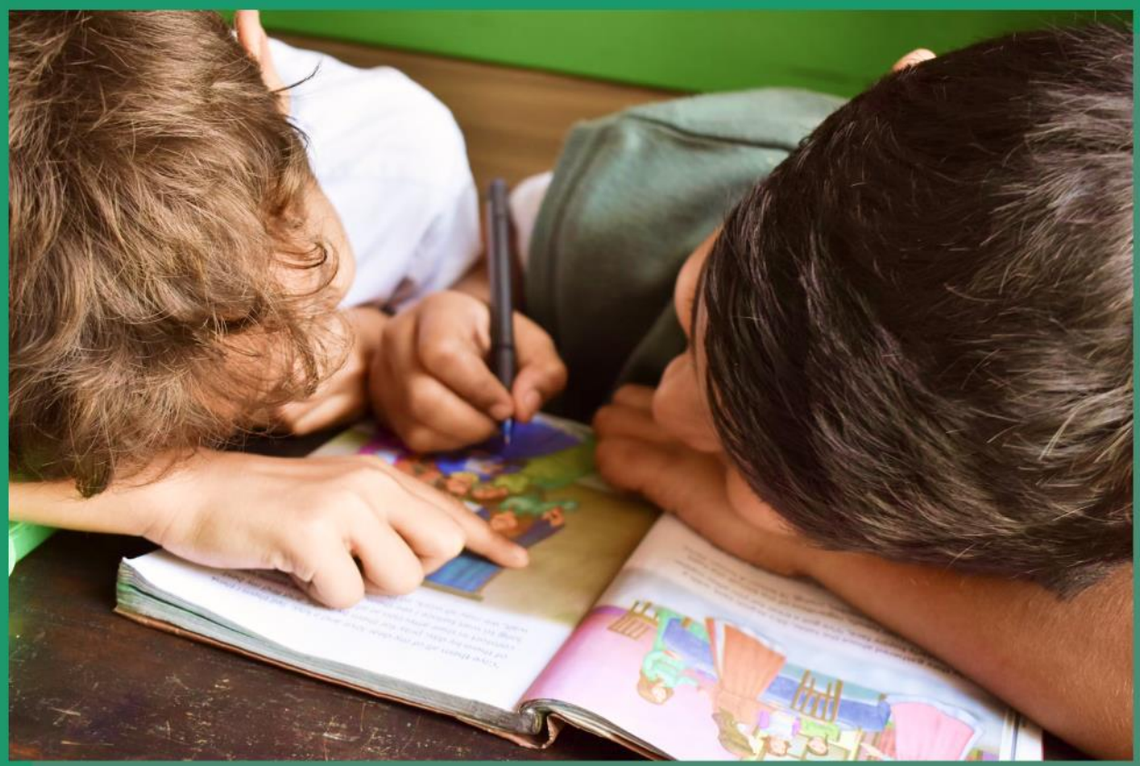
ChatGPT Workbook



LEVEL 4

PICTURE

4-1 Plans for My Wedding Anniversary

TOPIC	4-1 Plans for My Wedding Anniversary
Speaking	Next month, Mia and I will celebrate our 20th wedding anniversary at my uncle's beautiful grape plantation in California. It's very far from Mexico but it's the best place for our wedding celebration. The place is always warm and has a beautiful vineyard with the sunny skies. I plan to make my wife happy. After that, we will treat our guests to a candle-lit dinner. It will be a romantic night.
Writing Mission Word	wedding anniversary sunny treat plantation vineyard romantic
Conversation	1. When will the couple celebrate their anniversary? 2. How many years have they been married? 3. Where will they celebrate their anniversary? 4. Is the plantation close to Mexico? 5. What is the weather like at the plantation? 6. What does the plantation have? 7. What does the person plan to do for his wife? 8. What will they do for their guests?

PICTURE

4-2 Events in the Ice Age 1

TOPIC	4-2 Events in the Ice Age 1
Speaking	Thirty-eight million years ago, the first large mammals lived on Earth. The climate underwent a great change in the early prehistoric period. It was still warm and temperate, but in the beginning of the mid prehistoric period, it grew cold. The cold weather affected the spread of the plants. Many tropical or subtropical types of plants disappeared and even the woods shrank. Instead, immense grassy plains took over the area.
Writing Mission Word	**million** **beginning** **tropical** **period** **spread** **immense**
Conversation	1. When did the first large mammals live on Earth? 2. What happened to the climate in the early prehistoric period? 3. What was the weather like in the early prehistoric period? 4. What happened to the weather in the mid prehistoric period? 5. How did the cold weather affect plants? 6. What happened to the woods? 7. What took over the area instead of woods? 8. Did the cold weather help plants spread?

4-3 Events in the Ice Age 2

TOPIC	4-3 Events in the Ice Age 2
Speaking	The severe cold froze vast stretches of water, particularly around the North and South poles. Water vapor froze in the clouds and fell as snow. This snow covered the continents so thickly. It did not melt. This made the rivers dry. Many of them disappeared. Yet the oceans evaporated, but the vapor did not become rain. The seas became dry. The level of the ocean gradually dropped and the sea floors emerged. Even the deep trench of the Bering Strait was dry.
Writing Mission Word	**give off** **major** **fraction** **reflect** **outward** **size**
Conversation	1. What happened to water because of the severe cold? 2. What happened to water vapor in the clouds? 3. How thickly did the snow cover the continents? 4. Did the snow melt? 5. What happened to the rivers? 6. What happened to the oceans? 7. What happened to the level of the ocean? 8. What emerged as the ocean level dropped?

PICTURE

4-4 The First Plow

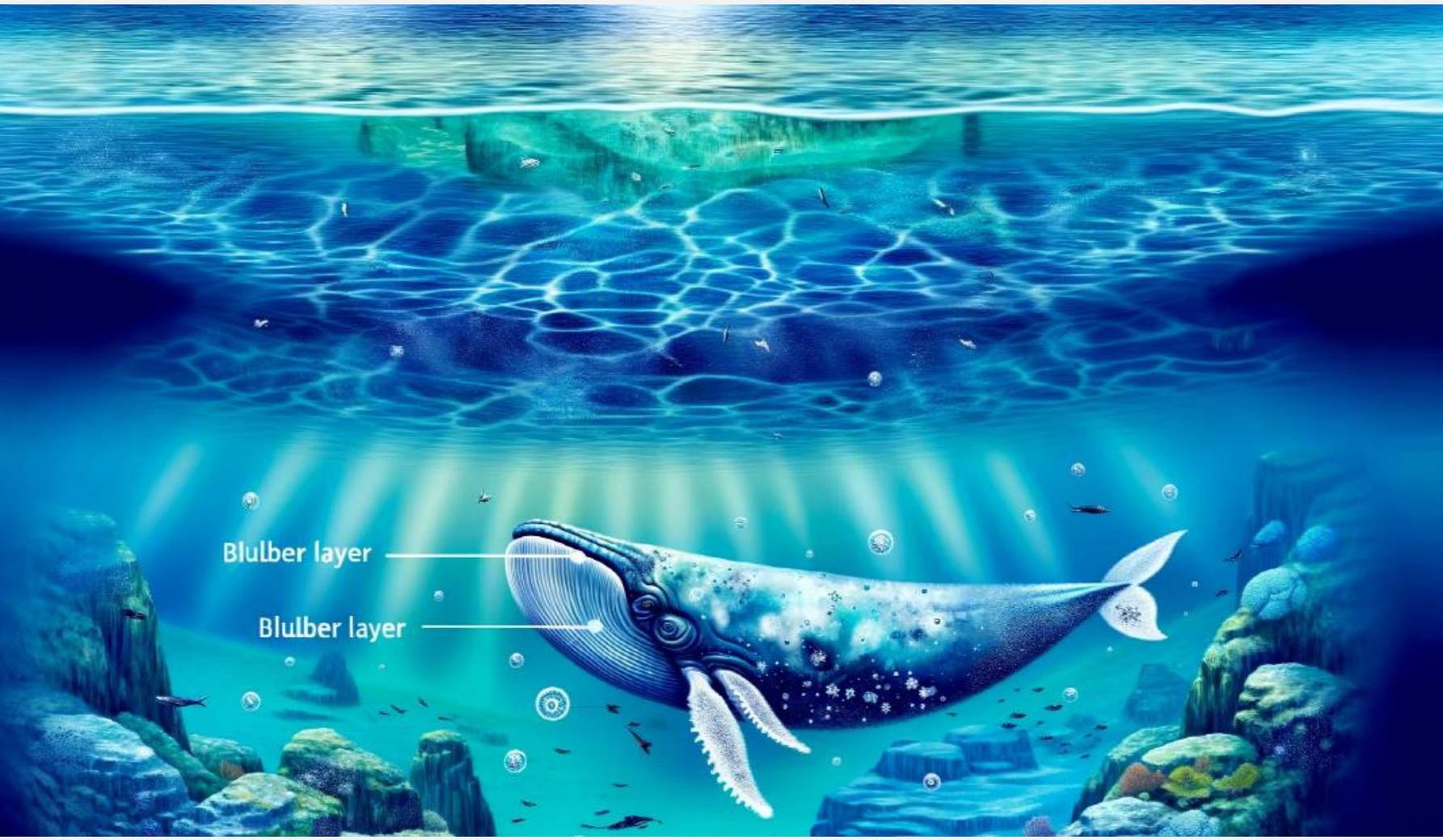
TOPIC	4-4 The First Plow
Speaking	Billy had homework about the first plow. He asked his mom for an answer. He asked about the inventor of a plow. According to Billy's mom, before a farmer plants his seeds, he plows into the ground. The plow breaks up the hard ground and turns the soft soil over. Billy searched on the Internet and got some information. The plow was an ancient invention and no one knew its creator. Men in earlier times were intelligent. They made their work in the field effective. Some people found the ancient plow several years ago.
Writing Mission Word	**plow** **break up** **ancient** **inventor** **ground** **intelligent**
Conversation	1. What was Billy's homework about? 2. Who did Billy ask for help? 3. What specific question did Billy ask? 4. According to Billy's mom, what does a farmer do before planting seeds? 5. What does a plow do to the ground? 6. Where did Billy search for more information? 7. Is the plow a recent invention? 8. Do people know who invented the plow?

4-5 The Largest Mammal in the World 1

TOPIC	4-5 The Largest Mammal in the World 1
Speaking	In prehistoric times, gigantic creatures lived on land and in the sea. They were far larger than most animals alive today. The largest animal in existence is the blue whale. It is about thirty meters long and weighs 125 tons. And more interestingly enough, about one-third of the length of this animal is its head! Perhaps the most wondrous thing about the whale is not in its size. It is not a fish but a mammal.
Writing Mission Word	give off, major, fraction, reflect, outward, size
Conversation	1. When did gigantic creatures live on Earth? 2. Where did these creatures live? 3. How did their size compare to animals today? 4. What is the largest animal in existence today? 5. How long is a blue whale? 6. How much does a blue whale weigh? 7. What fraction of a blue whale's length is its head? 8. Is a whale a fish or a mammal?

PICTURE

4-6 The Largest Mammal in the World 2



TOPIC	4-6 The Largest Mammal in the World 2
Speaking	As whales developed and adapted to life in water, many changes took place; among these was the development of blubber. Mammals are warm-blooded animals. They keep their body temperature within certain limits. Whales have a layer of fibrous tissue under their skin. Each layer is full of oil and retains heat. On a larger whale, this layer of blubber is from thirty-five to fifty-five centimeters thick.
Writing Mission Word	adapt body temperature fibrous blubber limit tissue
Conversation	1. What happened as whales adapted to life in water? 2. What was one of the changes that developed in whales? 3. What kind of animals are mammals? 4. What do mammals do with their body temperature? 5. What do whales have under their skin? 6. What is each layer of this tissue full of? 7. What does the layer of blubber do? 8. How thick is the blubber layer on a larger whale?

PICTURE

4-7 The Largest Mammal in the World 3

TOPIC	4-7 The Largest Mammal in the World 3

Speaking

According to the scientists, Blue Whales live for at least 80 years. However, no one knows individual records of the age of the whale when people hunt them with certainty. The oldest whale that people are studying now is 34 years old in the northeast Pacific. The whales' only natural predator is the Killer Whale. Many mature Blue Whales have scars because of the Killer Whale's attack. Nobody knows the mortality rate of such attacks yet.

Writing Mission Word

whale	Killer Whale	scar
certainty	predator	mortality

Conversation

1. How long do Blue Whales live according to scientists?
2. Do people know the exact age of hunted whales?
3. How old is the oldest whale currently being studied?
4. Where is this 34-year-old whale located?
5. What is the only natural predator of whales?
6. What do many mature Blue Whales have because of Killer Whale attacks?
7. Do people know the mortality rate of Killer Whale attacks on Blue Whales?
8. Are Blue Whales hunted by humans?

PICTURE

4-8 Try Harder!

TOPIC	4-8 Try Harder!
Speaking	Michael Paul Morris works as a journalist for a newspaper company. When the downturn of their country comes, a lot of workers are in trouble because they lose their jobs. Michael Paul is not an exception to this. His boss talks with him today. In general, his boss doesn't like him because he doesn't work very well on the job. According to his boss, he types too slowly. In addition, he files the documents too carelessly.
Writing Mission Word	**journalist** **in general** **in addition** **downturn** **exception** **carelessly**
Conversation	1. What is Michael Paul Morris' job? 2. Where does Michael Paul work? 3. What happens to many workers when a country has a downturn? 4. Is Michael Paul an exception to job loss? 5. Who talks to Michael Paul today? 6. Does Michael Paul's boss like him? 7. According to his boss, what does Michael Paul do too slowly? 8. How does Michael Paul file documents according to his boss?

PICTURE

4-9 The Effective Company Man

TOPIC	4-9 The Effective Company Man
Speaking	Manners come together with looks. When you dress more neatly, you act more professionally as well. Stay away from bad habits. Don't join gossips. It is not good for you at all. Don't talk about how other people look or act. Build your own image and make a lasting impression.
Writing Mission Word	manner, habit, last, professionally, gossip, impression
Conversation	1. What comes together with looks? 2. How do you act when you dress neatly? 3. What should you stay away from? 4. Should you join gossips? 5. Is gossiping good for you? 6. What shouldn't you talk about? 7. What should you build? 8. What kind of impression should you make?

PICTURE

4-10 Solar Cars 1

TOPIC	4-10 Solar Cars 1
Speaking	Solar power is generating electricity from sunlight. The use of energy from the sun provides an alternative source. This energy is cheaper and more environment-friendly. There are many uses of solar energy. Many scientists from different countries are now developing solar energy for the use in cars or 'solar cars' because they are the means of our future transportation. Solar cars use solar cells for the power energy. They are getting power from the sun and store it.
Writing Mission Word	alternative / solar / solar cell environment-friendly / develop / store
Conversation	1. What is solar power? 2. What does solar energy provide? 3. Is solar energy cheaper than other sources? 4. Is solar energy good for the environment? 5. What are scientists developing solar energy for? 6. Why are scientists focusing on solar cars? 7. What do solar cars use for power? 8. Where do solar cells get power from?

4-11 Solar Cars 2

TOPIC	4-11 Solar Cars 2
Speaking	Is the solar car the means of our future transportation? With rising gasoline prices and environmental issues on global warming and climate change, solar cars became the top issue among the car consumers. Now people think about the real use of them in the future. Unlike fossil fuels, energy from the sun is totally free and clean. They do not produce harmful gases and pollutants. They don't pollute the air. So, solar cars are gaining ground as substitutes for present day cars. Solar cars also have cool designs along with most modern cars.
Writing Mission Word	**transportation** **harmful gas** **gain** **consumer** **pollute** **modern**
Conversation	1. Why have solar cars become a top issue among consumers? 2. What environmental issues are mentioned? 3. Are people thinking about using solar cars in the future? 4. How does solar energy compare to fossil fuels? 5. Do solar cars produce harmful gases or pollutants? 6. Do solar cars pollute the air? 7. Are solar cars becoming more popular as substitutes for current cars? 8. How do the designs of solar cars compare to modern cars?

PICTURE

4-12 Renewable Energy Resources

TOPIC	4-12 Renewable Energy Resources
Speaking	Men are continuously searching for new energy resources. Today's energy resources will soon run out. So people are studying on the alternative energy. There are non-renewable energy resources, like fossil fuels. They are still providing us with energy. These energy resources are not infinite and will run out in the near future. As a result, the prices of these resources are rising constantly. However, these non-renewable energy resources are damaging our environment.
Writing Mission Word	**resource** **non-renewable** **constantly** **run out** **fossil fuel** **damage**
Conversation	1. Why are people searching for new energy resources? 2. What kind of energy are people studying? 3. What are examples of non-renewable energy resources? 4. Are non-renewable energy resources still providing energy? 5. Will non-renewable energy resources last forever? 6. When will non-renewable energy resources run out? 7. What is happening to the prices of non-renewable resources? 8. What negative effect do non-renewable resources have?

PICTURE

4-13 Exploration Under the Sea 1

TOPIC	4-13 Exploration Under the Sea 1
Speaking	The Piccard Family of Switzerland has produced scientists, adventurers and explorers generation by generation. Their family is famous. They have faced a lot of adventures and challenges. The Piccard family has made their way to fame also with balloonists, aeronauts, hydronauts, chemists, and physicists. Some of them have reached the highest flight and have made the deepest dive of all time.
Writing Mission Word	**produce** **adventure** **flight** **generation** **fame** **dive**
Conversation	1. Where is the Piccard family from? 2. What has the Piccard family produced over generations? 3. Is the Piccard family famous? 4. Have the Piccards faced adventures and challenges? 5. What professions have contributed to the Piccard family's fame? 6. What record-setting flights have some Piccards achieved? 7. What record-setting dives have some Piccards achieved? 8. Over how many generations has the Piccard family produced notable people?

PICTURE

4-14 Exploration Under the Sea 2

TOPIC	4-14 Exploration Under the Sea 2
Speaking	People had known about some of the deep-sea fish. They had caught these deep-sea fish with special nets. However, their feature had been in a different appearance when they usually reached the surface of the water. The change in appearance is an effect of the difference in water pressure between deep sea and shallow sea. Nobody had ever seen these creatures alive. It stirred Jacques Piccard. He did an exploration in the bottom of the sea. He thought of the creatures and views in the deep sea.
Writing Mission Word	**deep-sea fish** **appearance** **exploration** **surface** **stir** **creature**
Conversation	1. How did people know about deep-sea fish? 2. Did the deep-sea fish look the same at the surface? 3. What causes the change in the fishes' appearance? 4. Had anyone seen these deep-sea creatures alive before? 5. Who was stirred by the mystery of the deep-sea creatures? 6. Where did Jacques Piccard explore? 7. What did Piccard think about during his exploration? 8. Are deep-sea fish used to shallow water pressure?

PICTURE

4-15 Exploration Under the Sea 3

TOPIC	4-15 Exploration Under the Sea 3
Speaking	On January 20, 1960, Piccard, together with Lieutenant Don Walsh, reached the bottom of the sea. However, the equipment on their submersible was not enough for the high water pressure. They could not conduct additional research. They reached the bottom of the sea, but they only stayed for twenty minutes. They had heard a loud cracking sound in their submersible earlier and returned at once for safety. By the time they resurfaced, the two explorers could answer a big question about the presence of living things in the deep place without light.
Writing Mission Word	**bottom** **conduct** **crack** **pressure** **additional** **presence**
Conversation	1. When did Piccard and Walsh reach the bottom of the sea? 2. Who accompanied Piccard on this deep-sea dive? 3. Was their submersible's equipment sufficient for the high water pressure? 4. Could they conduct additional research at the bottom? 5. How long did they stay at the bottom of the sea? 6. What concerning sound did they hear in their submersible? 7. Why did they return to the surface immediately? 8. What question could they answer after resurfacing?

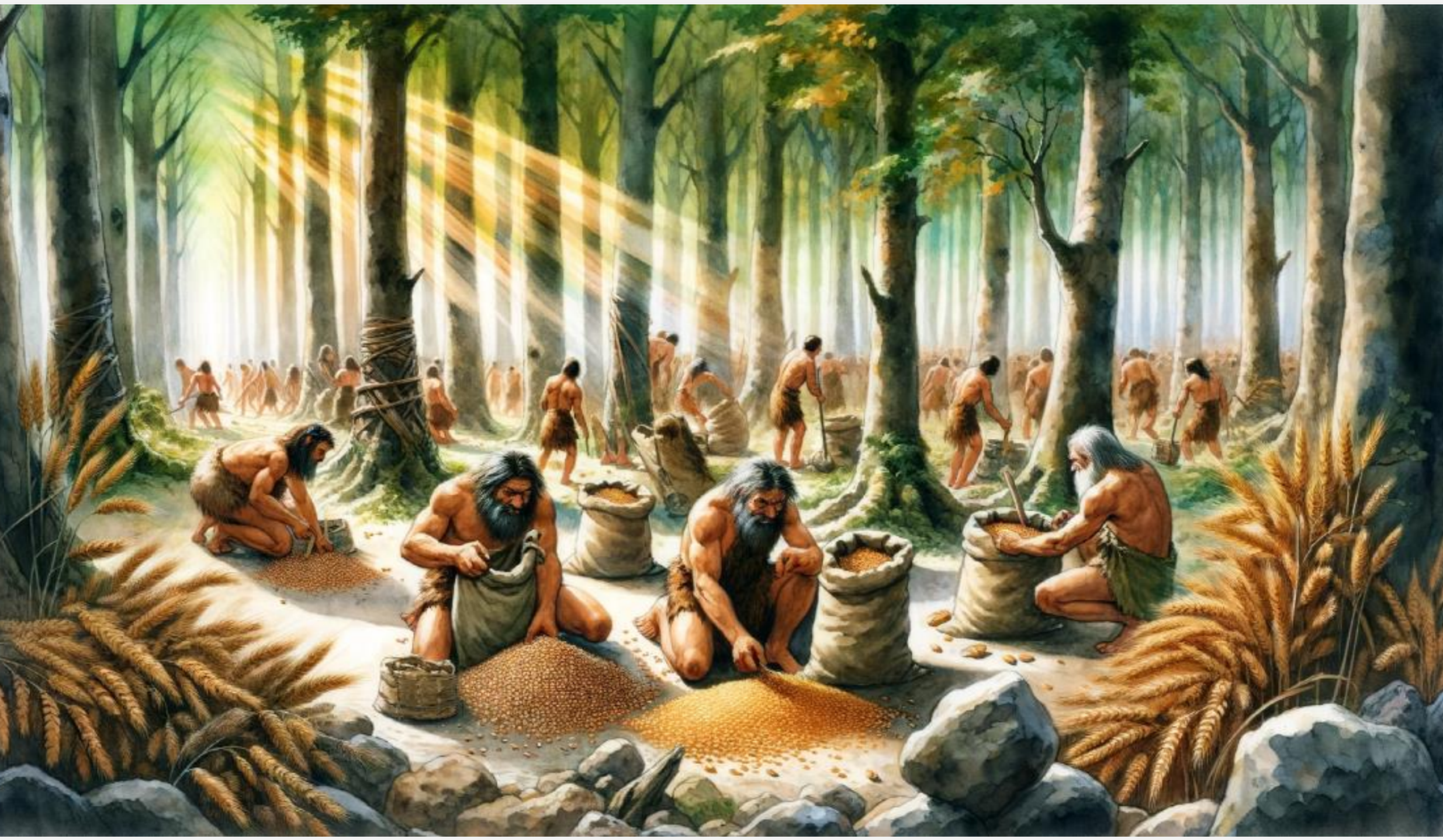
PICTURE

4-16 A Grain of Corn 1

TOPIC	4-16 A Grain of Corn 1
Speaking	A grain of corn is very small. However, the seed swells and puts out a root and gives birth to a new plant when you place it on the soil with good conditions. This process must have impressed a primitive man. So he grew the plant and he could harvest every year. Corn-growing is a very old practice, but nobody knows where it started.
Writing Mission Word	grain, impress, growing soil, harvest, know
Conversation	1. Is a grain of corn big or small? 2. What happens when you plant a corn seed in good soil? 3. Who must have been impressed by this process? 4. What did primitive man do after being impressed? 5. How often could primitive man harvest corn? 6. Is corn-growing a new or old practice? 7. Do we know where corn-growing started? 8. Does corn need good soil conditions to grow?

PICTURE

4-17 A Grain of Corn 2



TOPIC	4-17 A Grain of Corn 2
Speaking	Some people suggest that corn growing had begun by chance. In prehistoric times, cave-dwellers could only gather the grains of barley and wheat. They could keep these kinds of food for a long time. When hunters would go for a walk in the woods they would pick grains and place them on their sacks. Before they left the woods they had left grains and scattered them on the ground. It had been their tradition. They had to leave an offering to the gods in the woods. They would please them in that way.
Writing Mission Word	**prehistoric** **woods** **tradition** **cave-dweller** **scatter** **please**
Conversation	1. How do some people think corn growing began? 2. In prehistoric times, what grains could cave-dwellers gather? 3. Could these grains be stored for a long time? 4. Where would hunters walk? 5. What would hunters do with grains while walking? 6. What did hunters do with grains before leaving the woods? 7. Why was scattering grains a tradition for the hunters? 8. How did the hunters think scattering grains would affect the gods?

PICTURE

4-18 Oxygen for Human Life

TOPIC	4-18 Oxygen for Human Life

Speaking

It is important to keep up constant oxygen in our body. Nature supplies oxygen for our life. Haven't you heard about this? From year to year, there is a little change in the amount of oxygen and carbon dioxide in the air because of the give and take relationship among man, animals and plants. According to some researchers, we breathe out carbon dioxide into the air. However, plants take in the carbon dioxide and then breathe out oxygen. And again man and animals take it in.

Writing Mission Word

oxygen	relationship	take in
nature	researcher	carbon dioxide

Conversation

1. What is important for our body?
2. Who supplies oxygen for our life?
3. Is the oxygen and carbon dioxide in the air always the same?
4. Why does the amount of oxygen and carbon dioxide change?
5. What do we breathe out into the air?
6. What do plants take in from the air?
7. What do plants breathe out?
8. Who takes in the oxygen that plants breathe out?

PICTURE

4-19 The Memory Bank

TOPIC	4-19 The Memory Bank
Speaking	To remember or to forget things in your mind depends on how you feel about a particular experience. As a whole, people may easily forget unpleasant or upsetting things but remember beautiful things. Haven't you heard that before? Our brain can learn things or carry out tasks. Better brains can learn more. In the simplest brains, to learn is very crude. Human beings show the greatest learning abilities.
Writing Mission Word	particular　hear　crude unpleasant　carry out　ability
Conversation	1. What does remembering or forgetting depend on? 2. What kinds of things do people easily forget? 3. What kinds of things do people easily remember? 4. Is this a commonly known idea? 5. What can our brain do? 6. Can better brains learn more? 7. How is learning in the simplest brains? 8. Who shows the greatest learning abilities?

PICTURE

4-20 Ways to Keep Your Brain Healthy

TOPIC	4-20 Ways to Keep Your Brain Healthy

Speaking

You are what you eat. To feed yourself nutritious food also keeps your brain healthy. It will be much better to eat more fruits than sweet candies every day. Fruits have sugar, but it is not harmful to you. It cleans the wall of arteries in the brain. Candies can't do that. To think clearly once in a while is also good. It cleans your brain, too. Why don't you try it?

Writing Mission Word

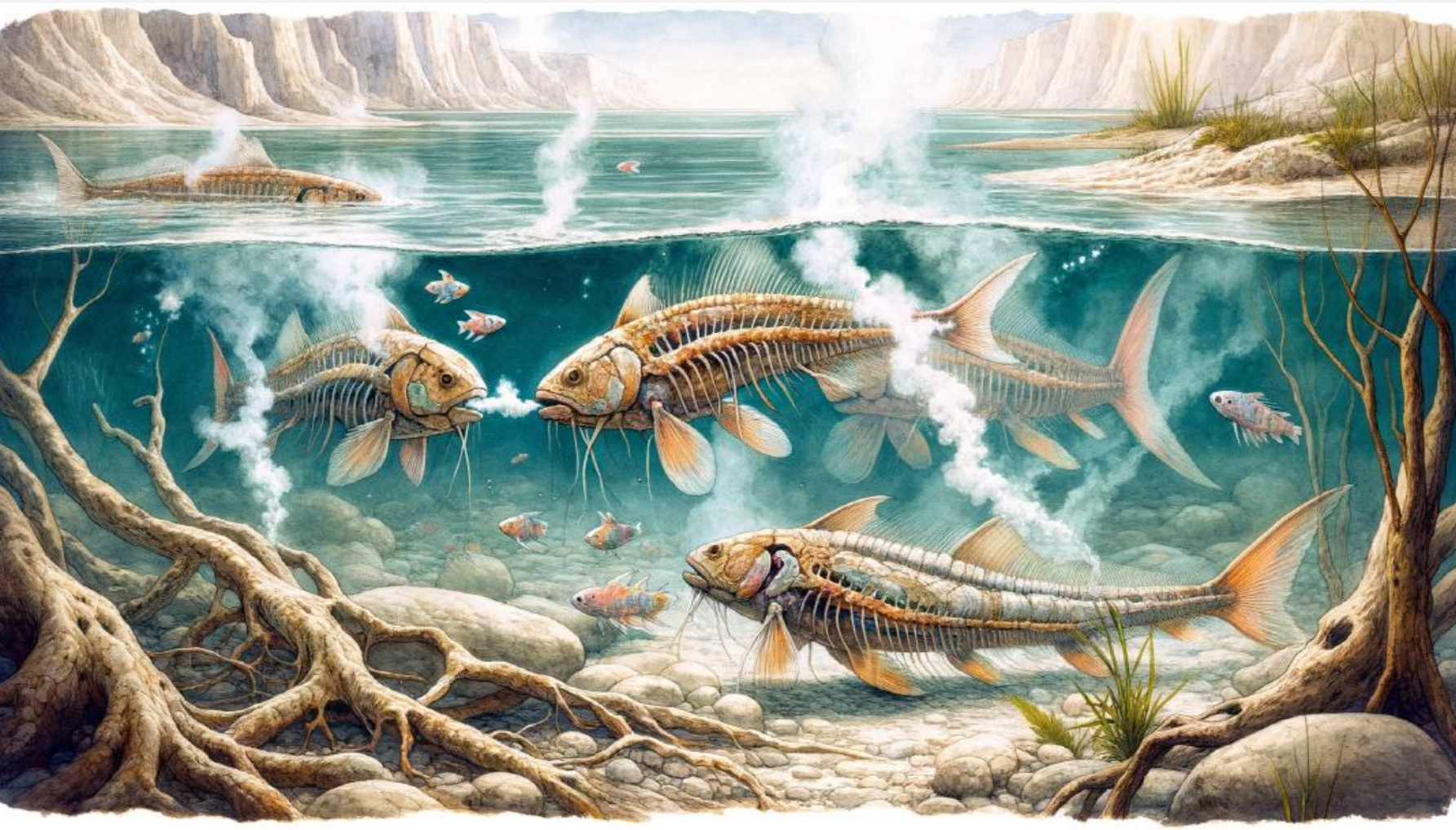
nutritious	**harmful**	**clearly**
fruit	**artery**	**while**

Conversation

1. What common saying is mentioned in the passage?
2. What does eating nutritious food do for your brain?
3. What should you eat more of instead of sweet candies?
4. Do fruits contain sugar?
5. Is the sugar in fruits harmful?
6. What does the sugar in fruits do for your brain?
7. Can candy clean your brain arteries like fruits can?
8. What else is good for your brain besides nutritious food?

PICTURE

4-21 From the Sea to Soil 1



TOPIC	4-21 From the Sea to Soil 1
Speaking	Over 350 million years ago, there were some of the primitive fish groups. They looked different from their ancestors. As well as gills, their simple lungs let them breathe the atmospheric air directly. They didn't filter the oxygen in the lungs through their gills. As a result, the lungs let these fish keep their heads out for a short spell. They inhaled the air and passed it through their lungs.
Writing Mission Word	**primitive** **lung** **inhale** **ancestor** **filter** **through**
Conversation	1. How long ago did these primitive fish groups live? 2. Did these fish look the same as their ancestors? 3. What did these fish have in addition to gills? 4. What did their lungs allow them to breathe? 5. Did these fish filter oxygen through their gills? 6. What could these fish do as a result of their lungs? 7. How did these fish breathe air? 8. Where did the inhaled air go in these fish?

PICTURE

4-22 From the Sea to Soil 2

TOPIC	4-22 From the Sea to Soil 2
Speaking	Amphibians left the oldest fossil imprints on the rocks. The early large amphibians retained obvious signs of their close relationship with fish. We cannot trace the existence of their fins now, but they definitely had a scaly cloak on their bodies like fish. Sometimes, in some of the species, the scales thickened on their stomach. And they knitted together to form a hard shell. This effective protection proved very useful when the large amphibians crawled along the ground from place to place.
Writing Mission Word	**fossil** **trace** **shell** **obvious** **fin** **effective**
Conversation	1. What creatures left the oldest fossil imprints on rocks? 2. What did early large amphibians retain from their fish ancestors? 3. Can we find evidence of fins on early amphibian fossils? 4. What did early amphibians have on their bodies like fish 5. In some species, where did the scales thicken? 6. What did the thickened scales form? 7. What was this hard shell effective for? 8. When was this protection especially useful for large amphibians?

PICTURE

4-23 The Extinct Giant Bird

TOPIC	4-23 The Extinct Giant Bird

Speaking

About 70 million years ago, Onactornis, giant extinct flightless birds, lived on the plains of South America. They stood nearly two point five meters tall. They had very strong hooked beaks. These beaks were almost forty centimeters long. They were fierce and cruel by nature. The plains gave a plentiful supply of food and let the birds hunt the large mammals. Many other meat-eating birds lived at that time and were equally furious and risky. Some of them were smaller than persons in height.

Writing Mission Word

extinct	**beak**	**meat-eating**
flightless	**plentiful**	**furious**

Conversation

1. When did Onactornis live?
2. What kind of birds were Onactornis?
3. Where did Onactornis live?
4. How tall did Onactornis stand?
5. What kind of beaks did Onactornis have?
6. How long were Onactornis' beaks?
7. What was Onactornis' nature?
8. What did the plains provide for Onactornis?

4-24 Where Have Passenger Pigeons Gone? 1

TOPIC	4-24 Where Have Passenger Pigeons Gone? 1

Speaking

The passenger pigeon once was one of the most common birds in the North America. It gathered in great flocks. They could stretch up to one mile. When they flew from one place to another, it took one hour for the whole flock to pass a single place. These birds lived in big groups. They laid their eggs in a large area of hundreds of miles.

Writing Mission Word

common	**stretch**	**live in**
flock	**another**	**lay**

Conversation

1. Where was the passenger pigeon once very common?
2. How did passenger pigeons gather?
3. How long could a flock of passenger pigeons stretch?
4. How long did it take for a whole flock to pass a single place?
5. How did these birds live?
6. Over how large of an area did they lay their eggs?
7. Were passenger pigeons solitary birds?
8. Did passenger pigeon flocks move quickly past a single point?

4-25 Where Have Passenger Pigeons Gone? 2

TOPIC	4-25 Where Have Passenger Pigeons Gone? 2
Speaking	There were about one billion birds in the early 1800s, before these birds caught the eyes of hunters. But soon, people started hunting them to get foods and their feathers Passenger pigeons changed into cheap goods. Hunters looked upon these birds as money. Money was falling from the sky. So they hunted and killed and then sold them as food. People in North America ate the meat of these helpless birds. Soon the number of these birds dropped but the hunters kept on hunting them. Men didn't foresee the result. Their actions led to the extinction of these birds. Eventually their end was just moments away.
Writing Mission Word	**passenger** **hunter** **foresee** **cheap** **helpless** **eventually**
Conversation	1. How many passenger pigeons were there in the early 1800s? 2. When did people start hunting passenger pigeons? 3. What did people hunt passenger pigeons for? 4. What did passenger pigeons change into? 5. How did hunters view passenger pigeons? 6. What did people in North America eat? 7. What happened to passenger pigeon numbers as hunting continued? 8. What did men's actions lead to for the passenger pigeons?

PICTURE

4-26 Will of the Wind, Typhoon

TOPIC	4-26 Will of the Wind, Typhoon
Speaking	Typhoons just come and go but they leave a lot of damage behind. They even cost lives. The word hurricane and typhoon are specific names of tropical cyclones by region. In the North Eastern part of the Pacific Ocean, they call it a hurricane while in the North Western part, a typhoon. A typhoon is a violent tropical storm that moves in spiral way and brings heavy rains. A typhoon forms where water is warmer than the surrounding water.
Writing Mission Word	**come and go** **specific** **violent** **cost** **region** **surround**
Conversation	1. What do typhoons leave behind? 2. Can typhoons cost lives? 3. Are "hurricane" and "typhoon" general names for storms? 4. What are tropical cyclones called in the North Eastern Pacific? 5. What are tropical cyclones called in the North Western Pacific? 6. How does a typhoon move? 7. What kind of weather does a typhoon bring? 8. Where does a typhoon form?

PICTURE

4-27 Will of the Wind, Tropical Cyclone

TOPIC	4-27 Will of the Wind, Tropical Cyclone

Speaking

Tropical cyclones come from the maximum winds blowing near the center. A tropical depression is a cyclone that has a wind speed of 63 kilometers per hour. And a tropical storm is a cyclone that has a wind speed of 63 to 118 kph. Aside from this, cyclones also have categories of 1 to 5. Five is the highest, it has a sustained wind of 250 kph. It damages the roofs of many residential and industrial buildings and blows small buildings over or away. Flash flood, mud slide, landslide and even death are common effects of typhoons. The lists below show some of the worst typhoons that have ever hit this planet.

Writing Mission Word

maximum	**category**	**industrial**
depression	**sustain**	**residential**

Conversation

1. Where do tropical cyclones come from?
2. What is the wind speed of a tropical depression?
3. What is the wind speed range of a tropical storm?
4. How many categories of cyclones are there?
5. What category has the highest sustained wind speed?
6. What is the sustained wind speed of a category 5 cyclone
7. What damage can a category 5 cyclone cause?
8. What are some common effects of typhoons?

PICTURE

4-28 Will of the Wind, Hurricane

TOPIC	4-28 Will of the Wind, Hurricane
Speaking	The 1935 Labor Day hurricane had a wind of 295 kph and for 1 minute, it killed 408 to 600 people and left the damage of US$ 96 million. It was on August 29, 1935. It was the second most destructive hurricane ever in American history and the first hurricane in category three out of five categories during the 20th century. Hurricane Tip was the largest and the most intense tropical cyclone on record. It hit Japan. It had a wind speed of 305 kph, sank 22,000 homes, destroyed 27 bridges and killed 86 people. Katrina was the fifth deadliest and the sixth strongest of all hurricanes. It left 1,836 dead bodies and the damage of $90.9 billion, and became the most destructive and costliest natural disaster.
Writing Mission Word	**destructive** **intense** **deadly** **century** **record** **disaster**
Conversation	1. What was the wind speed of the 1935 Labor Day hurricane? 2. How many people did the 1935 Labor Day hurricane kill in 1 minute? 3. How much damage did the 1935 Labor Day hurricane cause? 4. When did the 1935 Labor Day hurricane occur? 5. What record did Hurricane Tip hold? 6. What country did Hurricane Tip hit? 7. What was Hurricane Katrina's ranking in terms of deadliness and strength? 8. How much damage did Hurricane Katrina cause?

4-29 A Dish of Poison 1

TOPIC	4-29 A Dish of Poison 1
Speaking	Fugu is a Japanese dish from the meat of a puffer fish. Fugu is too poisonous to eat, unless you have gone under special training to prepare, sell and cook it. Fugu contains deadly amount of poison on the organs, especially the liver and ovaries, that can paralyze the muscles and eventually make someone die. People started eating Fugu about 2,300 years ago in Japan during the Jomon period. One of the most prestigious edible and poisonous species is the tiger blowfish.
Writing Mission Word	**unless** **organ** **prestigious** **training** **paralyze** **blowfish**
Conversation	1. What is Fugu? 2. Is Fugu safe to eat without special training? 3. What organs in Fugu contain a deadly amount of poison 4. What can the poison in Fugu do to a person? 5. When did people start eating Fugu in Japan? 6. During which period in Japan did people start eating Fugu? 7. What is one of the most prestigious edible and poisonous Fugu species? 8. Does Fugu require special preparation to be eaten safely?

4-30 A Dish of Poison 2

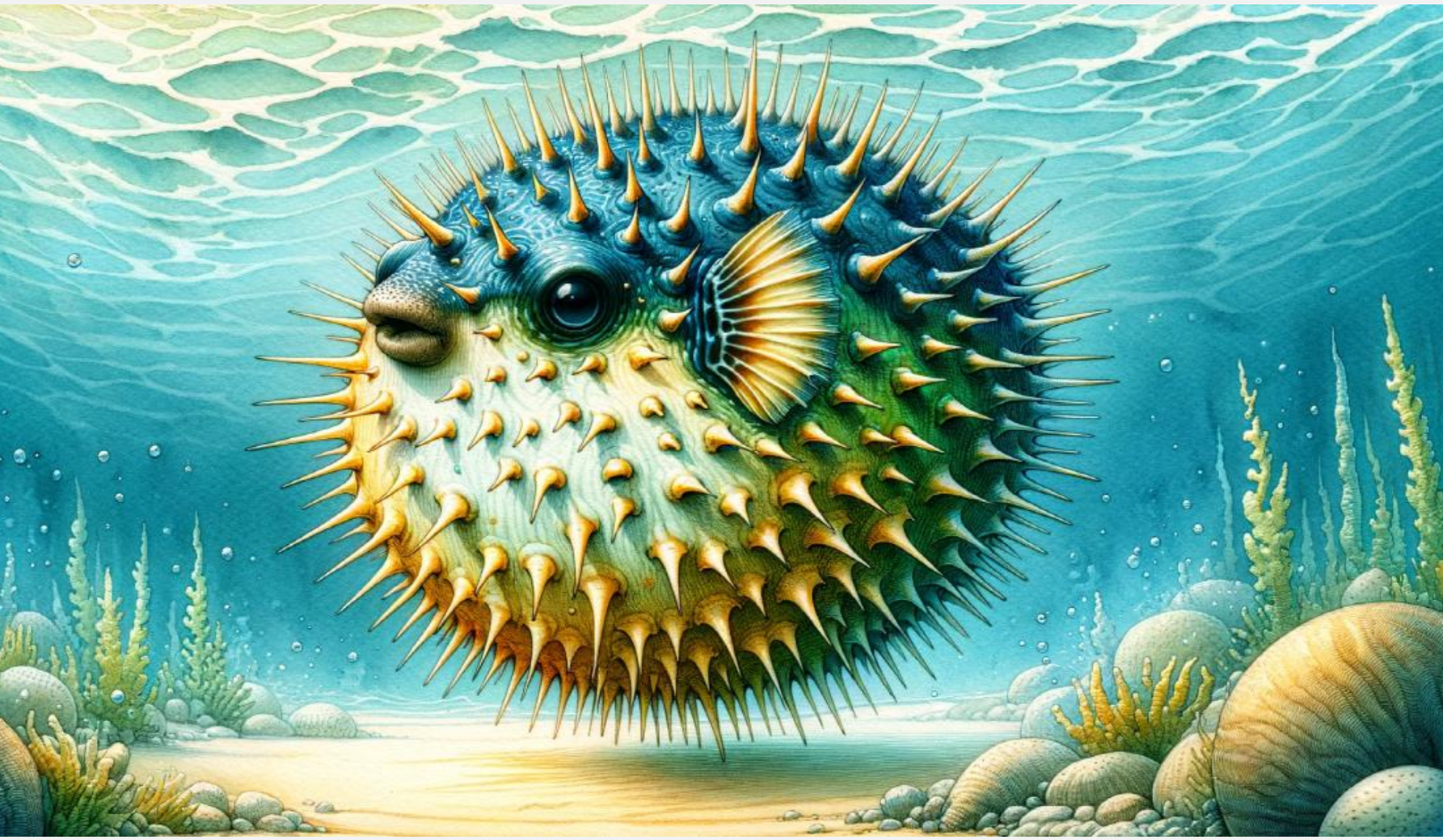
TOPIC	4-30 A Dish of Poison 2
Speaking	The best time to eat Fugu is in winter because they are fat at this time. Restaurants that display Fugu must present valid documents that allow them to distribute and sell Fugu. Only licensed chefs can cook and prepare Fugu. You need at least two or three year training before taking an official test. The test consists of written fish identification, test of preparing and eating it. Because of this difficult test, only 30% of applicants pass the test.
Writing Mission Word	**valid** **license** **identification** **distribute** **official** **applicant**
Conversation	1. When is the best time to eat Fugu? 2. Why is winter the best time to eat Fugu? 3. What must restaurants do to display Fugu? 4. Who can cook and prepare Fugu? 5. How much training is required before taking the Fugu chef test? 6. What does the Fugu chef test consist of? 7. What percentage of applicants pass the Fugu chef test? 8. Is the Fugu chef test considered easy or difficult?

4-31 A Dish of Poison 3

TOPIC	4-31 A Dish of Poison 3
Speaking	So, you can really be sure that the fish is safe to eat. A dish of Fugu costs around US $20 to $50 for one serving and from US$ 100 to US$ 200 for eight or full course meal. It's really expensive to eat Fugu. Chefs use a special knife to cut the largest possible amount of meat without poison. You can eat Fugu in various ways like sashimi, stew, deep-fried and pickled. Improper preparation of Fugu may cause poisoning. The signs of poisoning are dizziness, exhaustion, headache and nausea. Almost 50% to 80% of the people who have suffered from poisoning died after 24 hours. There is no known antidote up to now. So the next time you try something new and think twice before eating it.
Writing Mission Word	**serve** **poison** **dizziness** **full course** **pickle** **antidote**
Conversation	1. Can you be sure that Fugu is safe to eat at a restaurant? 2. How much does one serving of Fugu cost? 3. How much does a full course Fugu meal cost? 4. Is eating Fugu considered cheap or expensive? 5. What do chefs use to cut Fugu meat without poison? 6. What are some ways you can eat Fugu? 7. What can improper preparation of Fugu cause? 8. What percentage of people who suffer from Fugu poisoning die within 24 hours?

PICTURE

4-32 Puffer Fish



TOPIC	4-32 Puffer Fish
Speaking	A puffer fish or blow fish is a small fish that swims very slowly. It does something amazing to protect itself from bigger fish. A puffer fish can stretch its stomach like a rubber band by filling its stomach with a lot of water. A puffer fish looks like a large ball with sharp needles. There are about 121 species of puffer fish. Most of them are poisonous. Puffer fish are typically small to medium sized but some of them can grow up to 100cm long.
Writing Mission Word	**amazing** **rubber** **species** **protect** **sharp** **typically**
Conversation	1. What is another name for a puffer fish? 2. How does a puffer fish swim? 3. How does a puffer fish protect itself from bigger fish? 4. What does a puffer fish look like when it stretches its stomach? 5. About how many species of puffer fish are there? 6. Are most puffer fish species poisonous or non-poisonous? 7. What size are puffer fish typically? 8. How long can some puffer fish grow?

4-33 Money and Its Origin

TOPIC	4-33 Money and Its Origin
Speaking	Nowadays, almost everything we do, involves the use of money. In ancient times people did not use money as we know it. When did people start to use money? Long time ago, people didn't use metal coins and paper bills. They used a variety of uncommon things for money. For instance, in some parts of the world, people used sharks' teeth or animals' skin for money.
Writing Mission Word	**involve** **long time ago** **uncommon** **ancient** **bill** **instance**
Conversation	1. What do most things we do nowadays involve? 2. Did ancient people use money the same way we do now? 3. What question is asked about the history of money? 4. Did people long ago use metal coins and paper bills? 5. What did people use for money long ago? 6. What is one example of an uncommon thing used as money? 7. What is another example of an uncommon thing used as money? 8. Were the things used as money in the past the same everywhere?

PICTURE

4-34 Computers for Entertainment

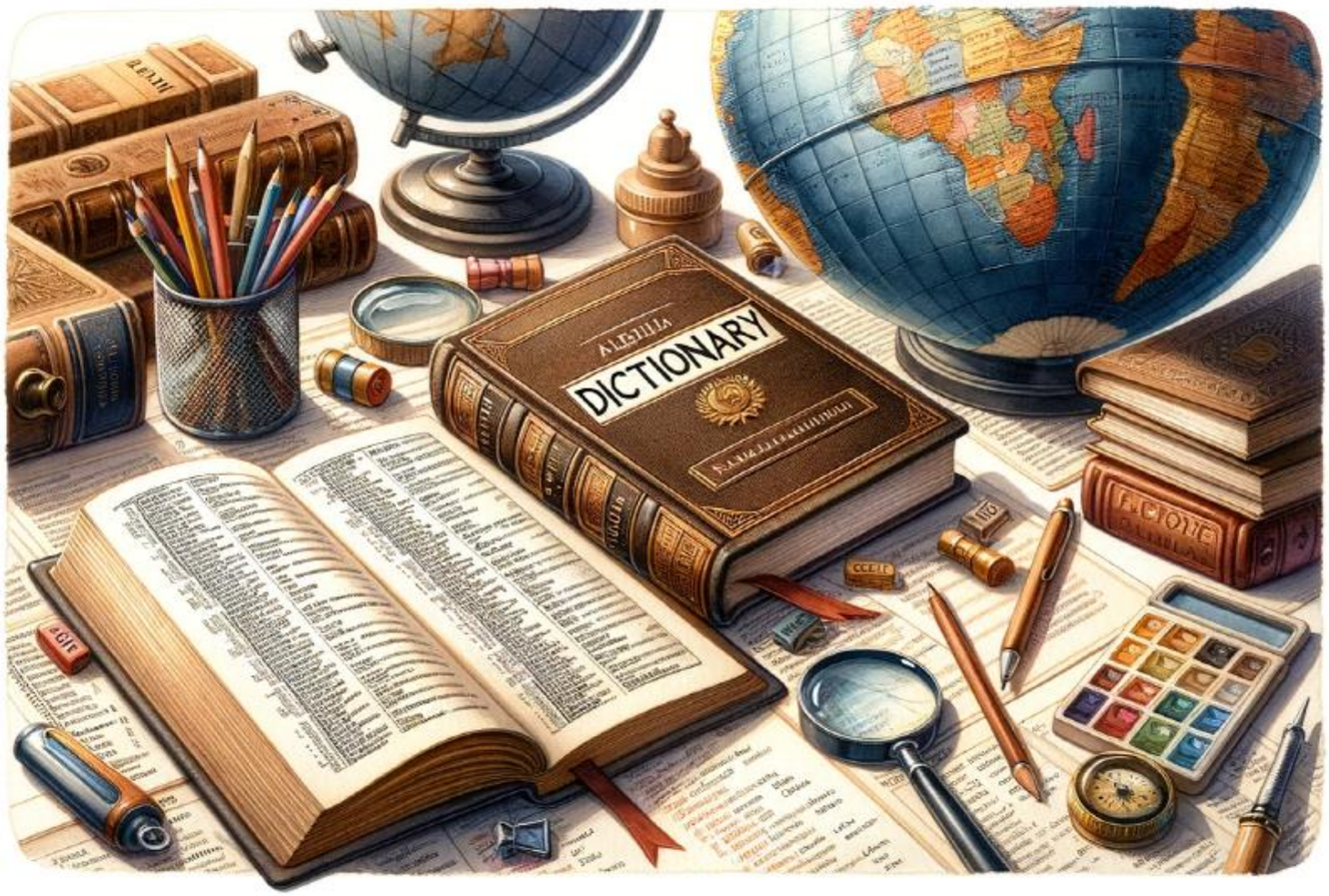
TOPIC	4-34 Computers for Entertainment
Speaking	Computers are helpful in many ways. They can work with information much more quickly than a person's brain can. People use them for work, for information, or for fun. People find many ways to use their computers at home for fun. There are a lot of computer games which one or two people, or even groups can play. People who like watching movies can use DVDs on their home computers to watch movies. They can also download movies on the Internet which they can watch at home.
Writing Mission Word	**helpful** **information** **download** **quickly** **a lot of** **Internet**
Conversation	1. In what ways are computers helpful? 2. How quickly can computers work with information compared to a human brain? 3. What are some reasons people use computers? 4. How many people can play computer games together? 5. What can people who like watching movies use on their home computers? 6. Where else can people get movies to watch on their home computers? 7. Are computers only used for work and information? 8. Can computers process information faster than the human brain?

PICTURE

4-35 What's This?

TOPIC	4-35 What's This?
Speaking	Rules! We have to follow them. Everywhere you go, there are always rules. In school, you must follow what your teacher says. You must wear a proper uniform. You must do your homework and so on. Why are there rules? Why do we need to follow them? It's a simple question that requires an easy answer. A rule means a certain standard of conduct in a place. Some rules are so weird that you might even think that they are just a joke.
Writing Mission Word	give off, major, fraction reflect, outward, size
Conversation	1. What do we have to do with rules? 2. Where can you find rules? 3. What are some rules you must follow in school? 4. What question is asked about the existence of rules? 5. What question is asked about following rules? 6. Is the answer to why we have rules simple or complex? 7. What does a rule mean? 8. How strange are some rules?

4-36 Reference Books



TOPIC	4-36 Reference Books
Speaking	A dictionary is a set of words listed in alphabetical order that gives definition, the origin of the word, phonetics, pronunciations and other forms of the word. Oxford English Dictionary and Webster's Dictionary are some of the most popular dictionaries worldwide. An atlas is a collection of maps of the earth presenting geographic quality and government limits. It may also show social, religious and economic information. The very first atlas was made by Ptolemy, a mathematician, astronomer and geographer, with 27 illustrated maps.
Writing Mission Word	**definition** **geographic** **religious** **alphabetical** **government** **illustrate**
Conversation	1. How are words listed in a dictionary? 2. What information does a dictionary give about words? 3. What are two of the most popular dictionaries worldwide? 4. What is an atlas? 5. What does an atlas present? 6. What other information may an atlas show? 7. Who made the very first atlas? 8. How many illustrated maps were in Ptolemy's atlas?

4-37 Can You Believe It?

TOPIC	4-37 Can You Believe It?
Speaking	People no longer believe in foolish old wives' tales. Do you believe that if you get up from the wrong side of your bed in the morning, it will bring you bad luck? If you accidentally break a mirror, will you expect seven years of bad luck? In ancient times, before mirrors were invented, people would see their reflections either in water or in smooth shiny metal objects. They took their reflections as their souls. So, if their reflections were somehow broken, then their souls were also broken. The belief continued even after mirrors were made.
Writing Mission Word	**foolish** **expect** **reflection** **get up** **shiny** **belief**
Conversation	1. What kind of tales do people no longer believe in? 2. What superstition is mentioned about getting out of bed? 3. How many years of bad luck are supposedly brought by breaking a mirror? 4. Before mirrors, where would people see their reflections? 5. What did ancient people believe their reflections were? 6. What did ancient people believe about broken reflections? 7. Did the belief about broken reflections end when mirrors were invented? 8. Are superstitions about mirrors and luck still widely believed today?

4-38 Marriage Customs

TOPIC	4-38 Marriage Customs
Speaking	Why do so many people get married in June? For one thing, June has been the luckiest month for weddings since the days of ancient Rome. The goddess Juno, after whom the month has been named, was the guardian of happy marriages. June also has the longest day of the year. A wedding in June, therefore, will materialize into a long and happy marriage. And why is a diamond a 'girl's best friend'? They believed its sparkle came from the fires of love and wearing a diamond brought love and faithfulness.
Writing Mission Word	**ancient** **guardian** **sparkle** **wedding** **marriage** **faithfulness**
Conversation	1. What month do many people get married in? 2. Since when has June been considered the luckiest month for weddings? 3. Who was Juno in ancient Roman belief? 4. What is the month of June named after? 5. What significant day does June have? 6. What is a June wedding believed to lead to? 7. What is a diamond referred to as? 8. What did people believe a diamond's sparkle came from?

PICTURE

4-39 Why Does a Diamond Shine?

TOPIC	4-39 Why Does a Diamond Shine?
Speaking	Diamonds are the result of a process that took place in nature. Long time ago, the earth was gradually becoming cooler. At that time, a mass of hot liquid rock existed beneath the ground. This mass was subjected to extreme heat and pressure. Because of this, molecules of carbon became packed together in dense, which created clear crystals. A diamond is just a crystal of pure carbon. When a diamond is found in a rough form, its outside appearance is not as shiny as we all know about. Men just make it shiny. Most diamonds are cut in two, and each half is shaped and cut into a round diamond called brilliant.
Writing Mission Word	**process** **extreme** **crystal** **gradually** **dense** **appearance**
Conversation	1. What natural process resulted in the creation of diamonds? 2. What was the Earth's temperature doing long ago when diamonds formed? 3. What existed beneath the ground at the time of diamond formation? 4. What were the conditions this mass was subjected to? 5. What happened to carbon molecules under these conditions? 6. What is a diamond in its basic form? 7. What is a diamond's appearance when first found in rough form? 8. What is a common shape diamonds are cut into?

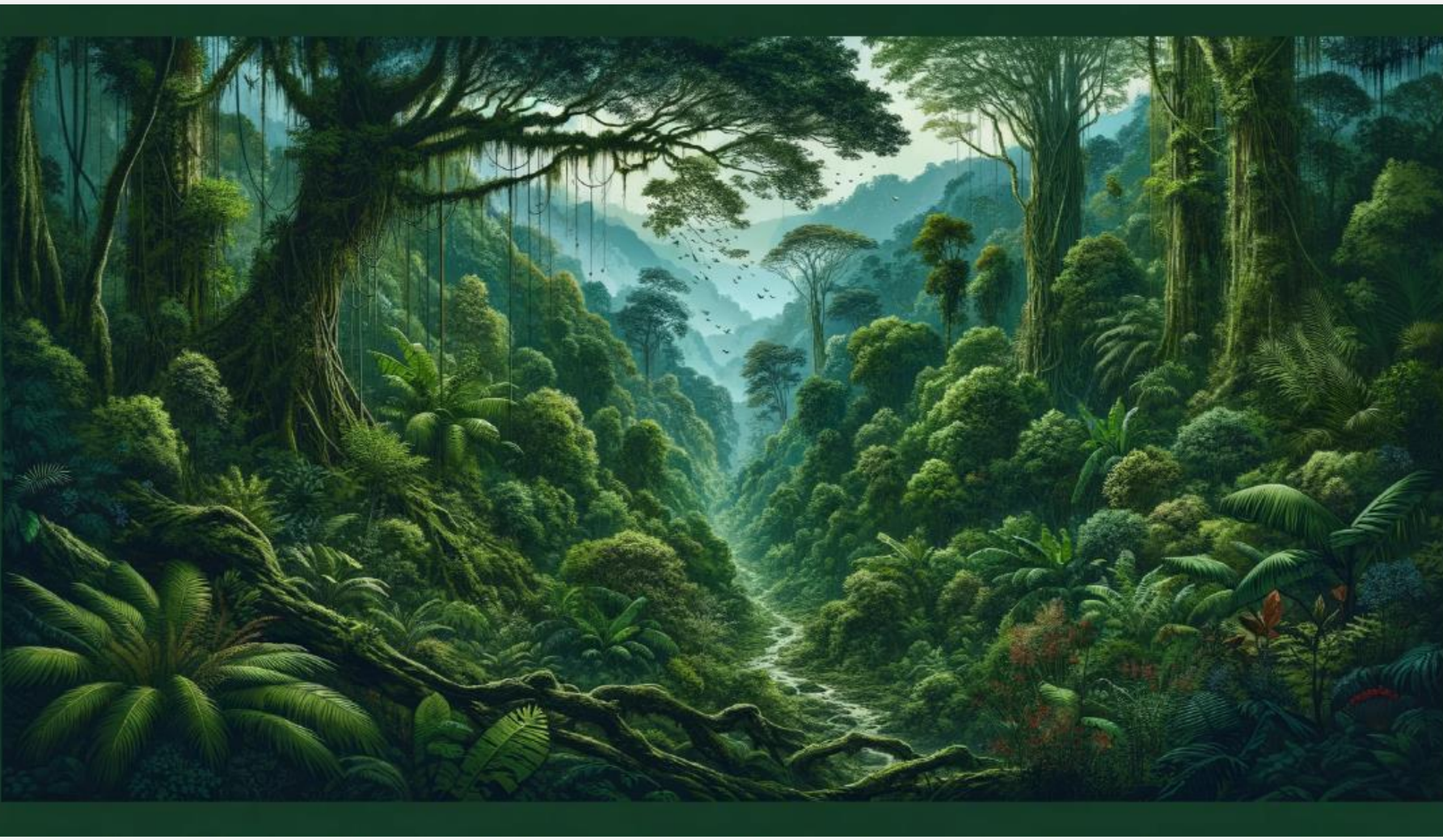
PICTURE

4-40 Gold

TOPIC	4-40 Gold
Speaking	Gold is one of the precious metal that people have known. People have used it by many cultures for hundreds of years. Gold is also soft metal, so you can shape it easily into necklaces, earrings, bracelets, rings or even anklets. But, if you want to make it harder, you should mix it with other metal. Why is gold so valuable? It has a special color 'bright yellow' that no other metal has. We also value gold for its rarity though it's not as expensive as diamonds. It is still valuable for its beauty.
Writing Mission Word	**precious** **metal** **valuable** **culture** **anklet** **beauty**
Conversation	1. What kind of metal is gold? 2. For how long have cultures used gold? 3. Is gold a hard or soft metal? 4. What jewelry can gold easily be shaped into? 5. What should you do to make gold harder? 6. What special color does gold have that no other metal has? 7. Besides its color, what else makes gold valuable? 8. Is gold more or less expensive than diamonds?

PICTURE

4-41 Green Mind



TOPIC	4-41 Green Mind
Speaking	The rainforest is a thick forest in tropical areas where there is a lot of rain. The monsoon wind plays a significant role that maintains the earth's tropical rainforest. Almost 75 percent of all species on earth are indigenous to the rainforest. However, millions of plants, insects and microorganisms are still not on the list of flora and fauna. We call the rainforest 'Jewel of the Earth' and 'World's Largest Pharmacy' because it has a great number of natural medicines. Rainforests contribute to forming 28 percent of oxygen in the atmosphere.
Writing Mission Word	**monsoon** **indigenous** **contribute** **significant** **microorganism** **atmosphere**
Conversation	1. Where are rainforests located? 2. What helps maintain the Earth's tropical rainforests? 3. What percentage of Earth's species are native to rainforests? 4. Are all rainforest species documented in lists of flora and fauna? 5. What is one nickname for the rainforest? 6. What is another nickname for the rainforest? 7. Why are rainforests called the World's Largest Pharmacy? 8. How much of the atmosphere's oxygen do rainforests help form?

PICTURE

4-42 Rainforest

TOPIC	4-42 Rainforest
Speaking	The rapid growth of industrialization has led us to nothing but destruction of the rainforest. Deforestation is one of the major contributors to its destruction. The 20th century caused rainforests to shrink. Almost 90 percent of West Africa's rainforest and 69 percent of Amazon have disappeared. The current problem, global warming, is one of the effects of deforestation. Another effect could be the extinction of animals and plants. We have to make some efforts to save rainforests quickly. It might be too late for us unless we realize our mistakes now.
Writing Mission Word	rapid / shrink / extinction destruction / deforestation / make an effort
Conversation	1. What has the rapid growth of industrialization led to? 2. What is a major contributor to rainforest destruction? 3. What happened to rainforests in the 20th century? 4. How much of West Africa's rainforest has disappeared? 5. How much of the Amazon rainforest has disappeared? 6. What current problem is an effect of deforestation? 7. What is another potential effect of deforestation? 8. What do we need to do to save rainforests?

PICTURE

4-43 God's Sense of Humor 1

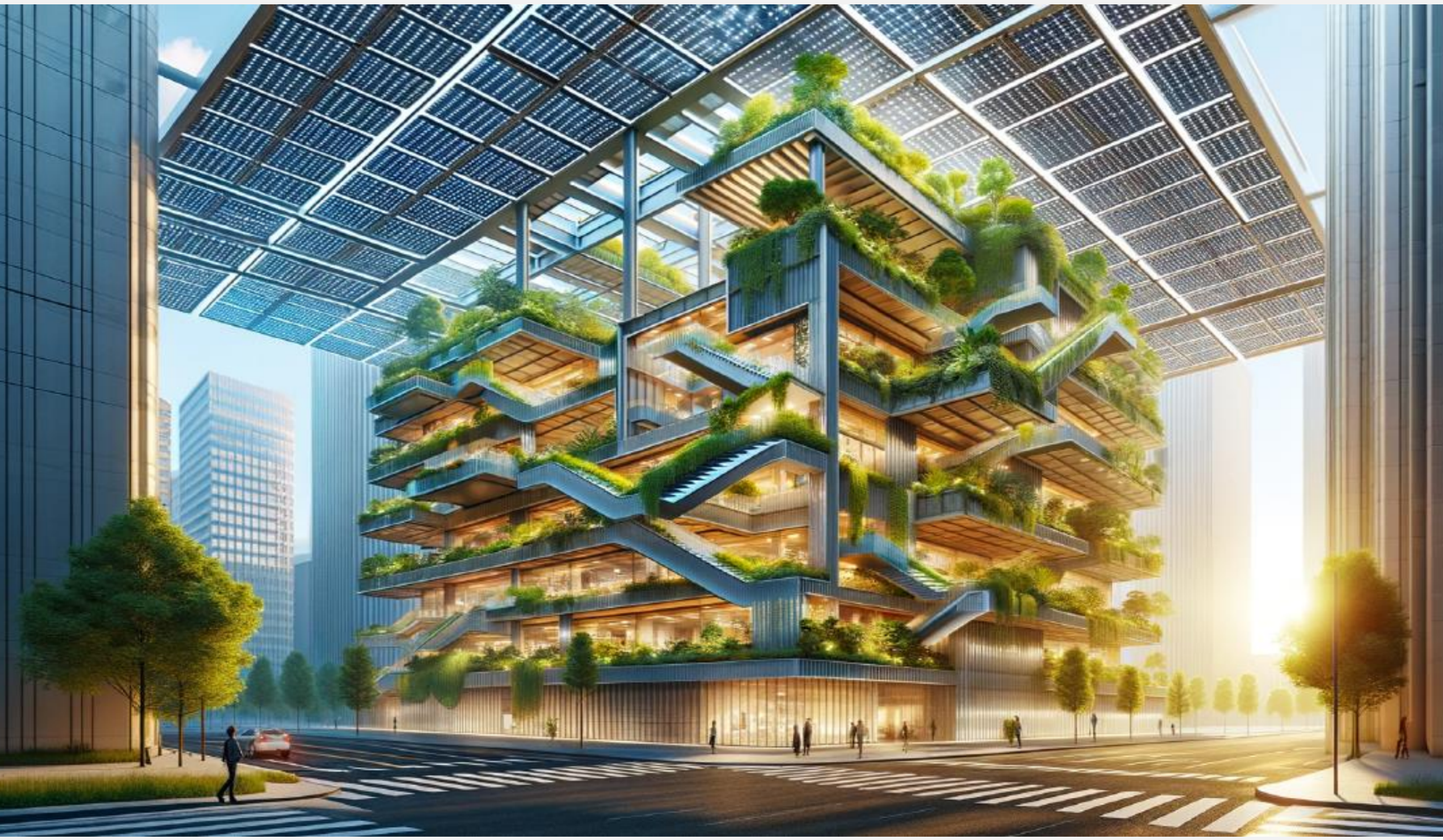
TOPIC	4-43 God's Sense of Humor 1
Speaking	The dense brown fur covers a platypus' body and its wide flat tail keeps its body warm. The tail functions as a fat storage. It has a webbed feet and a rubbery snout that is similar to those of ducks. A male platypus is bigger than a female. The average size of a male is 50 centimeters in total length while the female's average size is 43 centimeters. When a platypus is on land, it uses its knuckles for walking to protect the web between its toes.
Writing Mission Word	**function** **webbed feet** **length** **storage** **be similar to** **knuckle**
Conversation	1. What covers a platypus' body? 2. What keeps a platypus' body warm? 3. What does a platypus' tail function as? 4. What kind of feet does a platypus have? 5. What animal does a platypus' snout resemble? 6. Which is bigger, a male or female platypus? 7. What is the average total length of a male platypus? 8. Why does a platypus walk on its knuckles on land?

4-44 God's Sense of Humor 2

TOPIC	4-44 God's Sense of Humor 2
Speaking	Only male platypus produces venom and it is in its ankle spurs. The venom is powerful enough to kill smaller animals. But it isn't deadly to humans. But the pain will be so terrible that the victim cannot bear it. A platypus is a nocturnal animal. It lives near the river where it can find food and dig nesting burrows. Its habitat may range up to 7 kilometers. Natural predators of a platypus include snakes, water rats, hawks, owls and eagles which lower the number of platypuses. Though captive breeding has made limited success, the government is trying to find a better way of preserving and protecting platypuses.
Writing Mission Word	**venom** **nocturnal** **platypus** **terrible** **burrow** **captive**
Conversation	1. Which platypus gender produces venom? 2. Where is a platypus' venom located? 3. Is platypus venom powerful enough to kill small animals? 4. Is platypus venom deadly to humans? 5. How painful is a platypus' venom to victims? 6. Is a platypus nocturnal or diurnal? 7. Where does a platypus live? 8. What are some natural predators of the platypus?

PICTURE

4-45 Built with Green



TOPIC	4-45 Built with Green
Speaking	Solar energy is an important source of energy. One building owner has decided to use this infinite energy. He has a building under a huge panel. The sunlight enters the building through 'a well of light' that makes the temperature inside just right. So, there's no need for a heating system. There is another similar building in Japan. It has 35,000 plants on the steps and balconies that keep the indoor temperature cool and clean. This building provides a beautiful green environment right in the middle of the city.
Writing Mission Word	**infinite** **sunlight** **provide** **panel** **heating system** **environment**
Conversation	1. What kind of energy source is solar energy? 2. What has one building owner decided to use? 3. What is the owner's building under? 4. How does sunlight enter the building? 5. What does the 'well of light' do for the building's temperature? 6. Does the building need a heating system? 7. Where is another similar building located? 8. What does the Japanese building have on its steps and balconies?

PICTURE

4-46 For My Vacation

TOPIC	4-46 For My Vacation
Speaking	In Turkey, there is a unique hot spring, Pammukale. This hot spring is 2,700 meters long and 160 meters high. About 250 liters of hot water that contains a large amount of hydrogen and calcium rises every second. The flowing thick white layers of limestone rolling down the slope resemble a frozen waterfall. The government removed and demolished the hotels and the roads around Pammukale, and replaced them with artificial pools. Nobody is allowed to wear shoes in the water to protect the mineral deposits. More interesting thing is that you can see some tadpoles swimming in the pool.
Writing Mission Word	**contain** **resemble** **allow** **a large amount of** **demolish** **deposit**
Conversation	1. Where is Pammukale located? 2. What kind of natural feature is Pammukale? 3. How long is Pammukale? 4. How high is Pammukale? 5. How much hot water rises from Pammukale every second? 6. What does the limestone flowing down Pammukale's slope look like? 7. What did the government remove from around Pammukale? 8. Why is no one allowed to wear shoes in Pammukale's water?

PICTURE

4-47 A Gift from Santa

TOPIC	4-47 A Gift from Santa
Speaking	Holiday fever is in the air. The wind is getting colder and snow is falling from the sky. Children are singing Christmas carols and the mood of holiday season is all around. Gift-giving marks the Christmas season, and there is one person who is very famous this time of the year especially with children. That is Santa Claus. Santa Claus, Saint Nicholas, is known as the father of Christmas. Santa is the legendary figure who brings gifts to the homes of good children during the late evening and overnight hours of Christmas Eve.
Writing Mission Word	**fever** **all around** **legendary** **fall from** **holiday** **overnight**
Conversation	1. What is in the air during the holiday season? 2. How is the weather changing? 3. What are children doing that shows the holiday mood? 4. What activity marks the Christmas season? 5. Who is especially famous among children during Christmas? 6. What other name is Santa Claus known by? 7. What is Santa Claus known as? 8. When does Santa bring gifts to good children?

PICTURE

4-48 Stonehenge

TOPIC	4-48 Stonehenge
Speaking	There is a unique structure of stones in Great Britain. Some ancient people put together big stones of different shapes and sizes in a green field. We call these stones Stonehenge. Stonehenge attracts a lot of tourists every year. Everyone who sees Stonehenge thinks it's strange, but it's actually scientific. Scientists have studied Stonehenge for a long time. At first, they thought that magical people built Stonehenge in 250 BC. However, in 1963, the scientists realized that they were wrong. Magical people were not the ones who made it, but it was the ancient people that made it in 3200 BC.
Writing Mission Word	**unique** **strange** **realize** **structure** **scientific** **magical**
Conversation	1. Where is Stonehenge located? 2. What is unique about Stonehenge? 3. Who put the stones of Stonehenge together? 4. Where did ancient people put the stones? 5. Does Stonehenge attract many or few tourists each year? 6. Do people who see Stonehenge think it looks normal? 7. When did scientists originally think Stonehenge was built 8. When did scientists realize Stonehenge was actually built