprehension)
- Understand and use target vocabulary from the unit (pp. 56 and 63)
- Identify important ideas in a text (Reading Skill)
- Use synonyms to give your writing more variety (Vocabulary Skill)
- Summarize the main ideas of a text and give your opinion about it (Writing Skill)
- Use conjunctions "and", "but", and "or" to connect parallel ideas (Grammar)
- Write a summary and a personal response paragraph (Writing)

I. Reading Comprehension

A. Read the text about driverless cars. Then choose the most suitable summary for each section I–V from the list below. There is one option you will not have to use.

1. Section I: ___
2. Section II: ___
3. Section III: ___
4. Section IV: ___
5. Section V: ___

a. We need to decide on levels of safety before driverless cars are used commonly.
b. Every decision we make today will affect tomorrow's society.
c. Driverless cars are creating moral dilemmas as well as technological challenges.
d. Scientists are asking a famous theoretical question again.
e. Experts are planning to carry out a social survey in different countries.
f. Different societies don't view the same situation in the same way.

Driverless Cars and The Questions They Are Raising

Section I

Artificial Intelligence experts aren't the only ones working on the problem of driverless cars. Philosophers are also paying a lot of attention to its development. Cars that drive themselves are bringing a collection of ethical problems with them. Human society needs to start thinking about these to have the answers ready before driverless cars become common.

Section II

Philosophers have been especially focused on one problem posed by driverless cars: the so-called Trolley Problem. In this classic philosophical situation, a trolley is going down some railway tracks towards five people. You can redirect the trolley, but there is one person stuck on the other track as well. The philosophical dilemma is between actively doing versus allowing harm: Is it morally acceptable to kill one to save five, or should you allow five to die rather than

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actively hurt one? In the case of cars, other questions can add extra complications. What if the pedestrians who a car "decides" to kill are of higher social status? What if they are pregnant women? What if they are criminals escaping a bank robbery? What if they are old? Maybe the Trolley Problem sounds unrealistic today, but autonomous vehicles will be unable to avoid similar situations. If a car is in a position where any action will put either the passenger or someone else in danger, for example because there's an accident ahead and the only options are to hit a motorbike or go off a cliff, then what should the car be programmed to do?

Section III

Researchers have collected a lot of answers from different cultures. They asked 2.3 million participants from various countries over the last few years as part of the largest moral decision survey ever carried out. Some of the results are surprising. The majority of the respondents agreed to save the lives of groups of people over individuals and to save humans over pets. However, there are international differences in the priorities about who to save. This is the most useful finding of the study. It seems that people in different countries have different opinions about what is "right" in certain situations. For example, participants from eastern countries are more likely to be in favor of saving the person in an accident who was following the traffic rules. Participants in western countries, however, would prefer not to act at all. People in Latin American countries believe that choosing the younger individual or the one of higher status is the right choice. And, interestingly, the French are more likely to save women over men.

Section IV

Many scientists argue that the really important question is how good driverless cars need to be before they go on the roads. Currently it is hard to guess if they are safer than human drivers. They may be about the same. They might even be more dangerous. We simply don't have enough data to know this yet. All we know is that more than a million people die in car accidents every year now. But how can we decide if driverless cars are safer than human drivers if we can't collect enough data? Also, it is possible that driverless cars will get safer with time. Therefore, we should also agree on what to consider the minimum level of safety we require at first.

Section V

Another big question is connected to the collective future effect of how the cars are programmed. Philosophers and engineers are creating algorithms based on various ethical theories. Any small changes they program into the computers now can make a big difference in the long term. Decisions they make today will determine not only how one car drives but how all cars will drive. This can also be dangerous if we are not careful, because algorithms can become bad policy.

1 point for each correct answer		5

B. Read the statements. Write F (fact) or O (opinion).

6. ___ Experts are thinking about which one they would accept: to actively do damage or to let tragedies happen.

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7. ___ I believe autonomous vehicles are less risky than normal cars.
8. ___ We must begin to consider some important moral questions about driverless cars.
9. ___ More than half of the people who participated in the survey were women.
10. ___ Changes in the law tomorrow might depend on how we program the cars today.

1 point for each correct answer		5

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II. Vocabulary

A. Match each word with the correct definition.

11. obey ____
12. manufacturer ____
13. respond ____
14. feedback ____
15. reliable ____

a. say something in reply; answer
b. able to be trusted
c. carry out an instruction or follow a rule or law
d. observe or to watch
e. difficulty; something that blocks somebody's progress
f. a person or a company that makes a product
g. information about somebody's performance to say how well it was done
h. change something radically

1 point for each correct answer		5

B. Complete the paragraph with the correct form of a word from the word bank.

adapt data digital feedback in favor of limitation occur the benefits of

It is not easy to decide whose life is more important in a potentially dangerous situation that (16) _____ on the roads. In the past, the (17) _____ was that we simply did not have control over the matter. However, now that we will soon develop the (18) _____ technology to make these decisions in advance, the responsibility also becomes ours. We need to (19) _____ to these changing times. We must start by having discussions about what the most moral option is in each type of accident. And we should not feel bad about doing so. The (20) _____ says that currently 1.2 million people die globally every year in car accidents. Any delay we put on improving our transportation is killing people.

1 point for each correct answer		5

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III. Reading Skill: Taking notes in preparation for writing

A. Read the paragraphs and a student's notes. Match the correct summary to each paragraph.

21. ____
Engineers will have to find a balance between the performance of driverless cars and their environmental impact. Small changes in how quickly they speed up or slow down can add up. This in turn can then have huge effects on their energy use and pollution as well. Before they are even designed, experts should make these decisions with our planet in mind.

22. ____
Another new challenge is how to build our traffic infrastructure. One idea is to have greater separation between pedestrians and drivers. Our cars might be made to protect the driver more than the people walking in the street. As a result, we will need to do something to separate walkers more from cars. It may be necessary to build bigger pedestrian islands, for example; that will better protect someone who wants to safely cross the road.

23. ____
With all these changes ahead, engineers are also questioning even more basic ideas about our traffic system. Will we need crosswalks at all, once driverless cars become common? After all, self-driving cars might make it safe to cross a road anywhere. But perhaps it is not only crosswalks that will become unnecessary. It is possible that we will stop using traffic lights too. Human drivers now need traffic lights to cross an intersection without crashing and causing chaos. Self-driving cars could coordinate among themselves digitally instead.

a. the way we organize traffic might be revolutionized (e.g. no crosswalks, traffic lights)
b. equipment which can tell when a car is passing along the road: a new way to slow vehicles down
c. new danger: cars could be controlled by someone else?!
d. walking too dangerous → plan cities differently in future?
e. technological dilemma: choose efficiency or be greener?
f. special highways only for self-driving cars?

1 point for each correct answer		3

B. Look at the notes a–f you didn't use in A. Match each one to a paragraph topic below.

24. driverless cars operated by others may be used to cause harm on purpose ____
25. traditional and driverless cars to be driven in separate spaces? ____
26. increasing highway safety using new technology ____

1 point for each correct answer		3

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IV. Vocabulary Skill: Using synonyms

Replace the underlined word or phrase in each sentence with the correct synonym.

27. They say Elon Musk very closely <u>monitors</u> the development at all the departments of Tesla.
a. senses b. criticizes c. follows

28. Driverless cars will be programmed to sense any important <u>obstacles</u> in front of them.
a. barriers b. crossroads c. pedestrians

29. Tesla is <u>revolutionizing</u> the auto industry.
a. destroying b. changing c. stopping

30. One of the <u>benefits</u> of interactive software in driverless cars is better road safety.
a. tools b. advantages c. limitations

31. Scientists predict that by 2030 driverless cars will become a <u>global</u> industry.
a. international b. profitable c. out-of-date

32. Governments are <u>in favor of</u> companies that develop cars that don't pollute a lot.
a. obeying b. discovering c. supporting

1 point for each correct answer		6

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V. Writing Skill: Writing a summary and a personal response

Autonomous cars will probably have enormous effects on our society, many of which we cannot imagine yet. When electricity was discovered, it brought many things with it, not only light bulbs instead of candles. It caused and created many new things: institutions, industries; then even the internet. Nobody could predict the majority of these cultural and technological changes. Robotics, AI and driverless cars are most likely going to be the same. Much as we didn't see how the car caused suburbs to grow in the United States and in other countries, driverless cars will have an impact on the way we live in ways we don't know yet. Perhaps autonomous cars will lead to people living even further away from cities. The time humans now spend driving could be replaced by leisure. But there may even be negative consequences of the change. There are some other legal worries about responsibility because driverless cars may be programmed to prioritize the safety of the driver over other road users. Others worry about privacy and call the new car "Big Brother on Wheels". It is not clear how driverless cars are going to change our culture, but we need to prepare for more than just a revolution in transportation.

A. Restate the author's ideas by answering the questions.

33. Main ideas

a. What is the main idea of the author in the paragraph?

b. How is the discovery of electricity similar to the invention of driverless cars?

34. Cars and society

a. How does the author compare normal cars to driverless cars in the paragraph?

b. What are some of the possible consequences of driverless cars on society? (Mention at least three).

B. Evaluate the author's ideas by answering the questions.

35. Main ideas

a. Do you agree with the author's main idea? Why?/ Why not?

b. How is the discovery of electricity similar to the invention of driverless cars?

36. Cars and society

a. In what other, *positive* ways might driverless cars impact the way we live, in your opinion?

b. In what other, *negative* ways might driverless cars impact the way we live, in your opinion?

2 points for each correct answer		8

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VI. Grammar: Parallel structure

A. Underline the parallel structure in each sentence.

37. It is unlikely that in real life a car will ever have to choose between saving a baby, an elderly person or an animal, at any one time.

38. It is very probable that driverless cars will also just try to brake and slow down if they see an obstacle in front of them.

39. Governments face difficult dilemmas all the time. They need to decide if they want to spend money on public health programs, new roads, or schools.

40. A car can be very safe but not very cheap at the same time.

41. Many people ask what is so hard about everyday traffic situations, such as nearing a crosswalk, driving through an intersection, or making a left turn.

1 point for each correct answer		5

B. Combine each pair of sentences into one. Use "and", "but", or "or" and a parallel structure.

42. Scientists are working on answering these questions. Philosophers are working on answering them. Politicians are working on answering them.

43. Driverless cars will reduce the number of accidents. They will give us more leisure time.

44. Politicians have to think about some moral questions before driverless cars are allowed into traffic. They have to think about some legal questions. They have to think about some economic questions.

45. The software in driverless cars might stop unexpectedly. It might be hacked. It might make bad decisions.

46. In an emergency the car may try to stop. It may hit a pedestrian. It may go off the road.

1 point for each correct answer		5

Total points Sections I–VI		***50***

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VII. Writing

Write two paragraphs (about 100 words). First, write a summary of the text below. Then, write a personal response to the author's idea that using driverless cars is a shared global responsibility.

Different cultures seem to give very different answers to the Trolley Problem. However, driverless cars will be used globally. Therefore, humankind has to face the many challenges that driverless cars are going to cause. One of these is connected to the types of moral decisions these algorithms will have to make. Currently it is not clear who they would consider worthy of saving across various countries. Driverless cars being developed in different countries will be programmed in different ways depending on who they think is worth saving. Before these vehicles spread we must optimize our solution to this moral dilemma. Similarly, we must decide together if car companies can offer any "luxury upgrades" that might prioritize the passenger's life.

Points Section VII		20

Total points Sections I–VII		***70***

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Writing Rubric

Student name: _____

Date: _____

Assignment: **Write two paragraphs (about 100 words). First, write a summary of the text above. Then, write a personal response to the author's idea that using driverless cars is a shared global responsibility.**

Write a summary and a personal response		Points (0–5)	
Discourse competence	The summary paragraph gives the main idea of the reading and includes supporting details.		/5
	The personal response paragraph includes reasons for the writer's opinion.		/5
Linguistic competence	The text uses appropriate grammar to successfully complete the task.		/5
	The paragraph uses a range of appropriate vocabulary to successfully complete the task.		/5

Total points: _____

Comments: