

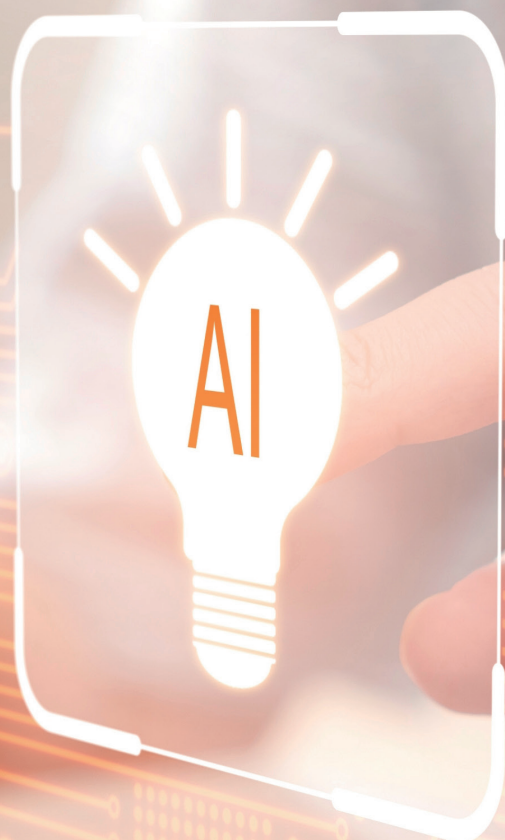
Lesson

8

Technology All Around Us

? Big Question

How can technology change our lives?



Study Points

Functions

- 알고 있는지 묻고 답하기

A: **Have you heard about** smart chairs?

B: **Yes, I have.** / **No, I haven't.**

- 놀람 표현하기

I'm surprised that a chair can do so many things.

Reading

- A Chat with an AI Chatbot

Forms

- It is hard **to understand your explanation.**
- Then it decides **what to recommend.**

Before You Begin

우리 생활에 변화를 불러온
기술에는 어떤 것이 있나요?
미래에는 어떤 기술이 개발
될지 이야기해 봅시다.

Topic 1 At the Technology Show

What kinds of machines or robots can you see?

Useful Expressions

Have you heard about ... ?

Yes, I have. /
No, I haven't.

I'm surprised
that ...

drone
3D printer
sensor
comfort
self-driving
by oneself

- 1 ☐ keep users warm
☐ check users' health

- 2 ☐ build buildings
☐ repair buildings

- 3 ☐ deliver food
☐ help farmers

A Listen and Check

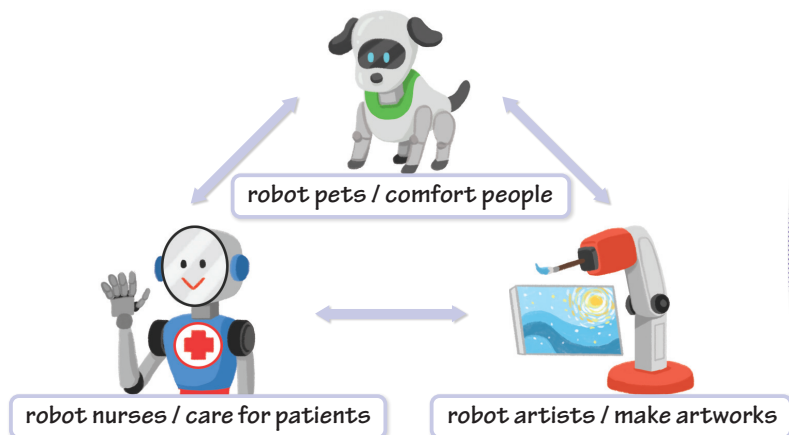
각 대화를 듣고, 그림 속 기계의 기능으로 알맞은 것에 표시해 봅시다.

Listening Tip

- They are chairs with special sensors.
- Let's take a closer look at it.

B Look and Talk

아래 로봇의 종류와 기능에 대한 정보를 보고, 짝과 대화해 봅시다.



예시

A: Have you heard about **robot pets**?

B: No, I haven't. What are they?

A: They are robots that can **comfort people**.


B: That's cool. I'm surprised that a robot can do that.

C Listen Up

1 대화를 듣고, 두 사람이 무엇에 대해 이야기하고 있는지 골라 봅시다. 

a. self-driving cars

b. self-driving bikes

2 대화를 다시 한번 듣고, 빈칸에 알맞은 말을 써 봅시다. 

What is special about the products?

- They can drive themselves.
- They have 1) _____ and sensors.
- They can check the area around them and choose the best 2) _____.
- They can 3) _____ by themselves if there is something in the way.

D Talk Together

아래 제품의 이름과 그림을 보고 기능을 상상하여 써 본 후, 짝과 대화해 봅시다.



The Best New Products of the Year



Warm & Cool Jackets
They can become warm or cool by themselves.



Smart Windows
They can become dark when the sunlight is too bright.



Robot Chefs

On your own

예시

A: The show has the best new products of the year. Have you heard about any of them?

B: Yes. I'm interested in the **Warm & Cool Jackets**. They are amazing!

A: Yeah. I'm surprised that they can **become warm or cool by themselves**.

B: Me too. That sounds so useful.

Topic 2

New Ideas, New Items



두 사람이 새로 개발된 제품에 관해 대화하고 있습니다. 동영상을 보고, 제품의 특징을 알아봅시다.



STEP 1 일상생활에서 겪는 불편함을 해결할 기계나 로봇을 상상해 보고, 그것에 대해 써 봅시다.

예시

On rainy and windy days, holding an umbrella is uncomfortable.



Item

FlyBrella



Details

- It is an umbrella that doesn't have a handle.
- It can fly above your head by itself.

Item

Details

-
-

Draw a picture

STEP 2 STEP 1에서 상상한 기계나 로봇에 관해 모둠원과 이야기한 후, 아래 표를 완성해 봅시다. 

예시 A: On rainy and windy days, holding an umbrella is uncomfortable.

B: So, what did you come up with, **Somi**?

A: I came up with the **FlyBrella**. Can you guess what it is?

B: I have no idea. What is it?

A: It is an umbrella that doesn't have a handle. It can fly above your head by itself.

B: I'm surprised that you thought of that. I'd like to try it someday.

Name	Item	Details
예시 Somi	FlyBrella	It is an umbrella that doesn't have a handle. It can fly above your head by itself.



Presentation Time!

다른 모둠원이 상상한 기계나 로봇을 친구들에게 소개해 봅시다. 

Have you heard about the **FlyBrella**?
It is **Somi's** idea. It is an umbrella that doesn't have a handle. It can fly above your head by itself. I'm surprised that she thought of that.



*** Speaking Tip

새로운 기계 또는 로봇의
특징을 듣는 사람들이
이해하기 쉬운 말로
설명하는 게 좋아요.

Self-Check

- 일상생활에서 겪는 불편함을 해결할 기발한 기계나 로봇을 생각해 냈나요?
- 모둠원의 아이디어에 놀라움을 표현할 수 있나요?



Before You Read





A AI(인공 지능)와 관련한 다음 문장을 읽고, 동의하는지 혹은 동의하지 않는지 표시해 봅시다.

	✓ AGREE	✓ DISAGREE
1 AI can be useful for studying.	<input type="checkbox"/>	<input type="checkbox"/>
2 AI always gives correct information.	<input type="checkbox"/>	<input type="checkbox"/>
3 AI can learn and get smarter by itself.	<input type="checkbox"/>	<input type="checkbox"/>
4 AI's decisions are always right and fair.	<input type="checkbox"/>	<input type="checkbox"/>
5 Sharing personal information with AI is okay.	<input type="checkbox"/>	<input type="checkbox"/>
6 AI can write songs and stories better than humans.	<input type="checkbox"/>	<input type="checkbox"/>

★ Reading Tip

질문과 답변으로 이루어진 글에서는, 질문과 답변
내용의 요지를 파악하며 읽는 게 좋아요.

B 각 사진에 알맞은 문장을 찾아 연결하고, 밑줄 친 단어의 뜻을 추측해 봅시다.

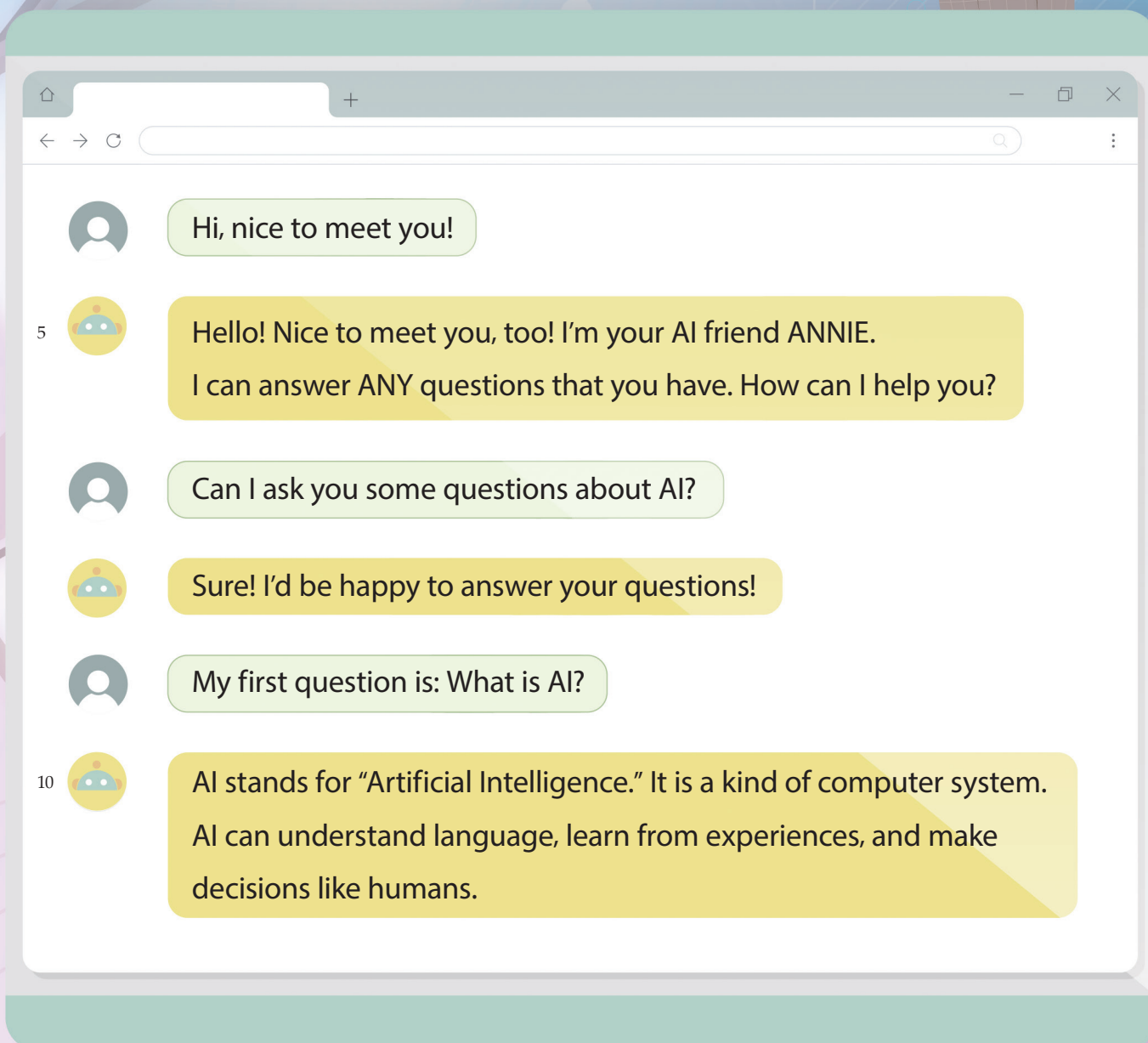
1		•	• (a) He put <u>artificial</u> snow on the tree.
2		•	• (b) The player hit the ball with amazing <u>accuracy</u> .
3		•	• (c) The man used the key to <u>unlock</u> the door.
4		•	• (d) The woman covered her phone screen for <u>privacy</u> .

A Chat with an AI Chatbot



Today's Lesson: What is AI?

- (1) Talk to an AI chatbot, and ask it some questions.
- (2) Share your chat with your classmates.



Q1 What does AI stand for?

stand for artificial intelligence decision



It is hard to understand your explanation. Can you give me an example?



Sure! Imagine that you have a new pet dog and you want to teach it how to sit and stay. Your dog will learn from information and experiences. AI is similar. But you don't have to give AI a snack!



How is AI used in everyday life?



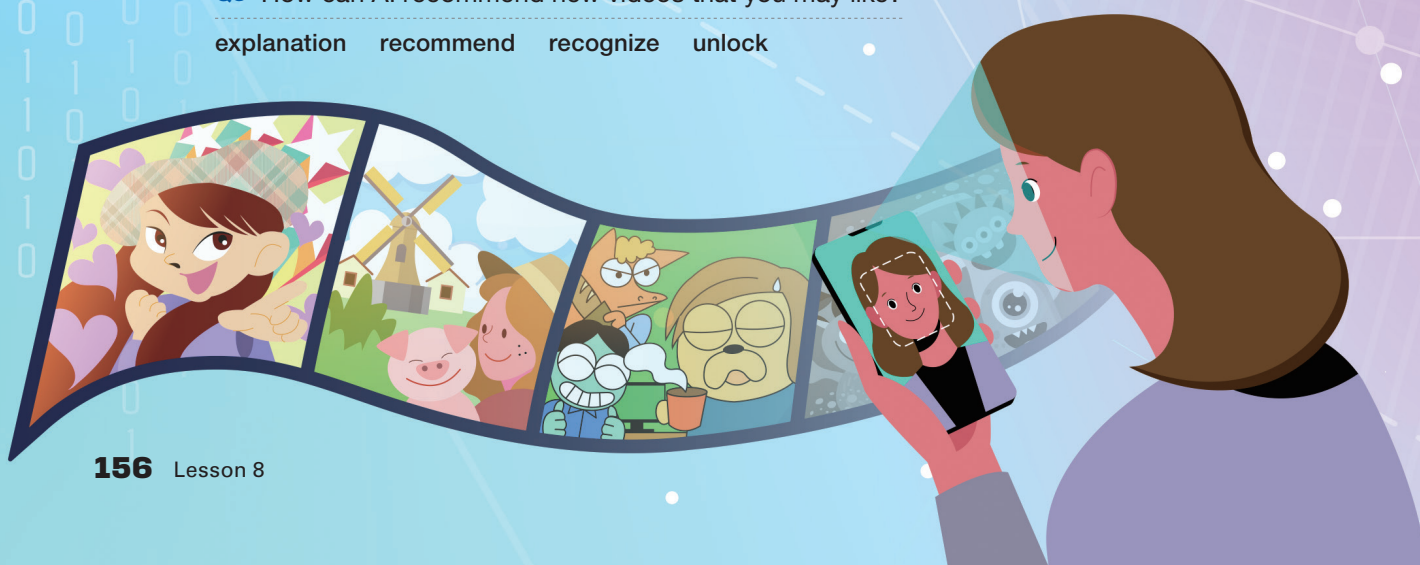
AI is used in many situations. For example, AI technology can recommend new videos that you may like. It studies which videos you have already watched. Then it decides what to recommend.

AI can also recognize your face to unlock your smartphone. It learns what your face looks like. Over time, it gets better at recognizing you, even if you change your hair or wear a mask.

Q2 How are a pet dog and AI similar?

Q3 How can AI recommend new videos that you may like?

explanation recommend recognize unlock





Here is my last question: What should I be careful about when I use AI?



You should keep the following things in mind:

1. Accuracy: AI is not always correct, so you should always carefully check the information that it provides.



2. Originality: Even if the information is correct, do not blindly copy it. Make sure you understand it, and then write it in your own words.



3. Privacy: It is not safe to share your personal information with AI.



If you are careful about these things, you can use AI safely and wisely.



Got it, thanks!



You're welcome! If you need help in the future, feel free to ask. Have a great day!




Q4 What are three things to remember when you use AI?
accuracy provide originality blindly copy privacy

Link to the **Big Question ?**

How much do you know about AI?


After You Read

A 다음 중 본문을 읽고 알 수 없는 내용을 말하는 사람을 골라 봅시다.




What did you learn from today's lesson?

(a) AI can learn from information and experiences.




Nari

(b) AI can still recognize us even if we change our hair.




Daeho

(c) AI can answer questions better than humans.



Kate

(d) We should not blindly copy the information that AI provides.



Ben

B 본문 내용과 일치하도록 빈칸에 알맞은 말을 골라 써 봅시다.

Questions	Answers
What is AI?	AI stands for "Artificial ¹ _____." It is a kind of computer ² _____. It can understand language and make ³ _____ like humans.
How is AI used in everyday life?	It can recommend new ⁴ _____ to watch. It can recognize your face to ⁵ _____ your phone.
What should I be careful about?	When you use AI, you should keep accuracy, ⁶ _____, and privacy in mind.

unlock decisions originality videos intelligence system

Make Connections

C 자신이 사용해 본 AI 기술을 떠올려 보고 질문에 대한 답을 쓴 후, 그에 대해 이야기해 봅시다.

Q: What AI technology do you use in your everyday life?

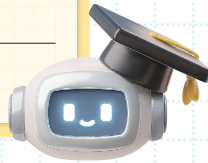
A: _____

Q: How does it help you?

A: _____


예시

I use an AI speaker at home. I can use it to turn the TV and lights on and off with just my voice. It's really helpful when I'm getting ready to go out.



Culture Focus

Technology Around the World

세계 여러 나라의 로봇과 AI 기술 활용에 대해 알아보고, 또 다른 사례들을 조사해 봅시다. 



미국의 한 로봇 공학 기업은 네 발로 걷는 로봇을 개발하여 다양한 분야에서 활용하고 있습니다. 이 로봇은 위험한 현장을 점검하고 재난 상황에서 생존자를 찾는 데 도움을 줄 수 있습니다.



네덜란드의 한 기업은 AI로 온도, 습도 등 작물 재배 환경에 대한 정보를 실시간으로 분석한 후 AI 시스템으로 최상의 재배 조건을 유지하여 높은 품질의 작물을 생산합니다.



중국의 한 물류 회사에서는 로봇들이 물류 창고에서 주문 상품을 빠르게 찾아내어 운반하고 발송 준비를 합니다. 또한 무인 배송 로봇이 최적의 배송 경로를 찾아 택배를 배송합니다.



A It is hard to understand your explanation. p. 156



가주어 it은 주어로 쓰인 to부정사가 길어지는 경우에 주어를 대신해서 써요.

To move on the ice is very fun!

It is very fun to move on the ice!

To skate too fast is dangerous!

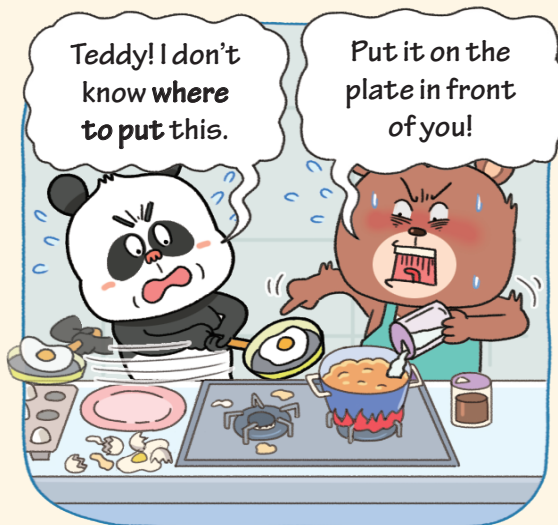
It is dangerous to skate too fast!

Let's Use It 다음 문장을 가주어 it을 활용한 문장으로 바꿔 써 봅시다.

- 1 To go hiking alone is dangerous. → _____
- 2 To play new games is interesting. → _____
- 3 To learn a language is difficult. → _____
- 4 To drink water often is important. → _____



B Then it decides what to recommend. p.156



의문사 + to부정사는 문장에서 주어, 목적어, 보어로 쓰일 수 있는데, 특히 목적어로 사용 되는 경우가 많아요.

what + to부정사	무엇을 ~할지
how + to부정사	어떻게 ~할지 (~하는 방법)
when + to부정사	언제 ~할지
where + to부정사	어디서 ~할지

Let's Use It 주어진 표현을 활용하여 문장을 완성해 봅시다.

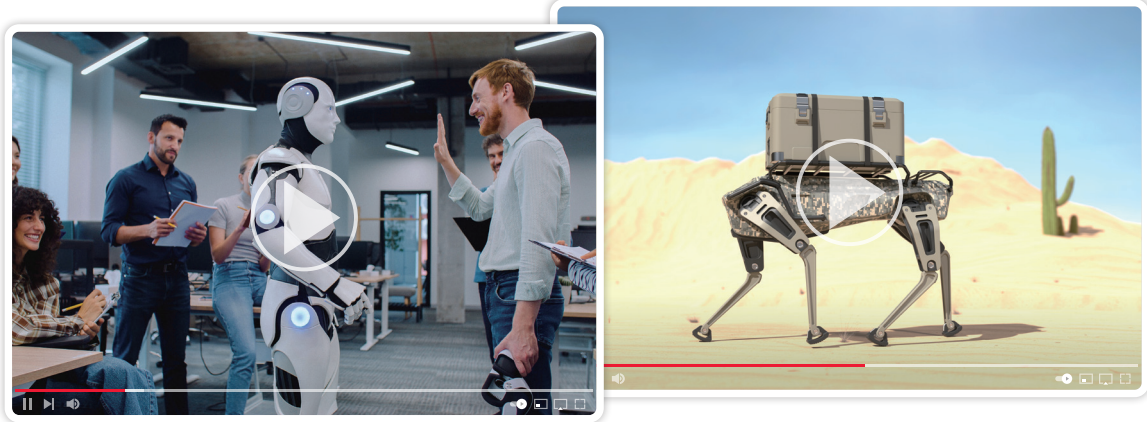
- 1 Can you tell me _____ you at the airport?
- 2 The doctor told me _____ when I have a cold.
- 3 A man asked me _____ tickets for the concert.
- 4 I learned _____ a website in my computer class.

where/buy
what/eat
when/meet
how/create

Topic 4

An Amazing Robot

STEP 1 영화나 책에서 본 놀라운 로봇을 떠올려 봅시다.



STEP 2 STEP 1에서 떠올린 로봇과 주어진 내용을 바탕으로 다음 질문에 답해 봅시다.

예시

What kind of robot did you see/read about?

I saw a cleaning robot in a sci-fi movie.

What did it look like?

It looked like a spider with many arms.

What was special about it?

It knew how to clean well and quickly.
It could clean lots of places at once with its many arms.

What did you think about it?

It would be great to have this robot because I could save time on cleaning.

What kind of robot did you see/read about?

I _____ in _____.

What did it look like?

It looked like _____.

What was special about it?

It knew how to _____.
It _____.

What did you think about it?

It would be _____
to _____
because _____.



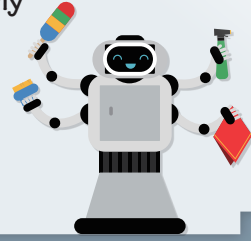
Ideas

understand emotions / travel through time /
repair cars / translate languages

STEP 3 STEP 2에서 정리한 내용을 활용하여 영화나 책에서 본 로봇을 소개하는 글을 써 봅시다.

예시

I saw a cleaning robot in a sci-fi movie. It looked like a spider with many arms. It knew how to clean well and quickly. It could clean lots of places at once with its many arms. It would be great to have this robot because I could save time on cleaning.



I _____ in _____.

It looked like _____.

It knew how to _____.

It _____.

It would be _____ to _____.

because _____.

Writing Tip

읽는 사람이 모르는 대상을 설명할 때는 비슷한 속성을 지닌 다른 대상에 비유하면 이해를 도울 수 있어요.

Self-Check

- 로봇의 생김새와 기능을 잘 묘사했나요?
- 로봇에 대한 자신의 의견을 포함하여 작성했나요?



Our Lives in the Future



미래에 우리의 삶이 어떻게
변화할지 자유롭게 상상해 보고,
반포 자료를 만들어 봅시다.

STEP 1 Think and Choose

미래에 우리의 삶이 어떤 모습일지 상상해 보고, 모둠원과 함께 이야기해 보고 싶은 주제를 정해
봅시다.

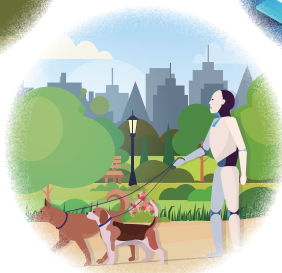
Houses



School Life



Transportation



Parks



Entertainment

STEP 2 Talk and Write

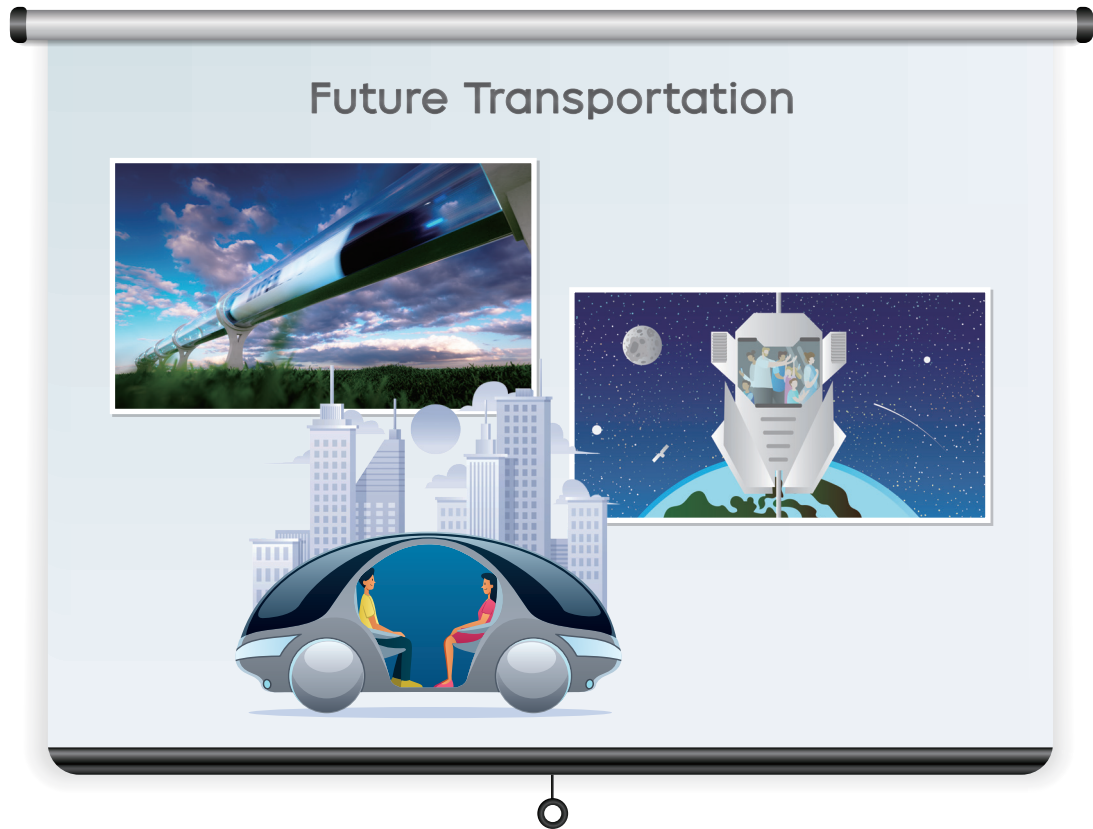
STEP 1에서 정한 주제로 모둠원과 자유롭게 이야기해 보고, 그 내용을 아래 표에 정리해 봅시다.

예시

Topic	What will it/they be like in the future?
Transportation	1) Trains will travel very fast through special tubes. 2) Cars will drive themselves without human drivers. 3) People will be able to travel to space for vacations.

STEP 3 Search and Create

STEP 2에서 작성한 내용에 어울리는 이미지를 찾아 발표 자료를 만들어 봅시다. 



STEP 4 Share and Comment

다른 모둠의 발표를 듣고, 어떤 점이 흥미로웠는지 아래 표에 정리해 봅시다.

모둠명	주제	흥미로운 점
예시 Future Ride	Transportation	It would be amazing to take a vacation in space.

Group-Check

- 선정한 주제에 관련된 미래의 모습에 대해 이야기했나요?
- 다른 사람이 만든 이미지를 사용한 경우 출처를 밝혔나요?



Lesson Review



A ^L 대화를 듣고, 냉장고의 특징으로 언급되지 않은 것을 골라 봅시다. 🎧

- Ⓐ It can scan the things inside.
- Ⓑ It can show users recipes.
- Ⓒ It can make shopping lists for users.
- Ⓓ It has special sensors.

B ^{R W} 다음을 읽고, 글의 흐름상 적절하지 않은 문장을 골라 바르게 고쳐 써 봅시다.

You should keep the following things in mind:

1. Accuracy: Ⓐ AI is not always correct, so you should always carefully check the information that it provides.
2. Originality: Ⓑ Even if the information is correct, do not blindly copy it. Ⓒ Make sure you understand it, and then write it in your own words.
3. Privacy: Ⓓ It is safe to share your personal information with AI.

_____ → _____

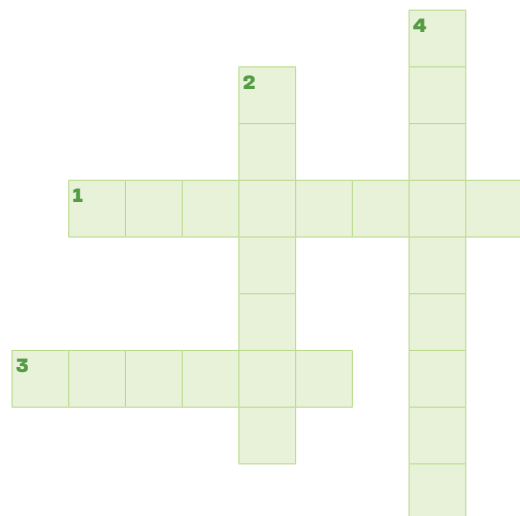
C ^{V W} 문장의 빈칸에 들어갈 알맞은 단어로 십자말 풀이를 완성해 봅시다.

Across ➡

- 1 AI can learn from experiences and make d_____s like humans.
- 3 AI can recognize your face to u_____ your smartphone.

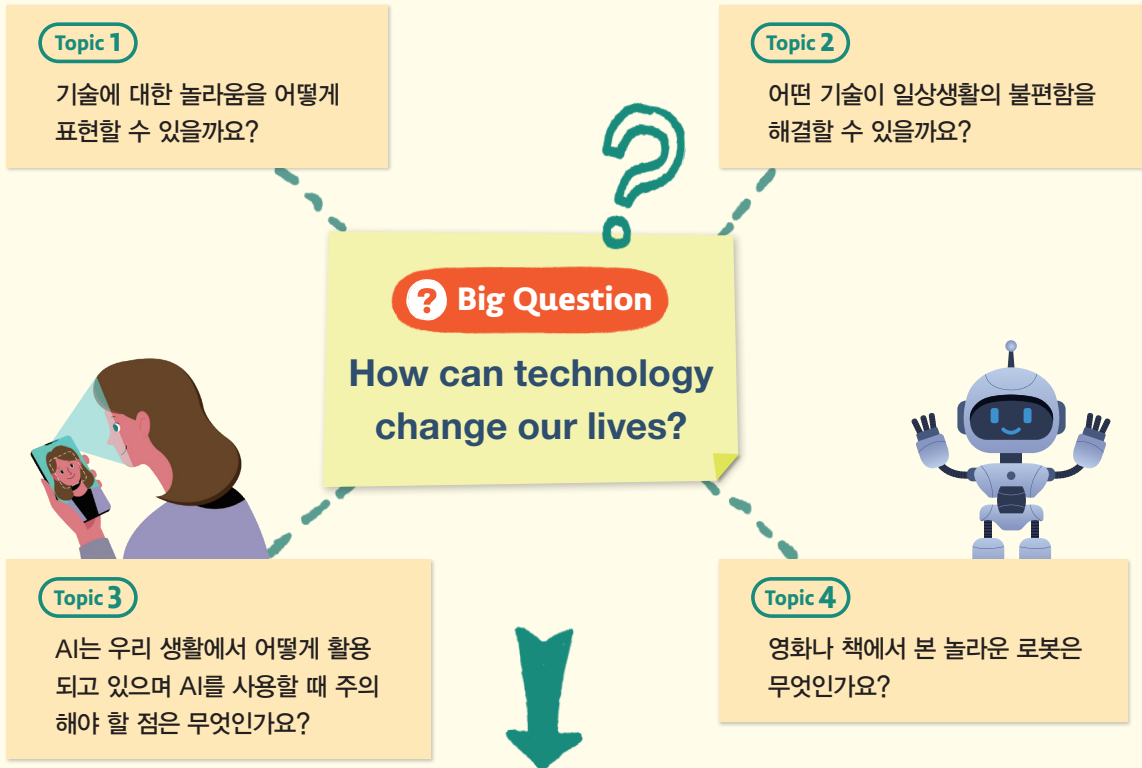
Down ⬇

- 2 I set the password on my phone to protect my p_____.
- 4 AI technology can r_____ new videos that you may like.



Answer to the Big Question

이번 단원에서 배운 내용을 생각해 보고, 아래 질문에 답해 봅시다.



Your Answer

Now I Can ...

이번 단원의 내용을 얼마나 잘 학습했는지 스스로 평가해 봅시다.

1 어떤 대상을 알고 있는지 묻고 답할 수 있다.	😊 😐 😞
2 어떤 대상에 대한 놀라움을 표현할 수 있다.	😊 😐 😞
3 AI의 개념, 활용 분야, AI 사용 시 주의할 점에 관한 글을 읽고 이해할 수 있다.	😊 😐 😞
4 영화나 책에서 본 놀라운 로봇을 소개하는 글을 쓸 수 있다.	😊 😐 😞
5 디지털 기술을 이해하고 안전하게 사용할 수 있다.	😊 😐 😞