



ou've seen robots in movies. But robots are a part of real life too. In fact, robots have a big **impact** on your life. They build the school buses you ride. They pack the clothes you order online. They might even milk the cow that **contributes** to your breakfast.

Now, scientists are building robots that can do even more. These robots will serve you drinks. They'll greet you in a store. They may teach your classes. They may even examine you when you're sick. And they will look and move like you. These robots may even think like you. Well, sort of.



PAUSE AND THINK: How do robots affect your everyday life?

Factory Workers

Most robots working today aren't like the ones you see in the movies. These robots are just machines. They are controlled by a computer. They do work without help from people. These robots are used to do simple jobs efficiently. They do the same task over and over. And they mostly work behind the scenes.

The first robot to work in a factory is a good

VOCABULARY

impact: a powerful effect

contributes: supplies something

efficiently: doing something well without wasting materials, time, or energy

developing: creating something over a period of time

engineers: people who design and build complicated products, machines, and structures

LEFT TO RIGHT: SIMBE ROBOTICS; RINGO CHIU/ZUMAPRESS.COM/NEWSCOM; COURTESY OF MARBLE

example of this. It was a metal arm. This robot weighed 2,700 pounds. It was called Unimate. This giant arm helped build cars in the 1960s. It picked up hot metal parts. Then it joined them together.

Since then, robots have taken millions of jobs from people. Robots pull up weeds at farms. A robotic arm called Flippy cooks fastfood burgers. And the SAM100 helps build walls. It lays nearly 400 bricks an hour.



PAUSE AND THINK: What are robots? How are they most often used?

Walking, Talking Robots

Robots like Flippy and Unimate have useful skills. But the newer robots will make them look simple.

Scientists are **developing** robots with artificial intelligence. That means the robots can learn and think like humans do. Some robots can recognize our speech. They can talk back. Other robots can see. They see using lasers and cameras.

Robots that can see or hear have already been put to work. They bring medicine to people in hospitals. They measure crops on farms. Do you shop at a Schnucks grocery store in St. Louis, Missouri? If so, watch out for Tally. It's a 6-foot-tall robot. It moves around the store. It counts items on the shelves.



PAUSE AND THINK: What is artificial intelligence?

Robot or Human?

Robots aren't just acting like us. They're also looking more like us. Why? Some scientists say that people are more likely to

ROBOTS IN REAL LIFE

Here are three ways you might come in contact with robots one day soon.



trust robots that look like people. So a British company is making robots that almost look human. How? **Engineers** use tiny motors. The motors control smiles. The engineers make plastic skin too. It has wrinkles and hair.

Robots that look like humans aren't very common yet. But you'll probably see many of them in the future. They already help people check in at hotels in Japan. Soon, they may even help care for sick people.



PAUSE AND THINK: Why are some scientists making humanlike robots?

Big Questions

Many people are scared by the rise of the robots. They wonder: Can robots really help us when we are sick? Will robots replace the humans in our lives?

And the biggest question: Will robots take our jobs? Millions of factory jobs have already been taken by robots.

Some experts say you won't lose your job to a robot. They say you'll just work next to one. The question is, how will you know? •



PAUSE AND THINK: Why might you not know you're working next to a robot?



Cheeseburgers, coming up!

In a grocery store Tally is a 6-foot-tall robot. It counts the items on the shelves at Schnucks markets in St. Louis, Missouri.



At a restaurant A robot named Flippy flips burgers at CaliBurger, a fast-food restaurant in California.



On a sidewalk

If you live in Dallas,

Texas—look out! A

Excuse

me, pizza

company called
Marble is testing out
food-delivery robots.



Guestions About Rise of the Robots



WHAT TO DO: Answer the questions below. Use full sentences.



1. When did robots start working in factories?



2. What are three jobs that robots already do?



3. How do engineers make robots look like humans?



4. Where do humanlike robots help visitors check into hotels?



5. Why are some people worried about robots?