

Unit 01 Gold Rush

AMERICANS STILL SEEKING GOLD IN CALIFORNIA Track 01

The US economy may be weak, but the price of gold has remained strong and is prompting many Americans to seek gold in the western US state of California, scene of a famous gold rush that began in 1848. But some of these new **prospectors** aren't dreaming of striking it rich. So what are they searching for in those ice-cold streams?

The San Gabriel River is only about a one-hour drive from Los Angeles. Fed by melting snow from the mountains upstream, the bone-piercingly cold water would be enough to keep most travelers safely on the bank. However, it isn't cold enough to stop a new wave of gold fever. Even though many years have passed since the first California gold rush, the San Gabriel, which was a major mining hotspot at the time, is still attracting prospectors. Some visitors are just there for fun.

Nick brought his son to have fun—and learn a little history. “He’s a fourth grader, and they’re studying the gold rush in school, so he wanted to go panning for gold,” Nick said.

“Well, we looked in this book, and I was just a little bit interested. It said that there was gold here, and I was thinking about coming here with my friends. So we came here, and we thought that we might have a chance to find some gold. Well, it’s pretty fun looking at the river and just getting all the rocks,” his son explained.

There are also some so-called weekend warriors—people who have other jobs and search for gold in their free time. Dan is a cabinet maker who reports to the river bank every Saturday. “Well, you start a little slow with the gold pan, and then you get the little box, the **sluice box**. And then, you realize that to find more gold you have to move more dirt, so then you go to the machines, and the machines do the work for you,” he said.

Lester has been at it for seventeen years. He says he taught Dan how to prospect, and like his student, is a weekend warrior—doing it for fun, not money. “You will not survive [prospecting gold for a living]. There’s just a little, you can’t even buy your gas,” said Lester.

But some are here for the money. Kevin, thirty-nine, is a Hollywood lighting technician who has been out of work for months. “It’s turned into a way to make extra cash and keep food on the table,” he said.

Kevin and his partner found several pounds of gold after **excavating** sandstone **deposits**. But that happy feeling comes at a steep price. Kevin spends ten hours a day in the water using a tube to suck up the gravel and stone from the riverbed. Everything that’s sucked up goes into what’s called a rocker box. The sand is washed away, and the heavier rocks and gold remain in the trough.

But few people have found enough to retire. Bernie has been prospecting for twenty-one years and is known as the “Mayor of the San Gabriel Valley.” Today, he still lives in a **trailer**. “I have yet to see, in this area, someone make a living by prospecting,” he said.

So what are these modern-day prospectors really in search of? “I love the river; it’s the best. I come at five o’clock in the morning every Saturday. I come up the mountain and wait for the sun to rise. It’s beautiful. Me, God, and the river,” said Dan.

FOCUS ON SOUNDS Track 02

1. The bone-piercingly cold (water would) be enough to keep most travelers safely on the bank.
2. It isn't cold enough to stop a new (wave) of gold fever.
3. (Well), we looked in this book.
4. There are also some (weekend) warriors.

DIALOG A Prospector's Pastime Track 03

W) Excuse me, sir? I'm very curious about that device you are using. What is it?

M) It's a metal detector. I just wave the base of it over the ground like this, and if there are any metal objects buried there, it will make a sound in these headphones.

W) What kinds of things do you find?

M) Well, coins, mostly. That's why I come to the beach. It's a real hotspot. People are always dropping coins here, and they are very easy to find in the sand.

W) What else do you find?

M) Old keys, knives and forks from picnics, sunglasses, cell phones—anything with metal in it. Mostly, it's trash, but sometimes, I find watches and other jewelry.

W) Have you ever found anything valuable?

M) Sure. I once found a diamond ring that was worth over \$2,000.

W) Did you keep it?

M) No. I knew that it was important to someone; probably an engagement ring or something like that, so I turned it in to the police.

W) What happened?

M) They found the owner. She was so happy that she gave me a \$200 reward!

W) That's nice! How much money do you think you've found here?

M) Mmm . . . Well, maybe eighty bucks in two years.

W) That's it?

M) (laughing) Yeah, you can't make a living doing this! I'm a manager at an electronics store. It's just a hobby for me. I just enjoy discovering buried treasure. I feel like a modern-day pirate!

Unit 02 Shorter Summer Break

SOME ADULTS CALL FOR SHORTER SUMMER BREAK FOR US KIDS Track 04

This is the VOA Special English Education Report.

The traditional American school year begins in late August or early September. It ends in May or June, followed by summer vacation.

Why such a long break? Because long ago, young people had to help their families **harvest** the summer crops. At least, this is what people today may think.

The reason has more to it. A recent report from an education policy center at Indiana University explored the historical roots of the traditional school calendar.

In the early days of the United States, children were not required by law to attend school. School calendars depended on local needs.

Students in **rural** areas went to school for no more than six months of the year—half in the summer, half in the winter. They worked on family farms during the other months.

City schools were often open much longer, some for eleven months of the year. Parents were happy to have a place for their children to go while the parents worked.

National leaders took a fresh look at schools after the Civil War in the 1860s. They saw free public education as a way to help support a strong **democracy** and prepare workers for new industries. **Immigration** was increasing, and so was the student population.

More and more people saw the need for a system of required education. But they had different ideas for the calendar.

Many city schools wanted a shorter year and a longer summer break. The schools were often crowded. There was no modern air conditioning, and air pollution from factories was a problem.

Hot days would make it difficult to learn. A long summer break would also give teachers time for other jobs to add to their low pay.

Many rural educators, however, pushed for a longer school year. They thought it would keep children safe from industrial dangers at a time when there were few child-labor laws. They also thought it would lead to a better-prepared workforce.

So the traditional school calendar was a **compromise**, with roots that now go back about a century and a half. The average school year used to be 170 days. Times have not changed much. Today, the common average is 180 days.

But some experts think the traditional school calendar needs to change because the needs of the nation have changed. This thinking has led some schools to keep students in class longer. More on that next week.

And that's the VOA Special English Education Report, written by Nancy Steinbach.

Transcripts are at voaspecialenglish.com.

FOCUS ON SOUNDS Track 05

1. The (traditional) American school year begins in late August or early September.
2. Immigration was increasing, and so was the student (population).
3. There was no modern air (conditioning).
4. The school calendar needs to change because the needs of the (nation) have changed.

DIALOG Comparing Notes Track 06

- G) Marco, I'm so glad school is almost over. Are you going home to Italy for the summer?
- B) Yes. I have to help pay for my schooling here in America. So I've got a job at my uncle's restaurant this summer.
- G) Good for you. My family is going to spend the summer at our lake cabin.
- B) Sounds fun. It's nice that you have a long summer break here in America.

- G) Is it different in Italy?
- B) Yes. In my hometown, students go to school about two hundred days a year.
- G) That doesn't sound fun.
- B) Well, actually the school day is shorter there than here. But Italian students also go to school on Saturdays.
- G) Saturday! It sounds like there are good and bad things about both systems.
- B) Yes. But I heard that some people in America are hoping to make the school year longer.
- G) Yeah, I heard that, too. It doesn't really make sense to have such a long summer break. I forget a lot of what I learned during the year.
- B) So what would be your perfect school schedule?
- G) Well, I suppose I wouldn't mind a longer school year if the actual school day was shorter. But no school on Saturday, please!
- B) I agree. I also think that it would be better to have two or three smaller vacations per year instead of one big one in the summer.

Unit 03 Transforming Lives

WASHINGTON ATTORNEY TRANSFORMS LIVES Track 07

Millions of people are living in the streets of America's cities and small towns. They sleep on park benches and in subways. Some suffer from **addiction** or mental illness; others are just down on their luck. Most people walk by them, hardly noticing them. VOA introduces us to one man in Washington, DC who took the time to stop and say hello, and at the same time, transformed his own life.

As the sun rises over the nation's capital, Jonathan George begins to stir under his blankets on the steps of Capitol Hill United Methodist Church. Then Rob Farley, a Washington attorney and member of the congregation, shows up, fresh from his morning run.

Two years ago, people in the neighborhood began to complain about the homeless sleeping on the church steps. So Rob began to wake up the men each morning and get them moving along.

Then something unusual happened—one of them asked for a cup of coffee. "And I was like, oh, I don't want to do this. But it was cold, so I said, 'Sure. Come in and get a cup of coffee.' So I **brewed** a pot," he explained.

Initially, it was just coffee. Then other homeless men started coming, and coffee grew into breakfast and friendship. "This is where we hang out. We come in, I get the coffee going. Victor is downstairs preparing some soup. And then we get, uh, guys start coming in," he said.

Jonathan George has attended the breakfasts for almost two years. George worked most of his life as a building maintenance man. After he was **laid off**, he became homeless. On any given morning, seven or eight people show up for breakfast. Initially, it's a place to have a warm meal and wash up after a night on the streets.

But then, friendships form. For Rob and the other church members, it was a lesson in why people become homeless and what can or can't be done to get them off the streets.

"We have obtained the help of a social worker, Julie Turner, through an organization here in DC called the Downtown Cluster of Congregations. And she has been working with us to help folks get into housing," Farley said.

It hasn't been easy, but there have been success stories. Alisa Lasater is pastor of the Capitol Hill United Methodist Church. "We have had four folks that let Rob or me take them to rehab, two of whom are still in the process and doing really well," she said.

Rob says the breakfasts have brought new meaning to his life. "I don't know what they have gotten, hope they have gotten something," Farley said. "But we have been able to at least transform me as a person that is more open, more understanding, more humble."

Alisa Lasater says the transformation has been mutual. "What I am clear on is that people's lives look different. Whether that is someone going and advocating for different policies, or whether that is men in this room who have said to me, 'I believe now I can make a change,'" Lasater stated.

Rob and Alisa are not sure where the breakfasts will go from here. But they have learned that homeless people are as human as anyone else.

FOCUS ON SOUNDS Track 08

1. Some people sleep on park benches and in (subways).
2. After he was (laid off), he became homeless.
3. We have (obtained) the help of a social worker.
4. Now he believes he can (make) a (change).

DIALOG The Shelter Track 09

W) Hey, Joe! Want to go to a party at Sarah's tonight?

M) I can't. I'm going down to the Saint Mary's Shelter tonight.

W) The homeless shelter?

M) Yeah, I'm helping serve dinner and then washing dishes.

W) Aren't you just wasting your time? Those people are all just crazy, or they're addicted to drugs and alcohol.

M) They're not all like that!

W) OK, maybe not all of them. But the rest are just too lazy to work. They just go to the shelter for a free place to stay and a free meal.

M) I can't believe what you are saying! How can you be so insensitive?

W) Come on, Joe. Those men could get a job if they really tried.

M) First of all, they're not all men. And furthermore, some of them are trying to get jobs.

W) Really?

M) Of course! Yes, some of them do suffer from mental illnesses, but some people at the shelter are just going through a hard time in their lives. You know Mrs. Jackson?

W) You mean that nice old lady that works at the bakery?

M) Yes. Did you know that she was homeless at one time? About fifteen years ago, she lost everything in a house fire. She had to stay at the shelter for a few months until she could move into an apartment.

W) I didn't know that. I'm sorry. I was wrong to think that way about homeless people.

Unit 04 Apple Season

IT'S APPLE SEASON IN AMERICA Track 10

Apples are the second most valuable fruit **crop** in the United States, after oranges. Autumn is a time when fresh apples are everywhere. They are not **native** to the country. Research shows that apples came from Central Asia. But they are believed to have been grown in America since the early 1600s.

Washington State, in the Pacific Northwest, produces the country's biggest apple crop. New York and Michigan are also big producers. Among nations, China is the biggest grower, followed by the United States and Turkey.

This year, American growers expect to harvest nearly 4.5 billion kilograms of apples. That is a little less than last year's record harvest.

Apples are a member of the rose family. Apples come in reds, greens, and yellows. About 2,500 kinds grow in the United States. Three times that number are grown around the world.

The University of Illinois Extension Service says one hundred varieties are grown most commonly in the United States. The most popular are the Red Delicious, Golden Delicious, Gala, Fuji, and Granny Smith.

In the United States, three-fourths of apples are eaten fresh. Some are made into sweet foods like apple pie. The rest are processed to make products such as apple juice, apple cider, apple sauce, and **vinegar**.

A popular saying goes "An apple a day keeps the doctor away." Apples are a healthy food. For one thing, they are high in **fiber**, mainly in the skin.

Apple trees flower in late spring. Late **blossoming** avoids freezing weather. So farmers can grow apples farther north than most other fruits. In North America, apples can be grown in all fifty states and Canada.

Johnny Appleseed was born in Massachusetts in 1774. He grew apple trees on land he owned in Ohio and Indiana. He traveled with settlers as they moved west. He supplied them with apple seeds and young trees and, it is said, religion.

Johnny Appleseed was an early American hero. His real name was John Chapman. Americans might not know the story of John Chapman, but almost everyone has heard of Johnny Appleseed.

This VOA Special English Agriculture Report was written by Mario Ritter. Our reports are online at voaspecialenglish.com.

FOCUS ON SOUNDS Track 11

1. Some are made into (sweet) foods like apple pie.
2. Apples are high in fiber, (mainly) in the skin.
3. (Research) shows that apples came from Asia.
4. Late blossoming avoids (freezing) weather.

DIALOG An Apple a Day Track 12

- M) Good morning, Madam. Can I interest you in some fresh fruit today?
- W) Those apples certainly look delicious! Where are they from?
- M) I grow them myself on my farm.
- W) Really? What are these pinkish-red ones?
- M) Those are called Fuji. They have a light, sweet flavor. Here, try a sample.
- W) Mmm, I like it! So these are grown locally, too?
- M) Yes, I also grow these on my farm, but they are not native to this area. Many apples, like the Fuji, originally come from Asia.
- W) Interesting. Well, there seem to be a lot of varieties here at the market.
- M) Yes, in fact, there are over two thousand different kinds of apples grown right here in America alone.
- W) That's a huge number! What are the main differences in the varieties?
- M) Taste is important, of course. But certain apples are better for some uses than others.
- W) What about this Fuji apple?
- M) Well, those are excellent for snacking and salads.
- W) Yes, I already give those to my kids in their lunchboxes. What's the best apple for making apple pies?
- M) You can use most apples for baking. The Red Delicious is the most popular apple in America. But my favorite is this Jonathan apple. It's very soft when it's cooked, so it's perfect for cooking. Here, try a piece.
- W) Delicious! I'll take a dozen of those, then. I will bake the best pie yet!

Unit 05 Studying in the US: Where to Live?

WHERE TO LIVE? Track 13

This is the VOA Special English Education Report.

March Madness is the name for the busy championship season in American college basketball. But March also means another kind of madness—the nervous wait for **admissions** letters from colleges and universities.

This week in our Foreign Student Series, we jump ahead to the subject of where to live. Housing **policies** differ from school to school. Some schools have limited housing or none at all.

Dormitory buildings might house a small number of students or many hundreds. Some dorms have suites. A suite has several bedrooms, a common area, and a bathroom. Other dorms have rooms along a common hallway. Two, three, or four students might share a room.

Males and females often live on different floors of the same building. Or they might live on the same floor or in some cases, even share a suite if permitted. But single-sex housing is usually also available.

Different groups and organizations such as **fraternities** and **sororities** might have their own houses where their members live. And there is often housing for married students.

Some dorms are nice; others are not so nice. But many students say they like the chance to make friends and be near their classes.

Cost is another consideration. Dorms can cost less than off-campus housing. But school-owned housing can also cost more, though the price may include meals.

Here are some questions to ask before making a decision: How much privacy can a student expect? Will the school provide a single room if a student requests one? Will the school provide a special diet if a student needs one? And are any dorms open all year so international students can have a place to stay during long vacations?

Kirsten Kennedy, housing director at the University of South Carolina in Columbia, says all first-year undergraduates there have to live in a dorm. After that, they are free to seek other housing.

Students can apply to become resident assistants after living in the dorms for a year. International students can also apply to become resident assistants after a year in the dorms.

Working as a resident assistant in student housing is one way to help finance an education. At many schools, RAs earn money as well as get their room and meals for free or at a reduced price.

And that's the VOA Special English Education Report, written by Nancy Steinbach. Our Foreign Student Series is online at voaspecialenglish.com.

FOCUS ON SOUNDS Track 14

1. A suite has several bedrooms, a common area, and a (bathroom).
2. Dorms can cost less than off-(campus) housing.
3. Many students like the (chance) to make friends and be near their classes.
4. Working as a resident assistant is one way to help (finance) an education.

DIALOG On-Campus or Off-Campus Track 15

- M) Congratulations on being accepted to Oakdale College.
- G) Thank you very much, sir. But where will I live?
- M) Well, at Oakdale, we have several options for first-year students. Would you prefer to live on campus or off?
- G) I'd like to spend my first year on campus.
- M) Good. In fact, we recommend living on campus for the first two years. That way, students really become part of the college community.
- G) I agree. But how do the costs compare?
- M) Well, generally, renting off campus is less expensive. But the price for housing on campus includes a meal plan for the year.
- G) That sounds good.
- M) OK. Now for on-campus housing. We have two main options. The first is Green Hall. It's a dormitory for both men and women.
- G) I don't think my mother would like the sound of me living in a co-ed dorm. Do you have any same-sex dorms?
- M) Yes, of course. Van Gelder Hall is an all-girls dorm. Each room is designed for two people. So you would have a roommate.
- G) That's fine.
- M) There is one other option. The International Student Center has rooms available for students who are majoring in a foreign language.
- G) I plan on studying biology. So that's not an option.
- M) I see. It seems that Van Gelder is the best choice for you. I suggest that you submit a housing application today in order to reserve your spot.

Unit 06 Calculators in Class

AFTER FORTY YEARS, CALCULATORS IN SCHOOL STILL ADD UP TO DEBATE Track 16

This is the VOA Special English Education Report.

Can you do the math? What is one hundred times four, divided by the square root of one hundred? If you know that, then you know the answer to this: How many years ago did three scientists at Texas Instruments invent the handheld electronic calculator?

The answer is forty. The scientists were Jerry Merryman, James Van Tassel, and Jack Kilby. Their first **device** could add, subtract, multiply, and divide. It had twelve bytes of memory—close to nothing compared to today’s powerful calculators. And it weighed more than a kilogram.

But it was powered by batteries. That meant it could be taken anywhere. Other electronic calculators had to be **plugged into** electricity. Not only that, they weighed close to twenty-five kilograms and were almost as big as typewriters.

In the United States, the National **Council** of Teachers of Mathematics says teachers at every level should support the use of calculators. Students are even permitted to use them when they take college entrance tests. That may surprise parents who still think of the days of paper-and-pencil only.

Yet after forty years, calculators in the classroom still add up to the same old debate.

Some education experts think calculators are used too much. Children, they say, learn to depend on these electronic brains instead of their own. Calculators may not only give students answers to questions they do not really understand, critics argue. They may also keep them from discovering ideas for themselves. The danger? Students who cannot even do simple addition and subtraction.

Other experts, though, say calculators have helped make mathematics more understandable to more students. They say calculators give students more time to understand and **solve** problems—and to develop a better sense of what numbers mean. That way, the reasoning goes, they can study higher-level ideas than they would otherwise. And they can feel better about their abilities.

What do teachers think? Generally, they say calculators can be useful—especially with more **complex** math. But they also say that young students should know basic operations before they begin using them.

And that’s the VOA Special English Education Report, written by Nancy Steinbach. Our reports are online with transcripts and MP3 files at voaspecialenglish.com.

FOCUS ON SOUNDS Track 17

1. The first calculator did not have much (memory).
2. They can use calculators to take college (entrance tests).
3. Students may learn to (depend) on calculators.
4. Calculators give students a (better sense) of what numbers mean.

DIALOG It Doesn't Add Up! Track 18

- G) Hey, Jack. Isn't that the computer game that you've desperately been wanting for a while? Here it is on sale with a twenty percent discount!
- B) Yeah, awesome! And I think I have just enough money to get it. Let me check. Does your cell phone have a calculator?
- G) Yes, why?
- B) Well, I need to figure out what twenty percent off of \$37 is.
- G) Just do the math in your head.
- B) What? Come on, Sally! It's so much easier with a calculator. Please let me borrow it.
- G) OK. But you really should learn how to do this stuff on your own. Here you go.
- B) Thanks. OK, so now, 37 divided by 0.2 is ... Wait a second, that can't be right. Oh, yeah, I have to multiply. OK, so then, I just subtract that from that figure. And I've got it!
- G) \$29.60?
- B) How did you do that so fast? You must be a genius!
- G) You could do it too if you just practiced more.
- B) So you never use a calculator—even in your math classes?
- G) Well, of course I have to use one for the more complex problems.
- B) I would never be able to do any math homework without a calculator.
- G) But don't you want to learn how to do the math?
- B) I don't care, as long as I get the right answer. Besides, after we finish school, we'll never use it anyway.

Unit 07 The Buzz About Bees

THIS WEEK ON AGRICULTURE REPORT, THE BUZZ ABOUT BEES Track 19

More than ninety kinds of fruits, vegetables, nuts, and seed crops depend on bees for reproduction. Bees pollinate billions of dollars worth of crops.

The insects gather nectar liquid from flowers. As they do this, pollen sticks to the bees. Pollen is the reproductive material of flowers. As a bee travels from plant to plant, so does the pollen.

Beekeepers transport their colonies by truck to farms where crops need pollination. Pennsylvania State University estimates that the United States has about 150,000 beekeepers.

Bees are good pollinators. But most people know them as producers of honey and wax.

In the United States, the Agriculture Department says more than 2.5 million colonies produced honey last year. Production increased one percent, though the number of colonies decreased two percent from 2003.

Honey can be stored, so producers can wait to sell when prices are up. But then prices fall as producers flood the market. That happened last year. Prices fell twenty-two percent after a good production year in 2003.

Between two and four colonies are needed to pollinate one hectare of most crops. Bees pollinate almost all almond and apple trees. Vegetables like broccoli, carrots, celery, and onions require bee pollination.

Experts say even crops that do not require bee pollination can be increased with the help of bees. The quality of many crops depends on the amount of pollination they receive. Crops like apples can grow unevenly if bees do not provide enough pollen for good reproduction.

Honeybees can be killed by chemical poisons. But they also have a lot of natural enemies. In North and South America, Asia, and Europe, **mites** can destroy **hives**. These tiny creatures suck the blood of bees. Varroa mites are a serious threat to honeybees. Tracheal mites are also a big problem; they live in the breathing tubes of bees.

Wax moths are insects that eat wax in the hive. Bacterial diseases also affect colonies. The bacteria that cause European and American foulbrood attack and destroy young bees.

Raising bees can be difficult. But many people like to keep bees as a business or simply for pleasure.

This VOA Special English Agriculture Report was written by Mario Ritter. Our reports are online at voaspecialenglish.com.

FOCUS ON SOUNDS Track 20

1. The insects gather nectar (liquid) from flowers.
2. The number of (colonies) decreased by two percent this year.
3. These tiny creatures suck the (blood) of bees.
4. Crops can grow (unevenly) if bees do not provide enough pollen.

DIALOG Buzzing Track 21

W) Hello, Billy! I haven't seen you for a long time. What brings you over to my house today?

B) I have a little something for you. Here you go.

W) Oh, my! What a beautiful jar! Is this honey?

B) Yes, it's fresh from my uncle's farm. He keeps bees.

W) I love honey! How long has your uncle kept bees?

B) For about three years now. He has that big apple orchard, you know, just outside of town.

W) Oh, yes, I always buy some of his apples at the fall farmer's market downtown.

B) Yeah, they're delicious! Well, he needs bees to pollinate the apple trees in the spring so they will produce apples.

W) Yes, bees are so important in the nature cycle.

B) Well, a few years ago, the wild bees started to disappear, and the apple crop really suffered. So, my uncle started his own colony near the orchard, and the apples came back the next year.

W) That is wonderful! And you also get honey from the bees.

B) Yes. But actually, my uncle collects more honey than the family can use.

W) What do they do with the extra honey?

B) Well, they do sell some at local markets. But mostly, they just give it away to family and friends.

W) Well, thank you so much. Please say *thank you* to your uncle. And to the bees!

Unit 08 The Price of Pleasure

THE PRICE OF PLEASURE Track 22

This is the VOA Special English Economics Report.

Usually we think about **material** qualities when we think about the pleasure we will get from a product. When something costs a lot, we might think about all the fine work that went into it. But can price alone **influence** the pleasure we experience?

Researchers from the California Institute of Technology and the Stanford Graduate School of Business say yes.

Hilke Plassmann, John O'Doherty, and Antonio Rangel at Caltech and Baba Shiv at Stanford did a study. They had twenty people taste different wines. Wine was chosen because it comes in many different qualities and prices and because a lot of people enjoy tasting it.

The people were told they were tasting five different Cabernet Sauvignons. The wines were identified only by price: \$5, \$10, \$35, \$45, and \$90.

But in truth, there were only three different wines, and two of them were presented twice, at a high price and a low price. For example, the wine that in fact cost \$90 a bottle was presented half the time as a ten-dollar wine. There were two important results from the study.

First, the individuals, on average, reported greater pleasure from drinking wine that they were told was higher in price. Brain images taken while the people tasted the wine supported this finding.

Activity, represented by blood-oxygen levels, increased in an area of the brain thought to process "experienced **pleasantness**." Experiments have shown that the medial orbitofrontal cortex processes the experience of enjoyment from smells, taste, and music. The new findings will add to the limited knowledge of how marketing affects brain activity.

The second result has meaning for economists and marketers. The experiment appears to **confirm** that raising the price can increase how much a product is enjoyed. In other words, when it comes to **expectations**, it seems you really do get what you pay for.

The study is in the *Proceedings of the National Academy of Sciences*.

And that's the VOA Special English Economics Report, written by Mario Ritter. Transcripts, MP3s, and podcasts of our reports are at voaspecialenglish.com.

FOCUS ON SOUNDS Track 23

1. They had twenty people taste (different) wines.
2. The wines were (identified) only by price.
3. A bottle was (presented) as a ten-dollar wine.
4. The new findings will (add to knowledge) of how marketing affects brain activity.

DIALOG You Get What You Pay For Track 24

M) Lisa, is that a new car in your garage?

W) Yeah, it is. My husband purchased it a few weeks ago. It is such an expensive model.

M) But you get what you pay for, right? This convertible is a great car.

W) That's what my husband thinks, too. He thinks that it's so fast and quiet, and he adores the heated leather seats. He says that this is the best car we've ever had.

M) Don't you think so, too?

W) Well, it is very fast and quiet. It's also very fuel-efficient. But so was our other car.

M) You mean that nice Korean sedan you had?

W) Yeah, that's right. It wasn't as fast as this one, but it had plenty of power. And it was a really smooth, quiet ride. Honestly, I thought our old car was more comfortable, and it was almost half the price of this one.

M) But you have soft leather seats! And they're heated!

W) Come on, Tom, we live in California! Who needs heated seats here?

M) I guess you're right about that. But this is a good quality car.

W) Well, my husband thinks that a high price means high quality. But that's not always the case.

M) What do you mean?

W) Three days after we bought it, the front lights stopped working. We had to take it in to the shop. They replaced part of the electrical system. We never had any problems like that with our old car.

Unit 09 Making Paper by Hand

HOW TO DO IT: MAKING PAPER BY HAND Track 25

This is the VOA Special English Development Report.

The earliest process of making paper was done almost five thousand years ago in Egypt and the Nile Valley. In those days, paper was made from strips of the papyrus plant.

Modern paper-making began in China about two thousand years ago. This process produced paper from cloth, straw, wood, or the **bark** of trees. The raw materials are **struck** over and over until they become loose. Then they are mixed with water.

After the water has been removed, the flat, thin form remaining is permitted to dry. This becomes a sheet of paper.

Large machines started to be used for making paper near the end of the 16th century. Today, paper-making is a big business. But it is still possible to make paper by hand, since the steps are the same as using big machines.

You should choose paper with small amounts of printing. Old envelopes are good for this reason. Colored paper also can be used, as well as small amounts of newspaper. Small pieces of **rag**s or cloth can be added. These should be cut into pieces about five centimeters by five centimeters.

Everything is placed in a container, covered with water, and brought to a boil. It is mixed for about two hours with some common chemicals and then allowed to cool. Then it is left until most of the water dries up. The substance left, called **pulp**, can be stored until you are ready to make paper.

When you are ready, the pulp is mixed with water again. Then the pulp is poured into a special box, or mold. The mold is made of small squares of wire that hold the shape and thickness of the paper. To help dry the paper, the mold lets the water flow through the small wire squares.

After several more drying steps, the paper is carefully lifted back from the mold. It is now strong enough to be touched.

The paper is smoothed and pressed to remove trapped air. You can use a common electric iron used for pressing clothes.

There are many other technologies for people making paper using small machines.

You can order more information about making paper from EnterpriseWorks/VITA. The address of the group's website is enterpriseworks.org.

And that's the VOA Special English Development Report. Transcripts, MP3s, and podcasts of our reports are at voaspecialenglish.com.

FOCUS ON SOUNDS Track 26

1. Modern paper-making began in China about two (thousand) years ago.
2. In (those days), paper was made from strips of the papyrus plant.
3. Old envelopes are good for this (reason).
4. The mold is made of small (squares) of wire.

DIALOG A Handmade Touch Track 27

B) Happy birthday, Aunt Mary! Here's a little gift for you. It's not much. But I hope you like it.

W) Oh, my! What a beautiful bookmark, John! Did you make this yourself?

B) Yes, I did.

W) It looks like it's made with oak leaves. How did you know that was my favorite kind of tree?

B) Well, I remember that you always used to read under that big oak tree in your back yard.

W) Yes, I was so sad when it blew down in that big storm last year.

B) I know. So I wanted to give you something to remind you of it.

W) You are so thoughtful. How did you make this?

B) Well, I gathered some leaves from an oak tree near my house. Then I dried them between the pages of a big, heavy book.

W) So, how did you turn the leaves into the bookmark?

B) I went to the art supply store. And I bought some special clear plastic sheets that get sticky on one side when you heat them. I put the dry leaves between two of the plastic sheets, and then I used a clothes iron on the sheets. The heat from the iron glued the sheets together.

W) And then you cut out the shape of a bookmark?

B) That's right. It's really pretty simple.

W) Oh, but I love it! This is one of the best gifts I've ever gotten because you made it especially for me.

Unit 10 E-Books Hold Next Chapter

E-BOOKS HOLD NEXT CHAPTER FOR BOOK INDUSTRY Track 28

This is the VOA Special English Economics Report.

The book industry is trying to get a good read on its future.

These days, instead of turning paper pages, many readers reach for handheld devices. These electronic readers not only store books to be read on a screen, they can also read them out loud.

This month, Amazon lowered the price of its Kindle reader by \$60 to just under \$300. The device can download books wirelessly from a store on Amazon's website. Most new releases and bestsellers cost \$9.99. Newspapers, magazines, and other services are available for a monthly charge.

Buyers of e-books get a **good deal**. Traditional hardcover books often cost around \$25. But what about book publishers and writers? Their concerns about profits are like the ones voiced as the Internet began to change the music industry. Many e-books are already selling for \$0.99.

Books printed on paper are easily shared and resold by anyone. But e-books can act more like computer software licensed only to the user who buys them.

And some Kindle users got a shock last week. They were surprised to find that copies of two books disappeared from their devices. These were \$0.99 versions of George Orwell's *1984* and *Animal Farm*.

Bloggers have had fun pointing out that *1984* is largely about **censorship**—the **suppression** of information in a society led by Big Brother. Amazon explained that it did not have the rights to the books, so it erased them and returned the people's money.

This week, Barnes & Noble, the world's largest bookseller, launched what it calls the world's largest e-bookstore. People can read the books on the Apple iPhone and other handheld devices and personal computers. They can also download over a half a million books available free from Google. The Internet search company is putting books online that are no longer protected by **copyright**.

But last October, Google reached a 125 million-dollar legal settlement to also make parts of some copyrighted books available. That deal with two groups of writers and publishers has raised competition issues. The Justice Department is now investigating. Also, the European Union plans **hearings** in September on how European writers might be affected.

And, that's the VOA Special English Economics Report, written by Mario Ritter. Transcripts and podcasts of our reports can be found at voaspecialenglish.com.

FOCUS ON SOUNDS Track 29

1. Many readers reach for handheld (devices).
2. The Kindle can download books (wirelessly) from a store on Amazon's website.
3. The company is putting books online that are no longer protected by (copyright).
4. Book publishers and (writers) are concerned about their profits.

DIALOG On the Same Page Track 30

- M) Looks like this flight is going to be full. Are you going to Los Angeles as well?
- W) Yeah. This check-in line is really slow. Good thing I brought this book to read.
- M) Actually, I brought quite a few.
- W) Hey, is that one of those new e-book readers? I've seen those on the Internet.
- M) Yes, I just got it a few months ago, and it's really great.
- W) Can you really use it to read books? Where do you get them?
- M) I just download them from the Internet. You can get the newest releases from the major booksellers' websites for around \$10, but there are thousands of old titles available for free.
- W) How many books do you have stored in that thing?
- M) About fifteen.
- W) Have you finished any of them?
- M) Well, no. I haven't had the time.
- W) So, you just open them up on the screen like a file?
- M) Yeah, let me show you. Here's a page from one story.
- W) It looks just like a word processing document. How do you turn the page?
- M) You just move your finger across the screen. Like this.
- W) Hmm, I don't think I could ever get used to e-books. I just can't imagine sitting under a tree in a park to read a computer screen! I could only be comfortable with a paper book.

Unit 11 Energy in Algae

LOOKING FOR ENERGY IN ALGAE Track 31

This is the VOA Special English Agriculture Report.

The search for new fuels has led some researchers to algae. Algae is a name for thousands of different **organisms**. They include single-celled plants as well as **kelp** and other large plants.

Kenneth Bruland is an ocean sciences professor at the University of California, Santa Cruz. He says many experts also consider plant-like bacteria to be a form of algae. These bacteria make food from the sun like plants do.

Algae grow quickly and some contain a lot of oils. Most algae-to-energy researchers are growing algae in huge tanks. But one company, Blue Marble Energy in Seattle, Washington, uses algae already growing along coastlines. Workers pump it into bags on a boat. They have to be careful not to suck up young fish or other small creatures.

Blue Marble says its work could help prevent harmful algae blooms. A bloom is when a **dense** area of algae forms and spreads. Some blooms can harm people, animals, or the environment.

Warmer water can cause blooms, and some scientists think global warming is adding to an increase in large ones. Nutrients from **sewage** and agricultural fertilizers also help algae grow.

Blue Marble is a start-up company with private investors. It also has a contract with Washington state to collect the algae called ulva, or sea lettuce, in parts of Seattle's Puget Sound waterway. In Puget Sound, big blooms of sea lettuce often break down in Dumas Bay. This process of rotting uses up oxygen and kills marine life. And when the sea lettuce washes up on the beach, it smells terrible.

Blue Marble President Kelly Ogilvie says his company has collected almost four thousand kilo(gram)s of algae in two harvests. The next step is to use bacteria to break down the algae into natural gas and different chemicals. Most companies doing algae-to-energy research are creating liquid **biofuels** for cars or airplanes.

But some people have concerns about harvesting wild algae. University of Washington researcher Kevin Britton-Simmons says removing the algae does not solve the problem. He says keeping fertilizer and other pollutants out of the water would prevent a lot of unnatural blooms.

He also says it is difficult to tell the difference between natural algae blooms and those caused by human activity. He says removing natural blooms would remove valuable food for marine life.

And that's the VOA Special English Agriculture Report.

FOCUS ON SOUNDS Track 32

1. These (bacteria) make food from the sun like plants do.
2. Most companies doing algae-to-energy research are creating liquid (biofuels).
3. Blue Marble says its work could help prevent harmful algae (blooms).
4. Workers pump it into (bags) on a (boat).

DIALOG Give It Gas! Track 33

M) Tomatoes, milk, cat food . . . Is there anything else we need?

W) John, we need to get some more cereal. Hey, look how expensive these corn flakes are! I can't believe the price!

M) Haven't you noticed that the price of corn has increased?

W) Not at all. I thought corn was really cheap.

M) It was. But a lot of it is being used to make ethanol these days.

W) Ethanol? You mean that biofuel that's added to our gas?

M) That's right.

W) But it's better for the environment than fossil fuels, right?

M) Yes, it does produce less pollution than some other fuels.

W) And I heard it helps solve the problem of global warming.

M) Actually, it doesn't.

W) But burning ethanol doesn't create CO₂.

M) That's true about burning ethanol as fuel. But that's not the whole picture.

W) What do you mean?

M) Well, it takes a lot of energy to turn corn into ethanol. Fossil fuels like oil and gas are used to produce it. And think about all the machines used to harvest the corn. And the trucks that transport it. All those activities release CO₂ into the air. And because more corn is being made into ethanol, that means less corn for food.

W) Wow. I never thought about the whole process like that. So that's why the price of corn is going up. It's more complicated than I thought.

Unit 12 Colds, Flu, and Folk Advice

COLDS, FLU, AND FOLK ADVICE Track 34

This is the VOA Special English Health Report.

Autumn and winter are cold and flu season—when people are most likely to catch the **viruses** that cause **influenza** and the common cold.

Is the old advice true that dressing warmly will help prevent a cold? Or if you do get sick, should you follow the old saying, “Feed a cold and starve a fever”?

And what about that fever? Should you take medication to reduce your temperature, or is it better to let the body treat the infection itself?

Everyone seems to have an answer. But how much value is there in popular wisdom?

Doctor Alvin Nelson El Amin knows a lot about cold and flu season in California. He is the medical director of the **immunization** program for the Los Angeles County Department of Public Health.

Doctor Nelson El Amin says research may be just starting to provide evidence for long-held beliefs. For example, scientists for years dismissed the idea that getting cold and wet might cause colds or flu.

But recent studies have shown that cold temperatures cause stress on the body. That stress can create conditions more inviting to viruses. So maybe it does make sense to wrap up warmly before going outside.

And what about the advice to feed a cold and **starve** a fever? Doctor Nelson El Amin says if you have a cold and are hungry, you should eat. But a fever, especially a high one, suggests a more serious problem. He says people are usually not hungry anyway when they have a high fever. Eating might even cause a person to vomit.

But drinking plenty of liquids is important. A fever can easily **dehydrate** the body.

Finally, when should you treat a fever? Doctor Nelson El Amin says a fever should be treated if it stays at forty degrees Celsius or above for a day or more. A temperature that high can damage brain cells. The doctor also believes in treating a fever if it prevents a person from sleeping.

Aspirin, acetaminophen, and ibuprofen can all be used to reduce pain and fever. But aspirin should not be given to children because it can cause a rare condition.

One belief that Doctor Nelson El Amin wanted to make clear is wrong is that the influenza vaccine can cause the flu. It cannot. Sometimes, people get the flu from another person soon after they get vaccinated, so they blame the vaccine, he says.

But flu vaccines do not protect everyone who gets them. Still, even if a person does get sick, the vaccine can limit the effects of the virus.

And that’s the VOA Special English Health Report, written by Caty Weaver.

FOCUS ON SOUNDS Track 35

1. He is the medical (director) of the immunization program.
2. How much value is there in (popular) wisdom?
3. (Research) may be starting to provide evidence for long-held beliefs.
4. But recent studies have shown that cold (temperatures) cause stress on the body.

DIALOG Off Color Track 36

- M) Sally, you don't look very well. What's the matter?
- W) Well, I have a bad headache. And I have been coughing since lunch.
- M) You don't think you have the flu, do you?
- W) I wouldn't be surprised because it's been going around. My daughter had it a few days ago.
- M) Maybe you should take the rest of the day off.
- W) I can't. I've got too much to do. (cough)
- M) Really, Sally, you need to go home and rest. Remember last year when I got that bad cold, but I kept on working? I ended up in the hospital.
- W) Yeah, I remember. (cough)
- M) It's not just for your sake, you know. You shouldn't be here at the office when you are sick because you might pass it on to other people.
- W) OK, I'll go and talk to the manager. Actually, a day off sounds really good. Just eating chicken soup and watching TV.
- M) You should put some hot peppers and lots of garlic in your soup.
- W) Hot peppers and garlic?
- M) Yeah, they'll really help clear your head. It really works for me.
- W) You know, I had a roommate in college who always ate lots of ice cream when she got a cold. She just ate bowls and bowls of it.
- M) Did it help her cold?
- W) I'm not sure. But it did make her happier!

Unit 13 Finger Length

A HANDFUL OF FINDINGS ABOUT FINGER LENGTH Track 37

This is the VOA Special English Health Report.

Is there meaning in the length of a finger? An 1893 guidebook called *Modern Etiquette in Public and Private* had this to say: "Long fingers are a sign of refinement. A short, stubby hand argues a lack of sensibility."

Well, long fingers might also be a sign of a good basketball player or pianist. Or maybe just a master at thumb wars. This much is sure: studies in recent years have pointed toward a number of findings.

Researchers at the University of Cambridge in England, for example, just tied finger length to success in financial trading.

The study led by John Coates looked at **stock traders** in London. Earlier work found that male stock traders made more money on days when their level of the male hormone testosterone was higher. John Coates—himself a former trader—wondered if, over all, men with more testosterone made more successful traders.

Individuals are **exposed** to testosterone while in their mother's **womb**. A way to know how much is to compare their ring finger to their index finger. The index finger is the one next to the thumb; the ring finger is third from the thumb. The longer the ring finger compared to the index finger, the greater the testosterone exposure.

The study involved forty-four traders and their profits and losses over a twenty-month period ending in 2007.

Those with the most experience and testosterone exposure earned about six times as much as those with the least. Also, the research showed that traders with the most exposure generally made the most money in wild markets when quick action is required. Testosterone is known to make people more sure of themselves and more willing to take risks. It may also improve a person's thinking ability.

The findings appear in the *Proceedings of the National Academy of Sciences*.

A 2007 British study showed that finger length might help predict test results among schoolchildren. Psychology researchers at the University of Bath looked at the hands of seven-year-olds. Those with ring fingers longer than index fingers did better on the math part of a standardized test than the reading part.

This was true for boys as well as girls. Females are also exposed to some testosterone in the womb.

And another British study reported last year that people whose index finger is shorter than their ring finger are at higher risk of **osteoarthritis**. That study was from the University of Nottingham.

And that's the VOA Special English Health Report, written by Caty Weaver.

FOCUS ON SOUNDS Track 38

1. A study tied finger (length) to success in financial trading.
2. Individuals are exposed to testosterone while in the (mother's) womb.
3. The ring finger is (third) from the (thumb).
4. He studied for a (twenty-month) period ending in 2007.

DIALOG It Runs in the Family Track 39

W) You know, Peter, I read a magazine article. It said diet can affect whether your baby will be a boy or a girl.

M) Really? Is that why you want to have a baby girl?

W) Yes. If I want a girl, I should eat a lot of foods high in calcium and magnesium. So I'm eating a lot of yogurt, nuts, and fish.

M) Do you really think it will work?

W) I don't know, but I think it's worth trying.

M) Well, I think that genetics is more important. My mother had four sisters. I was the only boy in my family. And my wife and I have two girls!

W) But on my side of the family, my father grew up in a family of all boys, and I have three sisters and no brothers.

M) Ha! I see. Well, maybe it's mostly just luck after all.

W) What do you think about playing music for the baby?

M) You mean like classical music?

W) Right. Mozart, Beethoven, that kind of thing.

M) Well, actually, my wife did that for both of our daughters. She sat and put headphones on her stomach so the baby could hear it.

W) That's what I do, too! Do you think it made a difference?

M) Well, both my kids play musical instruments.

W) Oh, good! That's what I am hoping for.

Unit 14 Vertical Farming

VERTICAL FARMING: POTATOES? THEY'RE ON THE FIFTH FLOOR Track 40

This is the VOA Special English Agriculture Report.

Dickson Despommier is a public health professor at Columbia University in New York City. His area is environmental health sciences.

One day nine years ago, he and his students developed an idea. They imagined people in cities growing crops inside a tall building. Tomatoes could grow on one floor of the skyscraper, potatoes on the next, small animals and fish on the floor above. You get the idea.

This **vertical** farm, or "farmscraper," could have space for restaurants and other places that serve food, like schools or hospitals. They could serve foods that are truly locally grown. The building could even produce its own energy. It could have wind **turbines** on top.

But why would anyone want to build a farm indoors in a city? Dickson Despommier believes it will become necessary. The world needs to find places to produce enough food to feed the growing population. Space, he says, is an all-important issue.

The professor also points to problems of traditional farms. They use a lot of freshwater. Their fertilizer and animal waste can pollute water resources. And their growing seasons can be limited.

But inside the vertical farm, crops could grow all year. And there would be no wind to blow away soil. Farmers would not have to worry about too much or too little rain, or about hot summers, freezing winters, or insects. And without insects, there would be no need for chemicals to kill them.

Farm machines that use fossil fuels, like **plows** and tractors, would not be needed either. And water could be recycled for drinking. "The vertical farm reuses everything, so there is no waste," says Professor Despommier.

Even buildings could be saved. Old buildings could become new farms and provide jobs.

The professor has been actively proposing the idea to cities as far away as Dubai and Canada. But so far, it exists only in plans and drawings, and a model at the Museum of Science and Industry in Chicago.

Critics say building a farmscraper would cost too much, especially considering the price of land in many cities. Dickson Despommier **estimates** the cost at about \$20 to 30 million.

But he says the building would not have to be very tall. And his graduate students have found many empty **lots** and unused buildings in New York City that could provide space.

And that's the VOA Special English Agriculture Report, written by Jerilyn Watson. For a link to the Vertical Farm Project, go to voaspecialenglish.com.

FOCUS ON SOUNDS Track 41

1. They imagined people in cities growing (crops) inside a tall building.
2. It could have space for restaurants, (schools), or hospitals.
3. Farm machines like plows and (tractors) would not be needed either.
4. And without insects, there would be no need for (chemicals) to kill them.

DIALOG The Water Cycle Track 42

W) Jim, what are those big blue things in your driveway?

M) They're rainwater barrels. I'm going to catch the rain that runs off our roof.

W) Really? Why do you want to collect rainwater?

M) Well, there are a couple of reasons, I suppose. But mainly, I want to do my part to conserve water.

W) What are you going to do with the water?

M) Well, I plan on using it in my garden when the weather's dry. That way, I won't have to use water from the tap.

W) That's a good idea. You'll save money that way as well.

M) That's right. I can use rainwater to wash my car, water my lawn, or even do my laundry.

W) Is it safe to use?

M) Sure. Of course, you probably shouldn't drink it, but it is just rain after all.

W) I guess you're right.

M) Lots of places are doing the same thing. You know that new city building on Lake Street?

W) You mean that really modern-looking one?

M) Right. That building is designed to catch and use rainwater. They use it to irrigate the landscaping and even flush the toilets in the bathrooms.

W) Really? Wow! That's a great idea. Imagine how much water could be saved if every building worked that way.

Unit 15 Computer Terms

WORDS AND THEIR STORIES: COMPUTER TERMS Track 43

Now, the VOA Special English program, Words and their Stories.

Computer technology has become a major part of people's lives. This technology has its own special words. One example is the word **mouse**. A computer mouse is not a small animal that lives in buildings and open fields. It is a small device that you move around on a flat **surface** in front of a computer. The mouse moves the pointer, or **cursor**, on the computer screen.

Computer expert Douglas Engelbart developed the idea for the mouse in the early 1960s. The first computer mouse was a carved block of wood with two metal wheels. It was called a mouse because it had a tail at one end. The tail was the wire that connected it to the computer.

Using a computer takes some training. People who are experts are sometimes called hackers. A **hacker** is usually a person who writes software programs in a special computer language. But the word “hacker” is also used to describe a person who tries to steal information from computer systems.

Another well-known computer word is **Google**, spelled g-o-o-g-l-e. It is the name of a popular search engine for the Internet. People use the search engine to find information about almost any subject on the Internet. The people who started the company named it Google because in mathematics, googol, spelled g-o-o-g-o-l, is an extremely large number. It is the number one followed by one hundred zeros.

When you Google a subject, you can get a large amount of information about it.

Some people like to Google their friends or themselves to see how many times their name appears on the Internet.

If you Google someone, you might find that person’s name on a **blog**. A blog is the shortened name for a web **log**. A blog is a personal web page. It may contain stories, comments, pictures, and links to other websites. Some people add information to their blogs every day. People who have blogs are called bloggers.

Blogs are not the same as **spam**. Spam is unwanted sales messages sent to your electronic mailbox. The name is based on a funny joke many years ago on a British television show, “Monty Python’s Flying Circus.” Some friends are at an eating place that only serves a processed meat product from the United States called SPAM. Every time the friends try to speak, another group of people starts singing the word SPAM very loudly. This **interferes** with the friends’ discussion—just as unwanted sales messages interfere with communication over the Internet.

This VOA Special English program, Words and their Stories, was written by Jill Moss.

FOCUS ON SOUNDS Track 44

1. People use the search engines to find information about (any subject).
2. The name is based on a funny (joke) many years ago.
3. Computer technology has become a (major) part of people’s lives.
4. He writes software programs in a special computer (language).

DIALOG Silver Surfers Track 45

- M) I’m happy to see you, my dear. It’s been such a long time since your last visit. Have you been getting my letters?
 G) Of course I have, Grandpa. And I really enjoy getting them. It’s just that . . . I . . .
 M) What? Is there anything the matter with them?
 G) Well, over the last year or so, your handwriting has been getting increasingly harder to read.
 M) Oh, no. Well, I’m afraid that’s because my hands shake when I write. I’m so sorry, Dear. I didn’t know it was that bad.
 G) Don’t feel bad, Grandpa. Hey, I have an idea. Why don’t you try using email instead of writing with a pen? If you typed your letters, I could read them more easily.
 M) Oh, you know I’m not good at learning new things.
 G) But Grandma has been emailing for a while now, and I can read everything she writes.
 M) Yes, but she has always been good with technology.
 G) But you’ve used the Internet before, right?
 M) Yes, I use it to check the weather and catch up on the news.
 G) Good! Now, let’s get online and set up an account for you. We’ll use the same one as Grandma, so it’s less confusing.

M) So are we going to be texting?

G) No, not exactly. Texting is what you do on a cell phone. With email, we can do instant messaging. It's really fun!

Unit 16 Brazil's Green Bus

BRAZIL LAUNCHES FIRST FUEL CELL BUS IN LATIN AMERICA Track 46

This is the VOA Special English Development Report.

If you travel by bus in Sao Paulo, Brazil these days, your vehicle may be powered by hydrogen fuel cells. The city's **urban** transportation system recently launched the first of up to five hydrogen buses. The hydrogen reacts with oxygen to produce electricity and water.

The bus uses a hybrid system that combines the hydrogen fuel cells with high-power batteries. It can be driven three hundred kilometers on the hydrogen cell and an additional fifty kilometers on its batteries.

The bus carries passengers in communities around Sao Paulo. The United Nations Development Program, the World Bank, and other private, public, and international groups supported the project.

Project official Carlos Zundt says the bus is the first of its kind in Latin America. Mr. Zundt says the vehicle releases only water **vapor** and is "totally clean." Traditional buses that run on **diesel** fuel release harmful carbon dioxide and other pollutants. Most buses around the world run on diesel fuel. Mr. Zundt says diesel vehicles are the main cause of air pollution in Sao Paulo.

The cost of the bus has not been announced. Hydrogen fuel cell buses cost more than traditional buses. But Mr. Zundt says reducing air pollution and acid rain will reduce **respiratory** illnesses for people in the city. In addition, the new bus is very quiet and does not produce noise pollution. Mr. Zundt says a hydrogen bus will last an average of twenty years, while a diesel bus can be used for five to eight years.

Sao Paulo has almost 20 million people. Almost half of them ride buses every day. Brazil has a large, modern, and competitive bus industry. It is one of the top producers in the world. The project hopes to **export** hydrogen fuel cell buses in the future.

A Brazilian report says that Brazil is one of five countries that have developed such buses. The others are the United States, China, Germany, and Japan.

But not everyone sees the hydrogen fuel cell bus as the hope of the future. Critics note the high cost of producing hydrogen. And they say other kinds of energy choices can provide power for buses.

And that's the VOA Special English Development Report, written by Jerilyn Watson. Transcripts and podcasts of our reports are available at voaspecialenglish.com.

FOCUS ON SOUNDS Track 47

1. If you travel by bus in Brazil, your (vehicle) may be powered by hydrogen.
2. It can be driven an (additional) fifty kilometers on its batteries.
3. (International) groups supported the project.
4. Buses that run on (diesel fuel) release harmful carbon dioxide.

DIALOG Another Way Home Track 48

- M) Hmm, the number 17 is late again.
- W) Oh, yes, that bus is always late. I'm so glad I don't have to take that one anymore! It is terrible!
- M) Yes, not only is it always late, but that old thing is so loud and smoky, it gives me a headache every time I ride it.
- W) Yeah, it's about twenty years old, I would guess. These days, I get to take one of those new green buses.
- M) You mean those electric ones? Oh, those are so nice and quiet.
- W) Well, I hear the city is planning to have all electric buses in ten years.
- M) I hope so, but I will be surprised if they get it done. I'm sure it costs a lot of money.
- W) Say, just out of curiosity, where are you going?
- M) 42nd Street.
- W) The Red Oaks neighborhood? I live really close to there!
- M) Really?
- W) Yes, listen, you don't have to take that stinky, old bus. I found another bus to get there. And it only takes five more minutes.
- M) That's wonderful!
- W) Yeah, I take the 300-E, that's one of those new, green buses. That goes up to Highland Road. Then I transfer to another bus that stops at 40th Street. You'll only be two blocks from your house.
- M) Great! I'll go with you, and I won't arrive home with a headache!

Unit 17 Snakebites

STEPS URGED TO PREVENT SNAKEBITES, IMPROVE TREATMENTS Track 49

This is the VOA Special English Development Report.

Snakes bite an estimated 5.5 million people worldwide each year. Experts say tens of thousands of people die from **venom** poisoning.

An untreated or incorrectly treated bite might require the removal of a bitten foot, for example, or an arm. Each year, around 400,000 **amputations** are the result of snakebites.

Last year, for the first time, the World Health Organization added snakebites to its list of "**neglected** tropical diseases." This recognition aims to bring greater attention to the problem.

Scientists know of about three thousand kinds of snakes. About six hundred of them are venomous. These are most often found in rural areas in tropical climates.

Asia and Africa have the highest number of snakebites—together about 4 million a year. Latin America and islands in the South Pacific follow.

The highest number of **victims** are agricultural workers. Snakebites are also common among fishermen, hunters, and children. Many victims live in areas with poor or non-existent healthcare systems and where antivenom treatments are often not available.

Antivenom is the only cure. But experts say antivenom technologies and their use need to be improved. Problems include a shortage of manufacturers and the high cost of treatment.

Also, there is a widespread lack of knowledge among local health workers about how to use antivenoms. The treatments can cause dangerous and even deadly reactions if not used carefully.

Antivenom contains proteins from animals such as horses or sheep. The animals are injected repeatedly with one or more different snake venoms to produce immunity. The Lancet medical journal recently published a series of reports on snakebite prevention and treatment. David Warrell at the University of Oxford in England co-wrote one of them. He praised efforts by the WHO to establish common practices for the production, regulation, and control of antivenom. But he says more must be done.

The authors say community education programs could help prevent snakebites by teaching people how to avoid them. They also suggest actions like providing protective boots to wear while working in fields and not sleeping on the ground.

Also important is providing information about where dangerous snakes are most likely to live and when they are most active.

And that's the VOA Special English Development Report, written by June Simms. MP3s, transcripts, and broadcasts of our reports are available at voaspecialenglish.com.

FOCUS ON SOUNDS Track 50

1. Also important is (providing) information about dangerous snakes.
2. Islands in the South (Pacific) have high numbers of snakebites.
3. Antivenom contains (proteins) from animals such as horses or sheep.
4. Community education (programs) could help (prevent) snakebites.

DIALOG Eight-Legged Beasts Track 51

W) Welcome to Garden World. Can I help you, sir?

M) Yes. We just moved into a house that is over eighty years old. I'm trying to get rid of spiders in our basement.

W) Well, that's a typical problem for an older home. Just so you know, this area does have a venomous spider called the Redback. It's a small, dark-brown spider with a reddish stripe. Unfortunately, it likes to live in cool, dark places like your old basement.

M) Really? How dangerous is it?

W) Well, it can kill small animals if the bite isn't treated.

M) Oh, dear! We just got a puppy!

W) Well, we carry products for killing spiders and insects here.

M) Do those products contain toxic chemicals?

W) Well, they are poisonous for the spiders but generally safe to use around the home.

M) But I don't want to use anything that might make our puppy sick. Do you sell any non-toxic products?

W) Unfortunately, we don't. However, I have found that peppermint oil works really well. It's really inexpensive, and you can buy it in many supermarkets.

M) How do you use it?

W) First, mix it with warm water. Then just spray it around windows, doors—anywhere you see spider webs.

M) Does it really work?

W) Yes. They hate the smell and will move away. Just spray it a couple times each month.

Unit 18 Kenya Gets Connected

RURAL AREAS OF KENYA GET CONNECTED TO THE WEB Track 52

This is the VOA Special English Development Report.

Some young **engineers** from the United States have brought the Internet to several areas of rural Kenya.

Their idea was to connect the **communities** to the web by **satellite**. But there was a problem. The areas are not even connected to Kenya's electric power supply. The answer: solar panels. Energy from the sun powers the satellite dishes and computers that link the areas with the world outside.

Kelly Moran, Joan Ervin, and Trisha Donajkowski spent ten days in Kenya in November. The women recently earned master's degrees in space systems engineering from the University of Michigan.

Another engineer, Drew Heckathorn, did not go to Africa but worked on parts of the project.

Kelly Moran says there was excitement when the team would arrive to connect communities to the Internet. People would sometimes run alongside the car carrying the engineers to welcome them. And local residents would offer to help the team build the Internet stations.

People now have **access** to educational, medical, and all kinds of other information. Farmers, for example, can easily find weather, crop, and price information online.

The project began back at the College of Engineering in Ann Arbor, Michigan in 2007. That was when twenty-five students in a class taught by Thomas Zurbuchen first talked about the idea.

The goal was to test whether Internet stations could be set up, how much they would cost, and how long they could operate. But the engineers also had to consider others things—like social needs. Students from the public health and business schools offered advice.

The young engineers also had to design the equipment to survive the heat in Africa. Professor Zurbuchen praises his former students for "making something work in a different climate far away from home."

Google paid for the final design of the equipment. The company is also supporting the costs of the satellite bandwidth needed for the connections. Google has invested in a new company that wants to put up a system of satellites over Africa. The **availability** of more satellites would reduce the costs.

Just five percent of Africans have Internet connections. The International Telecommunication Union says one-third of Kenyans have mobile phones. But mobile phones may or may not work well with the Internet.

And that's the VOA Special English Development Report, written by Jerilyn Watson. Transcripts and MP3s of our reports are available at voaspecialenglish.com.

FOCUS ON SOUNDS Track 53

1. They tried to do it, but there was a (problem).
2. Farmers can easily find weather, (crop), and price information online.
3. The project began back at the (College) of Engineering.
4. Students from the public health and business schools (offered) advice.

DIALOG Farmers and Phones

W) Welcome back, Sam!

M) Thanks. It's good to be back.

W) So, how was your trip to India?

M) It was incredible! I've never been anywhere like that before.

W) What made it so interesting?

M) Well, it's such a fascinating mix of old and new. Because my company sells small tractors, we spent quite a bit of time in the rural areas.

W) What was it like?

M) Well, people there are very poor. Most farmers still use cattle to plow the land. Many people do not even have electricity or indoor toilets. But you know what? They all have cell phones!

W) Cell phones? Really?

M) Yes! There are over 500 million cell phone users there, and most of the new customers are in the rural areas.

W) That is amazing! But if they don't have electricity, how can they have cell phone service?

M) Well, the service providers set up solar-powered base stations and towers.

W) I see.

M) And, companies in India make special phone chargers that use small hand-powered electric generators.

W) You mean like in those flashlights that you can wind up?

M) Right. All you have to do is turn the handle for a few minutes, and you can power your cell phone.

W) That's incredible! But if these farmers are so poor, how can they afford the phones?

M) Well, cell phones aren't as expensive there as they are in the States. They can buy a good phone for about \$40.

W) What about the service?

M) That's cheap, too. A cell phone call in India only costs about two cents a minute.

Unit 19 The World's Lowest-Priced Car

INDIAN AUTOMAKER LAUNCHES WORLD'S LOWEST-PRICED CAR

This is IN THE NEWS in VOA Special English.

This week, the world's lowest-priced passenger car was **launched** in Mumbai, India. The Nano, made by Tata Motors, is expected to cause a transportation revolution for millions of Indian families.

The small four-door car is about three meters long. It will cost 100,000 Indian rupees, or \$2,000. That is about half the price of similar cars offered by the nearest competitor. The Nano is expected to make car **ownership** possible for more of India's population. So it is being called "The People's Car."

Tata Motors chairman, Ratan Tata, says that was his main goal in building the Nano.

RATAN TATA: "It was never conceived of as being the cheapest car. It was conceived of as being a car that would give the people of India an opportunity to own a car that had not been within their reach before. I hope that is what we will achieve."

The Nano is a very simple car. The lowest-priced version does not include a radio or air conditioning. It has a 624 cubic centimeter, thirty-five-horsepower, gas-powered engine. Still, it is a welcomed **vehicle** in a country where many families of three or four people ride two-wheeled vehicles.

Industry observers predict that soon roads throughout the country could be filled with Nanos. Tata, India's top automaker, has done almost no traditional advertising of the Nano. However, early interest in the vehicle has been huge. The company says the Nano's website has been visited 30 million times.

Tata Motors says it will begin taking orders for the car on April 9, both at car dealerships and on the Internet. However, the cars will not be ready for **purchase** until July. Demand is expected to be far greater than supply.

Ratan Tata says the first 100,000 buyers of the car will be chosen by chance. Production of the Nano has been delayed for several months. Land protests last year forced the company to close its factory in the Indian state of West Bengal. A new factory is being built in the state of Gujarat.

The car is expected to be popular in industrial as well as developing nations. The company says it plans to sell a version of the Nano in Europe in 2011. After that, the car will also be available in the United States. Experts say demand for low-priced automobiles is likely to increase as the international economic crisis continues.

However, the Nano also has its critics. Some say the new cars will increase India's traffic and **pollution** problems. However, Tata company officials say the Nano will produce less pollution than any other car in the country.

And that's In the News in VOA Special English, written by Brianna Blake. Transcripts, MP3s, and podcasts of our programs are available at voaspecialenglish.com.

FOCUS ON SOUNDS Track 56

1. That is about half the price of (similar) cars.
2. The lowest-priced version does not (include) a radio.
3. (Industry) observers fear that roads could be (filled) with small cars.
4. The car may increase the country's (traffic) problems.

DIALOG A New Model Track 57

W) Good afternoon, Sir. What brings you to Sunshine Motors today?

M) Well, I'm looking for a new car. I used to have a big car, but I wanted something that used less gas, so I bought a smaller one last year.

W) And, you're not happy with it?

M) Well, it does get great gas mileage, but the engine is just too small. I do a lot of driving in the city, and it is just not powerful enough to keep up with traffic.

W) I understand.

M) Honestly, I just don't feel safe in such a small car.

W) So you're looking for a larger car again?

M) Yes, but not too big. I still want good fuel economy.

W) Well, how about a mid-sized car? This yellow one is made in Germany. Its engine is about twice the size of your current car, and it still gets around thirty miles to the gallon.

M) Excellent! OK, what about the one next to it—the blue one. That looks like the same kind of car, but it's \$2,000 more. Why?

W) Well, it has larger wheels, a sunroof, and a high-quality stereo system. It also has better safety features.

M) That sounds very good.

W) However, these extra features add more weight. That will affect gas mileage.

- M) How badly?
W) Well, it will be around twenty-seven miles to the gallon instead of thirty.
M) That's fine. I would prefer to have a safer car than a more fuel-efficient one.

Unit 20 Saving Reindeer

SAVING REINDEER—AND A COMMUNITY—IN MONGOLIA Track 58

This is the VOA Special English Development Report.

In far northern Mongolia, the survival of the smallest ethnic group in the country depends on reindeer.

An American named Morgan Keay visited the Tsaatan community when she was studying in Mongolia in 2002. Leaders told her that the animals were not healthy, and the number of reindeer was getting too small to support the community.

When she left, the chief gave her his grandfather's smoking pipe. That way, she would remember the Tsaatan and try to help them. The Tsaatan have about five hundred members. About half are reindeer herders up in the Taiga Mountains. The other half live in a town.

Back in the United States, Morgan Keay and a friend who had also studied in Mongolia started an organization. They named it Itgel—the Mongolian word for hope. The Itgel Foundation has helped bring foreign scientists to Mongolia to research and treat reindeer diseases. Itgel also helped Tsaatan workers build a community and visitor center. The building includes guest rooms for tourists. The Tsaatan not only work as guides; they now provide all services for travelers. The community works in partnership with international tour operators. Those tour operators had formerly been in control of the services.

People in the community designed the center, which they also own and manage. Before the visitor center was built, families earned an average of \$100 a year. Now, Morgan Keay says the average is three to four times that. Money also goes into a community fund. Four years ago, the Tsaatan had fewer than five hundred reindeer. Now, Morgan Keay says the herd has just reached nine hundred.

Last year, the Tsaatan learned that the government of Mongolia planned to spend \$1.5 million on their community. But no one had talked to the Tsaatan about the plans. The Itgel Foundation organized a meeting between community members and government representatives.

Morgan Keay says the Tsaatan are becoming economically independent for the first time. The Mongolian government is now considering a development plan written by the community. The plan deals with education, health, the environment, and economics.

And, that's the VOA Special English Development Report, written by Karen Leggett. For pictures, transcripts, and MP3 archives of our reports, go to voaspecialenglish.com.

FOCUS ON SOUNDS Track 59

1. The chief gave her his grandfather's (smoking) pipe.
2. They named it Itgel—the (Mongolian) word for hope.
3. They not (only) work as guides; they now provide all services for travelers.
4. The people designed the center, which they (own) and manage.

DIALOG An Animal Gift Track 60

- M) I really don't like planning to buy Christmas presents. Every year, it's the same thing. We spend a lot of time and money buying people gifts that they hate and don't ever use.
- W) Well, how about we try something different this year? My friend Mindy at work told me that last year she gave people the gift of helping others.
- M) What do you mean?
- W) Well, instead of spending money on presents for each other, they gave the money to help other people in need around the world.
- M) Great idea! So what should we give?
- W) Well, Mindy said that she uses an organization called Animals for the World.
- M) Yeah, I've heard of AFW. They provide farm animals to poor families.
- W) Right. So for instance, we could buy a cow through AFW, and then a family would have milk every day.
- M) And they could sell any extra milk they had.
- W) Exactly.
- M) What other animals are available?
- W) Well, I think pigs, chickens, sheep, and rabbits.
- M) I think we should give chickens.
- W) Why?
- M) Well, people could eat the eggs and sell them. But some eggs could hatch into chicks. A few chickens can soon become a lot of chickens! They could sell the extra chickens, and they could eat them, too.
- W) You're right! People could do a lot with chickens.