

FamilyMart Prepares to 'Employ' Cleaning Robots

Science and Technology

Exercise 1

Vocabulary

1.imagine Verb

 $\mathbf{I}^{\mathsf{'}} \mathbf{m} \mathbf{æ} \mathbf{d} \mathbf{\mathfrak{z}} \mathbf{n}$

to form an image or idea of something in one's mind

I can't **imagine** going a week without my phone!

2.bump

Verb

b_{\lamb}

to hit into a person or thing

I **bumped** my head on the rail.

3.sensor

Noun

ˈsɛnsər

a device that measures or reacts to heat, movement, light, etc.

The car's **sensors** and cameras allow it to perceive road markings.

4.struggle

Verb

'str_{\lambda}gəl

to experience difficulty dealing with or handling something

The tourism industry has **struggled** with the challenges brought on by the COVID-19 pandemic.

5.labor

Noun

leibər

workers considered together or as a social or political group

The emigration of young, educated people has led to **labor** shortages in many industries.

6.monitor

Verb

'ma:nɪtər

to watch and check someone or something for a period of time

Doctors monitored the man's condition for 24 hours after the accident.

Exercise 2

Article

Take turns reading the article aloud.

FamilyMart Prepares to 'Employ' Cleaning Robots

Sometimes the future looks very different to the way we **imagined** it. But other times, it's just as we expected, or read about in science fiction books.

Here's an example: Japan's FamilyMart stores are getting ready to **employ** robots, and not just any robots. These robots will clean the floor and carry popcorn and other snacks around.

It sounds like something you drew when you were at school, but before the cherry blossoms arrive this year you could be bumping into one of these things in 300 stores across Japan.

Okay, so they won't only be carrying snacks, and the machines' **sensors** should make sure that they don't **bump** into anything, but the robots are coming.

As companies across Japan **struggle** with the **labor** shortage, they're finding new ways to get jobs done.

FamilyMart said that the robots should be ready by the end of February. As well as cleaning the floors, they'll also carry products on their own special shelves. They'll even have a screen for advertising.

According to the company, the robots will be able to clean a store in an hour, and should work as fast as — or faster than — people.

The robots, which have been made for FamilyMart by Tokyo company with Robotics, are 39 centimeters wide and 109 centimeters high — that's almost exactly the same size as the *Star Wars* robot R2-D2.

And FamilyMart hopes that very soon these R2-D2s will be able to use cameras and **artificial intelligence** to **monitor** the shelves and tell staff when products need to be **restocked**.

FamilyMart said that as the number of workers in Japan decreases, it will be important to learn to live with robots.

Exercise 3

Questions

Answer the following questions about the article.

- 1. How many FamilyMart stores will the new robots be used in?
- 2. How fast will the robots be able to clean a store?
- 3. What's the name of the company that makes the robots?

Exercise 4

Discussion

Have a discussion based on the following questions.

- 1. What are your thoughts on FamilyMart's new robots?
- 2. Have you ever seen any robot workers in shops or restaurants?
- 3. Do you think robots will one day replace human workers in shops?
- 4. What did you imagine the future would look like when you were younger?

Exercise 5

Further Discussion

Have a discussion based on the following questions.

- 1. How would you feel if you had a robot colleague?
- 2. What parts of your job could be made easier with the help of automation?
- 3. How has automation changed your industry in recent years?
- 4. If you had your own robot at home, what tasks would you get it to do?