

ave you ever wondered what it will be like to be a middle schooler in the year 2113? Will you teleport to school? Plug your brain into the Internet? Go to summer camp on another planet?

Humans have been trying to predict the future since the dawn of history. Some predictions have been hilariously wrong-like the 1950 claim that in the future, underwear would be recycled into candy. But some of yesterday's predictions have been spot-on. Take Jules Verne. In his 1865 novel From the Earth to the Moon, he wrote that we'd go to the moon in pods much like today's rockets.

It's exciting to imagine how future humans will have solved the problems we have now, or what amazing new inventions will make our lives more convenient and interesting. We asked top scientists to share their predictions on what the world will be like in a century. If they're right, the year 2113 is going to be *really* cool.

# **ROBOTS WILL DO YOUR** CHORES-AND MORE.

When robots aren't cleaning our bedrooms, they could be doing most of our jobs, from building homes to teaching math. There are already robots that clean floors and pump gas; in the future they will be more sophisticated. Unfortunately, with robots taking all the jobs, unemployment will be high.

YOU WILL READ MINDS.

Speaking of being social, we will communicate in an entirely different way. Forget texts and tweets. Mind-reading technology will allow us to send thoughts to each other without speaking a word. We will also be able to send thoughts to objects around us. (Instead of pressing "start" on the microwave, you could just think "start.") Meanwhile, chips implanted in our brains will improve memory and intelligence. Just think how easy algebra will be!

## **WANT A NEW PAIR OF** JEANS? CLICK "PRINT."

The way we purchase products could be very different, says Peter Bishop, a professor of strategic foresight at the University of Houston. With amazing 3-D printers, you will download plans for a new pair of jeans and print them out at home, instead of having them shipped from far away.

YOUR CAR WILL DRIVE YOU. Today, around 30,000 Americans die in car accidents each year. One hundred years from now, accidents will be a thing of the past. According to Mark Safford, a consultant for the U.S. Department of Transportation, future cars will drive themselves. These electric cars will communicate with other cars on the road to travel safely in close formation at high speeds.

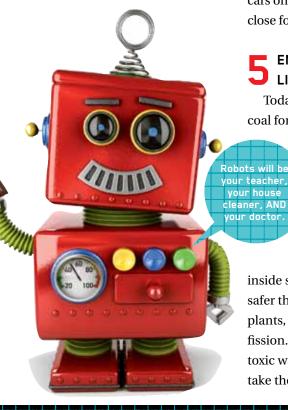
#### **ENERGY WILL BE** LIMITLESS.

AND

Today we rely on oil and coal for most of our energy,

> but this damages the environment and we may one day run out of these fuels. In the future, we'll rely on nuclear fusion, the

reaction that happens inside stars. Nuclear fusion will be safer than today's nuclear power plants, which use a process called fission. Nuclear fission creates toxic waste that is lethal and can take thousands of years to decay.





design and print

them out at

home!

**VISIT CHINA** WITHOUT LEAVING HOME.

Traveling will be

a lot more convenient. Spaceshiplike planes will fly above the atmosphere, enabling them to go anywhere in the world in just a few hours. But really there won't be as much need for travel. Thanks to virtual reality, you'll be able to have Thanksgiving dinner seated next to holograms-that is, realistic digital projections—of your grandparents.

YOU WILL EAT FAKE MEAT. Raising animals is not an efficient way to produce food, and it harms the environment: Cows, chickens, and pigs eat a lot, and then we have to deal with all that poop (and that poop can end up poisoning lakes, rivers, and streams). Today, scientists can "grow" meat in a lab from animal cells, but it's expensive and not very appetizing. In the future, they will have perfected the process. You'll order hamburgers that come from

factories, not cows. Scientists may even find ways to make lab-grown meat tastier and healthier than the real thing. Yum?

## YOU WILL VACATION IN **OUTER SPACE.**

Homes of the future will look similar to the homes of today; people have lived in box-like houses for hundreds of years, so that will likely continue. A few intrepid explorers may settle in colonies in orbit or on the surface of the moon or Mars, but most of us will stay on Earth—except for vacation of course!

## THE WEATHER WILL BE WORSE—A LOT WORSE.

Current forecasts show Earth warming up, sea levels rising, and storms and droughts getting more severe. Many of us will move to safer regions. As global warming continues, some coastal cities will have to be abandoned.

#### YOU WILL LIVE LONGER.

The average life span will be more than 100 years thanks to improved medicine. We can already manufacture new skin for burn victims. In the future, we will also be able to manufacture new cartilage and bones for injuries and arthritis, maybe even new intestines and livers, says Robert Langer, a chemical engineer at MIT. Tiny robots called nanobots will be injected into our bodies to carry out repairs or diagnose problems.

#### **GRANDMA WILL LOOK 30** YEARS OLD.

Not only will you live longer, you will also look younger longer. Drugs that prevent cell damage will reduce wrinkles, and advanced techniques for replacing lost hair will treat baldness. Sixty will be the new 30!

## YOU WILL LIVE FOREVER INSIDE A COMPUTER.

The big question, says Stuart Armstrong, an artificial intelligence expert at Oxford University, is whether we might live inside computers. Some technologists say that in a few decades, computers will be so smart that we will be able to upload ourselves into them. We would then become immortal programs running on machines, like video game characters. There's no predicting what could



In this fascinating magazine article from 1900, an engineer makes some bold guesses about the future. You might be surprised by what he got right! What can you infer about life in 1900 from his predictions?

# What May Happen in the Next 100 Years

By John Elfreth Watkins Jr.

These prophecies will seem strange, almost impossible. Yet they have come from the most learned minds in America. To the wisest men in our greatest institutions of In 1900, doctors science and learning I have gone, discovered that asking each to forecast what, in mosquitoes spread yellow fever, which his opinion, will have been wrought had killed more than before the dawn of 2001.

The American will be taller. His increase in stature will result from better health, due to vast reforms in medicine, sanitation, food, and athletics. He will live 50 years instead of 35—for he will reside in the suburbs. The city house will be no more. Building in blocks will be illegal.

Mosquitoes, house-flies, and roaches will have been practically exterminated. Insect screens will be unnecessary.

There will be no C, X, or Q. They will be abandoned because they are unnecessary. English will be a language of condensed words expressing condensed ideas, and will be more extensively spoken than any other language. Russian will rank second.

#### Everyone will walk 10 miles.

Gymnastics will begin in the the U.S. grew from nursery, where toys and games will 285,000 to more than be designed to strengthen muscles. Exercise will be compulsory in schools. Every community will have a gym. A man or woman unable to walk 10 miles will be regarded as a weakling.

Wireless telephone circuits will span the world. A husband in the middle of

the Atlantic will be able to converse with his wife in Chicago.

#### No foods will be exposed.

Storekeepers who expose food to air breathed out by patrons or to the atmosphere of the streets will be arrested along with those who sell stale produce. Refrigerators will keep food fresh for long intervals.

Hot or cold air will be turned on from spigots to regulate the

temperature of a house as we now turn on hot or cold water from spigots to regulate the

> temperature of the bath. Central plants will supply this cool air and heat in the same way as now our gas or electricity is furnished.

There will be no wild animals except in menageries. Rats and mice will have been exterminated. The horse will have become practically extinct. The automobile will have driven out the horse. Cattle and sheep will have no horns. They will be unable to run faster than the fattened hog of today. Food animals will be bred to expend practically all of

their life energy in producing meat, milk, wool and other by-products. Horns, bones, muscles and lungs will have been neglected.

#### Man will see around the world.

Persons and things of all kinds will be brought within focus of cameras connected electronically with screens, thousands of miles at a span. Americans will view in theaters the coronations of kings in Europe or the progress of battles in the Orient.

Roughly 1,000 known species have become extinct over the past 500 years, including the

poor dodo bird.

100,000 Americans.



Between 1894 and

1904, the number

of telephones in

3.3 million.

# What is yet to be is but a guess ... by Rebecca Kai Dotlich

and so as the universe asks, we chant yes, yes, yes

to cracking open riddles, propping ladders to the sun, searching for seaglass cities.

As we are swept along by time, this chime repeats: wonder.

From ancient ages,

from everywhere to someday, there is both dreaming and waking in the dark

and the world watches the compass, the map, the microscope, the telescope, the sketch.

What mysteries come after today, existing in a place called faraway, with charts of galaxies scrawled and scratched with what-ifs . . .

what is yet to be is but a guess.

#### **WRITING CONTEST**

Predictions about the future reveal a lot about us-about our values, our worries, and our hopes and dreams. Based on these three texts, what do our visions of the future say about us? Support your answer with details from all three texts. Send your response to FUTURE CONTEST. Five winners will each receive FEED by M.T. Anderson. See page 2 for details.

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