

Here come the robots!

1 Look at the news stories and discuss them with your partner. Is there anything you find surprising?

2a Read the text about how robots are doing human's jobs. Where is this happening?

Workers in China are building a factory where robots do all the work. The factory makes electronic equipment for smartphones and computers. The robots replace the jobs of 30,000 workers.

Amazon, the online retailer, is using robots in ten warehouses. The robots fetch items and bring them to packers. They make the workers' jobs easier.

Some jobs – taxi driver, teacher, nurse, farmer – only humans can do, right? Wrong! Here are three jobs that robots can do just as well as human workers.



The US and France

Farming is a difficult job, so some farmers in California had an idea to make their job easier. They designed a robot to help them with their lettuces. Lettuce Bot moves along the rows of plants and identifies which are small lettuces and which are weeds. It has a database of more than a million images to help it identify the plant. It then sprays pesticide on the weeds and leaves the lettuces. Some farmers in France are using robots to check and harvest their grapes. The device, called Wall-Ye, only works in places where it is allowed to go, or the hard drive self-destructs.

The UK

Milton Keynes is a typical English town, full of buses, cars and taxis. But here there's a difference – some of the cars don't have drivers! Three LUTZ Pathfinder driverless vehicles appeared in September 2015. They travel at 15 mph and use sensors to detect other vehicles and people. The vehicles are going to be used as taxis but aren't being used yet because the car still needs a 'brain'. Scientists at Oxford University are working on this and hope that they can begin a trial on the streets of London soon.



robot vacuum cleaner

Japan

Domestic robots first appeared in 2002 in the form of a robot vacuum cleaner. But now, scientists at Waseda University in Japan are working on a robot that does the job of a nurse and could help older people to live independent lives. The Twenty-one Nursebot can carry a person, help cook food, and even bring them breakfast! The robot is the size of an adult woman and moves around on a large wheel. It has two cameras for 'eyes', four fingers on each hand, and can pick up an object the size of a coin!

2b Read the article again and circle the best answer.

- 1 Farmers in California are using a robot to help them
 - a) harvest their lettuces.
 - b) find and kill weeds.
- 2 Wall-Ye can
 - a) only go in designated areas.
 - b) go anywhere.
- 3 Scientists at Waseda University are working on
 - a) a robot that can vacuum a room.
 - b) a robot that can help old people.
- 4 The Nursebot has got
 - a) eyes and hands.
 - b) eyes, feet and hands.
- 5 Driverless cars appeared
 - a) in Milton Keynes in 2015.
 - b) in London in 2016.
- 6 Oxford University scientists
 - a) are designing a new driverless car.
 - b) want to trial their car soon.

2c Read the sentences and put a tick (✓) if the sentence is true or a cross (X) if the sentence is false for each robot.

	Lettuce Bot	LUTZ Pathfinder	Twendy-one Nursebot	Wall-Ye
1 It can cook.				
2 It moves.				
3 People are using it now.				
4 It can 'see' things.				

Gateway to culture

3a Work with a partner and answer the questions.

- 1 What other jobs do you think robots can do?
- 2 How can robots make our lives easier?
- 3 Which of the robots in the article would you like to have?

PROJECT

3b You are going to work on a project about jobs that robots are doing or can do in the future in different parts of the world. Read the questions and prepare your project research.

- 1 In your groups, do some research on the Internet to find information about three robots that can do jobs in your country and other countries. Find answers to the following:
 - Is the robot doing the job now or are scientists developing the robot?
 - What job can the robot do?
 - How does it help people?
 - What special features does it have (e.g. sensors, eyes, hands, feet, etc.)?
- 2 Work together and discuss what you found out. Decide how to present your information to the class. This can be a slideshow, a presentation or a poster.

3c Present your information to the class. What were the main similarities and differences between your country and the other countries you chose?