

In the  
News

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# RISE OF THE

# ROBO

Machines are starting to look  
and act more like humans.  
Is that a good thing? BY TOD OLSON





VIDEO 1

VIDEO 2

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WEB VIEW

# ROBOTS

## ROBOT OR HUMAN?

An expert works on Fred, a very lifelike robot. Some scientists think people are more likely to trust robots that look like humans.

MATT CARDY/GETTY IMAGES

**W**e rarely see robots, except in movies. But in reality, these machines have a tremendous **impact** on your life. They build your school buses and help pack the clothes you buy online. They might even milk the cow that **contributes** to your breakfast.

Now, scientists are working on a new generation of robots. These robots will do more than just work in factories or warehouses. They'll serve you drinks and greet you in a store. They may even teach your classes in school or examine you when you're sick. And they will look, move, and even think like you—sort of.



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

## Factory Workers

The majority of robots working today aren't the walking, talking robots you see in science fiction movies. Instead, they're just machines that perform tasks without human help. Usually they are controlled by a computer and are used to **efficiently** carry out simple jobs. They perform repetitive tasks, working behind the scenes. →

## 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

The first robot ever to work in a factory fit that description. It was a 2,700-pound metal arm called Unimate that helped build cars at General Motors in the 1960s. The giant arm picked up hot metal parts and joined them together.

Since then, robots have replaced humans in millions of jobs. Farming robots pull up weeds around lettuce plants. Flippy, a robotic arm, cooks fast-food burgers. And SAM100, a truck-like robot, helps build walls by laying almost 400 bricks an hour.



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

## Walking, Talking Robots

Robots like Unimate, Flippy, and SAM100 have useful skills. However, the next generation of robots will make them look basic.

In laboratories around the world, scientists are **developing** robots with artificial intelligence—the ability to learn and think like humans do. Some machines can recognize our speech and respond. Others see by using lasers and cameras.

Robots that can see or hear are already performing more complicated tasks, such as delivering medicine in hospitals and measuring how well farmers' crops are growing. And if you shop at a Schnucks grocery store in St. Louis, Missouri, watch out for Tally. This 6-foot-tall robot roams the aisles, counting items on the shelves.



**PAUSE AND THINK:** What is artificial intelligence?

## Robot or Human?

In addition to acting like us, machines are also looking more human. Because some scientists believe people are more likely to trust robots that look like humans, one British company is making

# ROBOTS IN REAL LIFE

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



humanlike robots that almost look real. The company's **engineers** use tiny motors to control smiles and winks. They create plastic skin that has wrinkles and hair.

Humanlike robots aren't commonplace yet. But in your lifetime, you'll probably encounter many of them. They already assist visitors with checking in at hotels in Japan. In the future, they may even help care for sick people.



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

## Big Questions

Many people find the rise of the robots to be scary. If we're sick, can a machine provide the best comfort? Will robots start to replace human contact in our lives?

And the greatest concern: Will robots put humans out of work? Millions of factory jobs have already been lost to machines.

However, some experts believe you probably won't lose your job to a robot. They predict that you'll simply work alongside one. The question is, will you know for sure? •



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



I spy 72 boxes of rice . . .

1

**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.

Cheeseburgers, coming up!



2

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

Excuse me, pizza delivery.

3

**On a sidewalk** If you live in Dallas, Texas—look out! A company called Marble is testing out food-delivery robots.



Action Activity

# 5 Questions About Rise of the Robots

GO FURTHER! FIND MORE ACTIVITIES

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

WHEN

1. When did robots start working in factories?  
\_\_\_\_\_  
\_\_\_\_\_

WHAT

2. What are three jobs that robots already do?  
\_\_\_\_\_  
\_\_\_\_\_

HOW

3. How do engineers make robots look like humans?  
\_\_\_\_\_  
\_\_\_\_\_

WHERE

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

WHY

5. Why are some people worried about robots?  
\_\_\_\_\_  
\_\_\_\_\_

Answers are in the Teacher's Guide.