

# Issue Overview: The Internet of things

By Bloomberg, adapted by Newsela staff on 09.08.16

Word Count **454**

Level **860L**



TOP: Smart Home at the 2015 Mobile World Congress Conference on July 15, 2015 in Shanghai, China. Courtesy of Getty Images.

Some look forward to the day when their baby's diaper will tell them when it's wet. Others fear the day when a hacker can steal information from their car and personal devices. Either way, that day is coming. Cheap sensors connected to the Internet are beginning to appear in objects all around the world. Linked by wireless technology, they will make up what's been called the Internet of Things.

Altogether, there will be more objects connected through the Internet than people. Some experts say that by 2020, the number of connected devices will be more than three times what it is now. For people, this means coffeemakers that pause when they hit their alarm's snooze button. For businesses, it means warehouses that place their own orders. That would result in big savings.

## The Situation

Companies like Samsung, Apple and Google have been connecting all kinds of devices to the Internet. In 2015, Amazon introduced Dash Buttons. These devices attach to washing machines and pantry doors. Homeowners can press them to reorder supplies like detergent and food. This

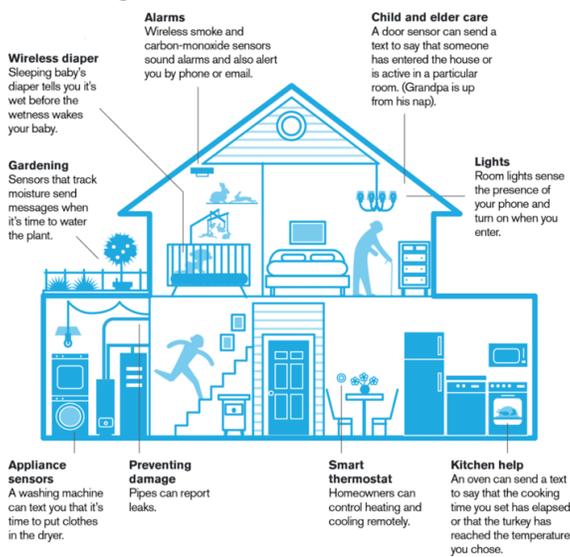
year, GE put out a washer that can reorder detergent when it's running out. Makers of other devices are following their lead.

Some companies have created new tools to help people manage connected devices. Others are building software and hardware for the Internet of Things.

One big challenge is getting devices to talk to each other. For example, a person may need one smartphone app to turn up the heat and another to turn on a home alarm system. Safety is an even bigger question. Without protections, hackers may be able to turn coffee pots into weapons.

## The

### Smart Things Automate the Home



## DEFINITIONS

### hacker

A person who uses computers to find private information

### sensor

A device or object that can pick up and respond to a wireless signal

### wireless

Technology that sends signals and information over airwaves instead of through wires

## Background

In 1982, students at Carnegie-Mellon University put sensors in a Coca-Cola vending machine. They connected it to an early form of the Internet. This let them tell if the machine was empty without having to walk all the way there.

The term "Internet of Things" was coined in 1999. Sensors were too expensive for most people until the rise of smartphones led to lower prices. They can now be used to track many things.

## The Argument

Wireless devices collect, track and send a lot of information. Doors and electrical systems can give clues about whether a house is empty. More information means more problems. The Internet of Things could make it easy for hackers to use devices for bad reasons. U.S. officials are making rules for safety, but they are moving slowly.

Companies are also figuring out what people will pay for different devices. An expensive thermostat might lower heating and cooling bills. That could save money over time. But wireless diapers may have to be a lot cheaper before people buy them.

## Quiz

- 1 According to the article, what is the relationship between students at Carnegie-Mellon University and the Internet of Things?
- (A) The students created the term "Internet of Things" in 1982.
  - (B) The students first connected sensors in a machine to the internet.
  - (C) They made technology that lowered the price of smartphones.
  - (D) They invented a thermostat that can lower heating and cooling bills.
- 2 According to the article, why might hackers cause a problem with devices connected to the internet?
- (A) Hackers can triple the number of connected devices by 2020.
  - (B) Hackers can stop the progress of the Internet of Things.
  - (C) Hackers can use unprotected devices for bad reasons.
  - (D) Hackers can make the sensors for devices cheaper.
- 3 Use the article and the graphic "Smart Things Automate the Home" to select the TRUE statement.
- (A) Sensors on doors and lights can tell if someone has entered a room.
  - (B) Sensors on garden plants can measure how much plants will grow.
  - (C) Sensors on diapers can tell if a baby is hungry or has had enough to eat.
  - (D) Sensors on ovens can take the food out and let it cool.
- 4 Which statement from the article is BEST supported by the graphic "Smart Things Automate the Home"?
- (A) For businesses, it means warehouses that place their own orders.
  - (B) One big challenge is getting devices to talk to each other.
  - (C) They can now be used to track many things.
  - (D) U.S. officials are making rules for safety, but they are moving slowly.