

Class

Name

Unit 1. Houses are “Going Green”

In the last ten years or so, 1 _____ have become more popular as more people make the effort to be kinder to the environment. Some people, however, are not happy to just put 2 _____ on their roofs. They want to do all that they can to protect the environment by preventing pollution in the land, air, and water. They do this by building 3 _____ houses, which are mainly made out of natural or eco-friendly materials.

One example of an eco-friendly home is the 100% Green House. This house uses water from the forest, which also serves as a power source thanks to two 4 _____. Solar panels on the roof provide 5 _____, too. Everything in the house has been designed to be energy efficient. All the materials used to build it are eco-friendly. This means they have a low 6 _____ on the environment. Another example of an eco-friendly home is the Fab Lab House. Its 7 _____ shape was chosen because it is the best form for capturing the sun’s rays. It is also elevated from the ground, which helps keep it cool in the summer. This unique house is powered by solar energy and cooled by natural drafts. These 8 _____ _____ the need for heating or air-conditioning systems.

Eco-friendly houses promote 9 _____ living through the use of unique building techniques and 10 _____—from wind turbines and solar panels to water conservation, recycling, and much more. It is no wonder they are becoming more popular. However, eco-friendly houses are just one step toward making our world cleaner and “greener.” We need to do a lot more.

Unit 2. Evening Explosions

No one knows 1 _____ when or how fireworks were invented. However, historians believe that gunpowder was discovered by early Chinese scientists who were searching for a medicine that would help people to live forever. They were also trying to turn 2 _____ into gold. The scientists never found the medicine they were looking for or how to make gold. However, they made many discoveries, one of which was the invention of printing ink. This 3 _____ saltpeter (potassium nitrate), which became one of the main 4 _____ in gunpowder.

At first, gunpowder was used by the 5 _____ in fireworks. They used fireworks to scare away evil spirits with their loud sound. The Chinese also brought fireworks to a higher level of development. Firework-masters were well 6 _____ in ancient China for their skill in making amazing displays of light and sound. Fireworks are still an important part of Chinese culture. In fact, China is the 7 _____ and exporter of fireworks in the world.

The use of fireworks for festivals and 8 _____ has spread throughout the world. In many countries, fireworks are used to celebrate national holidays, such as 9 _____ Day in the US and St. Patrick's Day in Ireland. 10 _____ of fireworks are also common on New Year's Eve.

Unit 3. Different English

People agree that there are many differences between British and 1 _____.
_____. In fact, British and American English differ mainly in terms of grammar,
2 _____, 3 _____, spelling, idioms, and 4 _____. The
English language used in America and that is used in the United Kingdom has diverged over hundreds of
year.

However, the main differences between British and American English are only spelling and some
5 _____. American spelling is usually 6 _____
than British spelling. As a general rule, American English avoids the *ou* spelling of words for example,
honor instead of the British form *honour* and *color* instead of *colour*.

Vocabulary differences are limited to very few topics. The 7 _____ seems to have the
8 _____. For example, the American word for *trunk* is *boot* in
British terms, and the *hood* is the *bonnet*. Similarly, *lorry* in Britain means the same as *truck* in America.

Grammatically, the most important difference is the past 9 _____
_____. In America, it is *gotten*. In Britain, it is *got*. 10 _____, American
English follows the way English people spoke long ago. It is British English that has changed more over the
years.

Unit 4. Jobs of the Future

1 _____ has changed our lives. Now we do everything on computers and even on our phones. Our jobs have changed as well, and we can only imagine what the jobs of the future will be like.

The fastest 2 _____ is technology, and the fastest growing technology job is mobile app developer. Mobile app 3 _____ write programs, such as games or shopping apps, for phones. The app industry is huge. In 2015, one billion cell phones were sold in the world. And people spend over 50 billion dollars a year on apps. Another area of growth in the computer industry is 4 _____. Now computers can do jobs like sorting email and mapping delivery routes. In the future, computers may be able to think for themselves and do complicated jobs automatically, such as designing buildings or even teaching. Computer programmers will be needed to create these thinking computers.

Other jobs in the future will focus on selling 5 _____.

6 _____ is a growing area. The marketer's job is to attract new customers and manage how the company's image is perceived online. The average person spends two hours a day on social media, so companies need to 7 _____ on the Internet. Marketers must know how to create interesting content that everyone will talk about. So they must have computer skills as well as people skills.

Of course, some jobs will never be replaced. We will always need doctors, for example. However, 8 _____ in the future will use more 9 _____ tools. Someday, doctors may even program robots to do 10 _____.

Unit 5. The Land Down Under

Australia is the largest island and the driest, 1 _____ on our planet. Its land area is almost three million square kilometers, and its population is estimated to be just over twenty million people.

The population of Australia is quite low compared to the population of other countries that are similar in size. This is because Australia gets very little 2 _____ in the interior of the island. As a result, this area is mostly desert and uninhabitable. Only the eastern coastal districts are 3 _____.

The first Australians were the 4 _____ who came from Asia about 40,000 years ago. The first Europeans to spot and land on Australia were the Dutch. However, Australia did not gain much attention until 1770, when James Cook claimed the eastern part of the island. In 1788, the first 5 _____ was created on the shores of Port Jackson. Permanent 6 _____ of Australia began in the nineteenth century, and since then people from all over the world 7 _____ to the island to live and work.

Australia is famous for many things, such as the largest coral reef in the world—The Great Barrier Reef—and 8 _____. The most popular animals are kangaroos, koalas, and wombats. These animals are marsupials, which are only found in Australia and parts of South America. The strangest Australian animal is the platypus. This is a monotreme. It lives in rivers and lays eggs. It is also 9 _____ and can cause severe pain to humans. These interesting features attract many tourists to 10 _____ each year.

Unit 6. The Thinking Game

No clear 1 _____ has been found to suggest the exact roots of chess. Most people believe that the game of chess was first played in India. The evidence for this is that the game is mentioned around the sixth century CE in texts 2 _____, _____, the language of ancient India. However, other sources state that chess originated in China as early as the 3 _____ BCE. This is eight centuries before it is mentioned in Indian texts. Which culture the game is derived from is still open for debate.

4 _____ still state that chess was an 5 _____ even though Sam Sloan, a chess historian, has provided evidence to the contrary. Part of the problem is that there are so many different kinds of chess. However, Sloan argues that this doesn't matter as they can all be traced back to the 6 _____ Chinese game.

By the year 1000, chess had spread 7 _____. There, the current form of chess developed in the late fifteenth century. Competitive chess began to be played around 1834, and the first modern international 8 _____ was held in London, England in 1851. After this time, its 9 _____ increased worldwide. Even though the origin of chess is still 10 _____, it has not changed the fact that millions of people still play the game. Chess is now one of the world's most popular games.

Unit 7. Changing the Time

The time may be 10 a.m. in 1 _____ and 2 a.m. in New York, but both of these times are based on the same time— 2 _____. This is because in 1884 3 _____ met to decide how to avoid the confusion caused by almost every town having its own time.

When people didn't travel 4 _____, it was not very important that the time was different wherever they went. However, as soon as there were railways and communication networks, it became 5 _____ to have a system of telling time that would make 6 _____ possible.

Such a system was devised by Sir Sandford Fleming (1827 – 1915). Born in Scotland, Fleming moved to Canada in 1845 and became a Canadian railway engineer. He organized a conference in 1884 in which nations from all over the world met. 7 _____ that there should be twenty-four meridians—lines of longitude—dividing the world into twenty-four time zones. The 8 _____ would pass through the village of Greenwich near London. The time at Greenwich would be called Greenwich Mean Time, and at each of the twenty-four meridian lines, the time would go forwards or backwards by one hour.

Standard time officially came into existence in 1884, and since then GMT has been the center of time-keeping for all nations. Most nations have only one time zone even though their 9 _____ may extend over two or more meridians. However, large nations such as China, the US, and Australia are divided into 10 _____.

Unit 8. A Rare Root

For thousands of years, ginseng has been regarded as a means for improving general well-being. It is usually taken for its 1 _____, such as strengthening the body and protecting it against stress. Ginseng is widely used in Asia and North America. Ginseng products have become so popular that it is now available in forms such as 2 _____, tea, candy, and even cigarettes.

There are two well-known types of ginseng, Asian and American. It is believed that Asian ginseng was 3 _____ in China thousands of years ago. By the 1900s, the international demand for ginseng was so strong that the wild supply had become endangered. As a result, the 4 _____ of ginseng began.

American ginseng grows in North America and is highly 5 _____ by Asians, especially the Chinese. American ginseng is believed to promote Yin energy and has a calming effect. Asian ginseng is believed to promote Yang energy and improves circulation. The two kinds 6 _____ . Therefore, American ginseng is sought after in Asia. In fact, hundreds of tons of ginseng are exported from the US and Canada every year.

Wild ginseng is now so rare that it has become 7 _____ to collect it in most American states. Wild ginseng grows naturally and is considered to be better than 8 _____ . Farmed or wild, it is difficult to verify the 9 _____ of ginseng. Nevertheless, it has been valued for thousands of years as an herb that can 10 _____ .

Unit 9. Chew On This!

1 _____ that prehistoric people chewed tree resin. The ancient Greeks chewed resin from the 2 _____ tree. The act of chewing mastic resin was believed to be good for the teeth. The English word *masticate* is derived from Greek, and it means to chew food. Furthermore, the 3 _____ from Central America chewed sap from the sapodilla tree. They called this sap *chicle*, and it was this sap that became the basis for the modern chewing gum industry. Indeed, one brand of 4 _____ gum is called Chiclets™.

It has also been found that spruce tree resin was chewed by Native Americans as a type of 5 _____. It is thought that settlers adopted this habit, and the custom eventually spread. It wasn't until 1848, however, that the first chewing gum was manufactured. John B. Curtis produced Pure Spruce Gum in the 6 _____ of Maine in the US.

Gum chewing did not become popular until after 1869, when former Mexican president Santa Anna took refuge in the US. He 7 _____ Thomas Adams to use chicle to produce a 8 _____. It became so popular that by 1888 people could buy chewing gum from vending machines.

The next 9 _____ in the manufacture of chewing gum was the invention of bubble gum in 1906. However, it was too sticky, and it was not until 1928 that the kind of bubble gum was 10 _____ people chew and make bubbles with today.

Unit 10. A Few Words About Shakespeare

1 _____ is 2 _____ to be the greatest writer in the English language. In spite of his fame, Shakespeare's life story is full of gaps. Indeed, so little is known about him that there are 3 _____ that he did not write the plays for which he is famous.

We know that Shakespeare was born in April 1564, but we do not know his birthday. He was the son of John and Mary Shakespeare. The Shakespeares lived in Stratford-upon-Avon, a small town on the banks of the River Avon in 4 _____.

As a boy, Shakespeare 5 _____ grammar school, although there are no records to provide evidence that he went to school. One surviving piece of 6 _____ about his life is his 7 _____. When he was eighteen, he married twenty-six-year-old Anne Hathaway. They had three children together.

In 1592, Shakespeare left Anne in Stratford to seek fame and fortune in London. He worked as a poet, playwright, and actor. Shakespeare is well-known for writing plays that are still enjoyed today. He wrote many comedies and tragedies that are still performed all over the world. Romeo and Juliet, Hamlet, and The 8 _____ are just a few of his plays that have been made into films.

Shakespeare's success can be attributed to his unique style of writing, his 9 _____, and his interesting characters. There is evidence that he made a 10 _____ of money in his lifetime. He died on April 23, 1616 and was buried in Stratford.

Unit 11. Alligators in China?

There are only two 1 _____ of alligator in the world—the American alligator and the Chinese alligator. The 2 _____ lives in the US, especially in Florida. The Chinese alligator lives in the lower part of the Yangtze River in China. It can particularly be found in Jiangsu, Zhejiang, and Anhui provinces.

There are thousands of American alligators living in the 3 _____. Unfortunately, the Chinese alligator is endangered. This rare species is very small. It grows to only five to seven feet long. Unlike the American alligator, it is 4 _____, even on its belly.

The Chinese alligator can usually be found in 5 _____ and ponds. The current problem is the depletion of this species' habitat for agricultural use. As a result, the alligator population 6 _____. Also, the ponds in which these alligators live are now used by farmers for raising ducks and fish farming. They are a 7 _____ to the farmers because they eat the ducks and the fish. Local people do not really care that these alligators are an important part of the environment and Chinese culture.

Fortunately, the 8 _____ is doing everything it can to save this species of alligator from extinction. There is now a 9 _____ program with several thousand Chinese alligators in 10 _____. It is estimated that the captive alligator population is over 10,000.

Unit 12. Brexit and the Birth of Deglobalization

The availability of the Internet has helped make our 1 _____ in many ways. We now have the ability to video-chat with friends across the ocean. We can update social 2 _____ from remote villages. We can shop from vendors on the other side of the globe. As our world grows more connected, it becomes easier for nations worldwide to work together for the common good, which promotes globalization. Globalization occurs when individuals, businesses, or even countries gain influence on an 3 _____.

Globalization can be an effective way for nations to work together. Countries may agree to cooperate to accomplish certain goals for the 4 _____ of society. Most of the time, this is a good thing, but globalization also carries a threat. Focusing on 5 _____ may cause governments to lose touch with the people in the individual member countries. When this happens, they may make decisions that are 6 _____ to the people in some of the countries. This can cause the people to feel left out. They feel that their views and opinions do not matter.

This is what happened to the people of England. During the 7 _____, some EU leaders felt accepting the refugees was a moral obligation. But many people in Britain were worried about 8 _____ and too much control by the EU. They felt a disconnection from the government that represents them, so they voted to leave the EU. Their 9 _____ became known as Brexit (10 _____). It made a strong statement to the increasingly globalized world: Do not forget us, the citizens. Keep our best interests first.

Unit 13. Netflix

Netflix™ is one of the largest 1 _____ in the world. Currently, it has one hundred million subscribers worldwide. How did it do it?

Netflix started out by 2 _____ to people by mail. People would order a movie on 3 _____, and a few days later the DVD would arrive in the mail. Netflix made it so easy—people no longer had to leave the house to rent a movie. Netflix quickly took off in the US. One year later, 239,000 people 4 _____ up for the service. By 2007, it had 7.8 million subscribers.

What can other businesses learn from Netflix's success?

- "Movie enjoyment made easy!" Netflix makes sure it is easier than ever to rent a movie.
- Netflix is 5 _____ and changes its plans 6 _____. At one point, Netflix was ready to launch its own device to stream its movies and shows, but then it realized it would be easier to let customers stream to any device.
- Netflix adapts to 7 _____. When Internet speeds increased, it made its movies available to stream. The company also created algorithms to analyze people's viewing habits so it can recommend different shows and movies to suit each customer.
- Netflix will try new things. It now produces 8 _____—new movies and shows—that appeals to different ages and interests, from the popular Marvel's The Defenders to the 9 _____ House of Cards. The company continues to grow—with nearly 20 million more subscribers in 2016.

These are not the 10 _____ why Netflix is successful, but they explain part of the story.

Unit 14. How Sound Travels

The speed of sound describes how much distance a sound wave 1 _____ in a certain amount of time. Sound waves travel through 2 _____ at different speeds. For example, sound waves travel through dry air at sea level at 344 mps (meters per second), or 770 mph (miles per hour). They travel through water at 1480 mps. Sound waves travel faster in liquids than in air. The speed of sound is also affected by temperature. The colder the air, the slower the 3 _____.

We can easily find the speed of sound by doing an experiment that 4 _____ the time it takes for an echo to travel from a known distance. For instance, a ship caught in a fog can avoid 5 _____ by sounding a foghorn and waiting for the echo. In this case, it is necessary to remember that the distance traveled by the sound is actually twice the distance from the 6 _____ to where the echo 7 _____ because the sound makes a round trip.

We can also work out how far away a thunderstorm is by understanding the speed of sound. As soon as we see the 8 _____, we can count in seconds until we hear the 9 _____. Then we calculate where the lightning (and the storm) is in 10 _____ to where we are by multiplying the number of seconds by 344 meters.

Unit 15. The History of the Alphabet

The 1 _____ in the English alphabet have their origin in the Roman alphabet. However, this alphabet was 2 _____ from the Greek alphabet. Even today, we still use some of the Greek letters, such as alpha, beta, gamma, and epsilon. Furthermore, the Greek alphabet was derived from the 3 _____. It seems the 4 _____ to our modern English alphabet is a long history of writing systems used and spread by other civilizations.

5 _____, which spread between 1200 BCE to 900 BCE, is not usually studied in detail in most history lessons at school. This is strange because Phoenicia— 6 _____ and Syria—was a very important civilization. Not only did the Phoenicians invent the kind of writing that we use today, but they were also great navigators and traders. They traveled throughout the Mediterranean Sea establishing trading posts, building new cities, and spreading their 7 _____. This script was based on symbols for sounds.

One great city that came to life was Carthage on the coast of North Africa. This is now modern-day Tunisia. The Carthaginians, who were originally Phoenicians, 8 _____ that the Romans decided that they had to be stopped. The wars between these two powers were known as the Punic Wars. Rome was eventually victorious, and Carthage 9 _____. Despite this, the Phoenician civilization lives on in the letters of the alphabet that 10 _____.

Unit 16. How Animals Communicate

Animals communicate with one another in 1 _____
_____: by sight (visual communication), by sound (2 _____
_____), by touch (3 _____), and by smell
(4 _____). In this way, animals are no different from humans. The
main difference is in the quality of each kind of communication.

There are two kinds of visual communication. One is called “badges” and refers to the color and shape of the animal. For instance, the brighter the feathers of a male bird, the healthier it is. This can help females pick a male bird as a mate. The other is called “5 _____” and refers to
6 _____ that can attract a mate or warn off an enemy. An
example is the way a male peacock spreads his tail and performs a dance to attract a female.

Most animal communication uses sound. Auditory communication can include the call of a bird, the roar of a lion, the song of a whale, and the “speech” of some animals. Chimps chatter and screech and make noises that have 7 _____, such as 8 _____
_____ or warning the other that predators are coming.

Touch is important to many animals. It is used to show comfort or to 9 _____
_____ or dominance. For instance, mother tigers lick their babies, chimps groom each
other, and cats rub themselves against humans to show affection.

Chemical communication is very important in some species. Some animals are able to send messages long distances by putting chemicals into the air. Pheromones, or 10 _____
_____, are produced by these animals and are left behind to mark territory or to attract
mates.

Unit 17. Spreading Sickness

Some diseases are infectious. They are called 1 _____. These diseases are transmitted through air, water, insects, and animals or by physical contact between infected persons.

Malaria, one of the most common and dangerous diseases, is transmitted by mosquitoes. If a mosquito bites someone who has malaria, the 2 _____ in some of that person's blood. This blood contains the 3 _____ that cause malaria. When the mosquito bites another person, it 4 _____ its infected saliva into that person and passes on the disease.

One of the most famous communicable diseases was the 5 _____, or Black Death. This killed millions of Europeans in the fourteenth century. The organism causing this plague was 6 _____, especially rats, and fleas, which then infected humans. Two other important communicable diseases that have caused major epidemics in the past are cholera and typhoid. These are passed from one person to another through contaminated food or water.

In the past few decades, there have been three new 7 _____. One of them, AIDS, causes millions of deaths every year. The AIDS virus is passed from one person to another through blood and bodily fluids. Two more recent communicable diseases are SARS and avian flu, or bird flu. SARS is extremely contagious and causes 8 _____. At first, bird flu was carried only in the excreta of birds, and it infected only other birds. Then, it began to infect humans who handled 9 _____ birds. In an 10 _____ to stop an epidemic of bird flu in humans, millions of birds were killed.

Unit 18. The Beautiful Music of Art and Science

1 _____ (AI) continues to grow and astound. Sometimes, it is a
2 _____ in a chess match. Sometimes, it is an automated
machine completing tedious tasks. The range of things robots can be taught to do is truly amazing.
Scientists are always looking for 3 _____. One of the areas of
interest is if AI has the ability to compose music. Music is an 4 _____
_____. Could a robot really capture that emotion?

Meet Aiva, the first AI system that has successfully composed 5 _____
_____ that is indistinguishable from human compositions. Its creators programmed Aiva
to learn by studying classical music. Instead of using an incubator program, they used what's called
6 _____. This type of programming allows Aiva to function much
as a human brain does when learning something, such as music. Instead of depending on a programming
code, Aiva explores and improves its performance without any 7 _____
_____. This is the reason for Aiva's success in capturing the emotion that is present in
classical music.

Aiva's performance 8 _____ . It can
compose its own sheet music in a matter of only minutes. Because of its amazing ability, Aiva is often
9 _____ out by companies looking for music for their movies, commercials, or video
games. Still, Aiva needs musicians to play the 10 _____ it composes. Aiva's creators
believe that, instead of replacing humans, AI and humans will work together to reach their full potential.

Unit 19. The Mysterious Easter Island

Easter Island, one of the world's 1 _____
_____, lies in the southeastern Pacific Ocean about 3,600 kilometers west of mainland
Chile. The island is named after 2 _____ because it was visited
on this day in 1722 by Dutch explorer Jacob Roggeveen. Inhabited by Polynesians since 300 or 400 CE,
Easter Island is now a World Heritage Site.

The most amazing sight on the island is the 3 _____ carved out
of volcanic rock. These 4 _____ stone figures have made Easter Island a famous site.
There were hundreds of these statues when the island was first visited by Europeans. They were probably
made by Polynesians between about 1000 and 1600 CE. These huge statues are between ten and forty
feet high and weigh up to fifty tons or more.

One mystery surrounding these statues is how the Polynesians, using only 5 _____
_____, carved and then moved these statues. The answer
seems to be that they were pulled along rails made from trees by hundreds of people working together. This
could also be the reason why trees are so 6 _____ on the island.

Over the centuries, Easter Island has suffered from 7 _____, disease, war, and
8 _____. As a result, most of the island's
9 _____ identity has been lost. However, the island's magnificent
stone figures will keep people 10 _____ in Polynesian history and culture for many years
to come.

Unit 20. Our Great Rainforests

There is a 1 _____ for hardwood to be used as construction material for building and making furniture. Most of the best hardwood grows in rainforests. Unfortunately, tens of 2 _____ of rainforest are destroyed by logging every year. The work of cutting down trees, or logging, is a very profitable business. Although governments try to control it, illegal logging still occurs. This factor, combined with climate change and 3 _____, has caused the world's rainforests to disappear at an alarming rate.

Rainforests take a long time to grow. Once they disappear, it will be thousands of years before they can grow again. Rainforests produce much of the 4 _____ and absorb carbon dioxide (CO₂), a greenhouse gas. However, deforestation of the rainforests by removing the trees 5 _____ them from absorbing the CO₂ in the atmosphere, the chemical that causes global warming.

Rainforests also provide a 6 _____ for millions of different species of animals and plants. When this habitat is destroyed, these animals and plants are at 7 _____ . Many of the plants are important for food and medicine, and the animals are part of the 8 _____ . Most animal species are dependent on certain plants or animals for their survival. When they die out, the species that are dependent on them die out too.

Many organizations are now fighting to keep rainforests from 9 _____ by human and climate activity. The protection and regeneration of our world's rainforests must be a 10 _____ if there is any hope in keeping them from shrinking.