Comprehension Passage Pack
for Grade 4

This resource contains the full text of reading comprehension passages in Levels 16 through 18 of Lexia® Core5® Reading. It supports teachers in further scaffolding comprehension instruction and activities for students.

The comprehension passages in Lexia Core5 Reading have been analyzed using a number of tools to determine complexity, including Lexile® measures. Based on this analysis, the comprehension passages are appropriately complex for students reading at the grade-level of skills in each program level. For example, the comprehension passages in Levels 16–18 (Grade 4 skills) typically fall within the range of Lexile measures deemed appropriate for on-level Grade 4 readers. (Texts with non-standard punctuation, such as poems and plays, are not measured.)

The *Content Area Connection* column in the table of contents can be used as a guide to determine the general topic of each passage. It does not indicate alignment to any specific content area standards.

Keywords in the passages are indicated in bold and defined in a glossary located at the end of the pack. The words are the same as those found in the online passages. While most terms are included to support word meaning, some terms are included because pronunciation may be challenging.

Reading Comprehension Passages: Levels 16-18

LEVEL 16, UNIT 1
FOLKTALE

THE CROWDED HOUSE: *A Folktale*

Long ago, eight members of the Rubin family lived in a little house that seemed terribly **cramped** and crowded. Papa, Mama, their four children, Aunt Gert, and Grandmother Rubin were always getting in each other's way. They complained unhappily that one day they might **burst** right through the walls. So Papa and Mama went to the wisest man in the village, Reb Solman, to ask for advice.

Reb Solman stroked his beard thoughtfully as he listened. Then he said, "Yes, I can help you, but you must do exactly as I say, no questions asked." Papa and Mama **eagerly** agreed.

"The first thing you must do," Reb Solman told Mama, "is to invite your sister and her family to visit."

"But, Reb Solman," said Mama worriedly, "my sister and brother-in-law have three big sons, so how will five more people in our crowded house solve our problem?"

Reb Solman replied, "Remember, you promised to obey and ask no questions."

So the five relatives arrived, and everyone was elbowing each other and tripping over feet, and the walls **trembled** as if about to explode. After several days, Papa ran back to Reb Solman and pleaded, "Oh, it is unbearably crowded and noisy now. Please, what should we do?"

Reb Solman said, "Bring your chickens, goat, and cow into the house." Papa blinked hard when he heard that, but he had promised to obey, so he did as he was told.

A few days later, Papa returned to Reb Solman. In an exhausted voice, Papa said, "The noise, the smells, the crowding, the situation is impossible."

Reb Solman said, "Send your relatives home, and put the animals outside."

So the visitors left, and the animals went outside where they belonged. The eight members of the Rubin family breathed a big sigh of relief. "I never knew that our house could feel so big and spacious," said Mama as she looked around.

"It certainly feels as if our house has grown bigger," said Papa. "Reb Solman is a very wise man." And everyone, smiling in agreement, relaxed in their remarkably roomy house.

LEVEL 16, UNIT 2
NARRATIVE TEXT

By Christopher Rodriquez

For Ana's tenth birthday, her dads Edwin and Alex took her and her brother for a hike in **El Yunque**, a **rainforest** not too far from where they live in Puerto Rico. The trail was full of beautiful trees, interesting plants, and fascinating animals.

"There are coquí frogs all across the island, but the **coquí** frogs here in El Yunque come in many different colors," Ana's dad, Alex, explained.

"You mean like this?" Ana asked. She held up the necklace her grandmother had given her as a gift, which had a small charm in the shape of a blue coquí frog.

Her dad nodded **enthusiastically** "Yes, even blue coquís like that!"

"Ana, look at this giant flower I found down by the creek!" her brother Marco exclaimed.

Marco reached for the camera hanging from Ana's shoulder. But as he pulled, the camera strap caught on Ana's necklace, causing the necklace to fall into the creek, and drift away.

"Oh no!" she shouted.

"Don't worry. ***No te preocupes***," her dad, Edwin, said. "We will find it. Look at this as an adventure with a problem to solve."

They followed the creek down the hill, looking for the lost necklace. After a few minutes, Ana spotted it, caught on a rock at the bottom of the creek.

"I'll get it!" said Marco, and he stuck his arm into the creek. When he did, they could all see that it was too far from his reach.

Ana thought for a moment and said, "We can make a fishing hook!"

Ana snapped off a tree branch, Marco pulled out a keychain to use as a hook, and her dad Alex tied it all together with a hair band from his ponytail. It was time to give it a try, so Ana plunged her arm into the water with the hook in hand.

They all watched in tense silence. Finally, the hook caught hold of the necklace. She'd done it! Ana stood, holding it **triumphantly** in her hand while her family cheered excitedly.

"Wait a second," said Marco. "Listen!"

The family looked around and saw dozens of blue coquís singing and jumping around.

Ana hugged her dads and said, "Thank you, ***papis***. Visiting El Yunque is the best birthday gift ever."

LEVEL 16, UNIT 3
INFORMATIONAL TEXT

Stitch by Stitch Row by Row

Mary Jackson is a basket maker. She lives in South Carolina. She received an award called the NEA National Heritage Fellowship. This award is given to talented artists who create **traditional art**. Jackson talks about her art, and how she has come up with creative solutions throughout her life.

When I was young, we didn't have any such thing as summer camp in Mount Pleasant, South Carolina. To keep me busy during the long hot days, my mother and grandmother taught me how to make baskets from **local** materials. I did not know that making baskets would lead to a lifetime of creative work continuing this tradition.

The art of making baskets from sweetgrass and palmetto leaves has deep roots in my family. The **technique** was brought to America by enslaved West Africans. Making baskets was a family activity. The men and boys **harvested** the materials and the women and girls shaped them into baskets that are both beautiful and useful. Early baskets were used in the fields and around the home.

When I started learning how to make baskets at age four, I didn't like the work. It was very slow, and the dry grasses were hard on my small hands.

Gradually, I got better at making baskets. I enjoyed trying new designs. Sometimes, sweetgrass was hard to find. I experimented with materials such as long pine needles and **bulrush**. These materials added new color and texture possibilities. I began to invent new shapes based on traditional baskets. My work drew the attention of collectors and art museums.

I have also been active in **preserving** sweetgrass. Sweetgrass is **endangered** due to new building developments along our beautiful Southern coast. With the help of plant experts, a group of basket makers learned how to grow the grasses in **protected areas**. These efforts make sure that there will be material for the future.

When I learned that I received the NEA National Heritage Fellowship award, I was very excited. Both my grandmother and mother had passed away, and I felt like it was a wonderful **tribute** to them because they had always encouraged me to make baskets. As I stood on the stage in Washington, D.C. to receive my award, I felt as though I was representing the traditions and community that I grew up in.

LEVEL 16, UNIT 4
INFORMATIONAL TEXT

TWO DESERTS

Great mounds of golden sand bake under a blazing sun. A line of camels is crossing these sand **dunes**. The people riding the camels are dressed to protect themselves from the heat and wind-blown sand. What is this place? It is the **Sahara** Desert, the largest desert in the world. It spreads across northern Africa.

The Sahara's dunes may seem to stretch forever, but these "sand seas" cover only part of this **vast** desert. The Sahara also has flat, stony lands as well as mountains. In places, underground water rises to form springs where trees and plants grow. In these **oases**, farmers grow crops.

The Sahara is called a hot desert, but not all of it is hot year round. Still, the summer sun can roast the air. At one spot, the **temperature** once soared to a record-breaking 136 degrees F (58 degrees C).

All deserts are dry lands. The yearly rainfall in the Sahara is less than 10 inches (25 centimeters), and often is much less. Some places here get no rain for years. Yet the Sahara is not the driest desert in the world. That record belongs to the **Atacama** Desert of South America.

The Atacama lies between high mountains and the Pacific Ocean. The mountains stop **moist** air from reaching the desert land, and the cold ocean also acts to prevent rain. The yearly rainfall in the Atacama is less than .004 inches (.01 centimeters). Some spots have not had rain since record-keeping began 400 years ago! With soil this dry, no plants can grow.

Unlike the Sahara, the Atacama is a cool desert. There are few scorching summer days but on winter nights, the temperature is often below freezing.

The Sahara and the Atacama are both deserts. They are alike in some ways, and different in many others.

LEVEL 16, UNIT 5
INFORMATIONAL TEXT

An imaginary line divides planet Earth halfway between the North and South poles. The line is called the equator, and it passes through **regions** called the tropics. In the tropics, the sun rises high in the sky. Tropical lands generally have warm to hot temperatures all year. People who live in the tropics never see snow. Almost never, that is.

The country of Tanzania (TAN-zuh-NEE-uh) lies in the tropics of eastern Africa. Along the coast of the Indian Ocean, the Tanzanian **climate** matches what the word *tropical* suggests: hot and humid. But in northern Tanzania, the land rises. There are mountains here, including Mount Kilimanjaro (kil-uh-mun-JAR-oh), a **dormant** volcano. Kilimanjaro is the tallest mountain in Africa. Its highest peak rises 19,340 feet (5,895 meters) above **sea level**.

Mountain climbers from all over the world come to **tackle** Kilimanjaro. It takes several days to reach the top. On their way up the mountain, climbers **encounter** changing climates.

The low hills at the base of Kilimanjaro receive the most rain, along with water that streams down the mountain. The rich volcanic soil is good for farming. Above these foothills, thick forests grow on the mountainside.

Higher up, wild grasses **replace** the forest trees. The wind becomes stronger, and less rain falls at this height. It can be very hot during the day, but night temperatures may drop below freezing.

At about 13,000 feet (4,000 meters), the mountainside becomes a desert. Little rain falls. The days are hot, the nights cold.

Higher than about 16,000 feet (5,000 meters), ice fields cover the slopes. Snow falls here. Temperatures drop well below freezing. At the **summit** are **glaciers**. The thick ice is **massive**, though the glaciers have been shrinking in recent **decades**.

Every year, thousands of people take guided hikes up Mount Kilimanjaro. This unique adventure has been compared to climbing from the equator to the North Pole.

LEVEL 16, UNIT 6
NARRATIVE TEXT

It was a typically sweltering and **humid** August day. The sky held a few dark, towering clouds, and even more appeared as the afternoon wore on. Fat, lazy raindrops began to splatter across the windshields of the two **vehicles** on River Road—a car and a moving van. Within seconds, the wipers were battling a seasonal downpour. Sluggish at first and then with increasing intensity, the rain had become a waterfall!

The drivers could not see beyond their windshields, so they pulled over to the roadside and stopped to wait for the storm to pass. Rushing water was already sweeping over the roadway, and soon it was slapping against the tires and drenching the underside of the vehicles. It was a flash flood!

Without hesitating, the driver of the van jumped into the swirling water. He was a **burly** man who carried heavy loads for his living, yet he struggled to fight his way to the passenger car, just a short distance ahead. He frantically pounded on the driver's window, and a teenage boy slowly lowered it. "You need to get out now!" the man shouted through the heavy rain, but the teenager seemed frozen in panic. "Get out, and go to my van!" The man pointed behind the car, and the boy nodded robotically as if he understood.

The man made his way to his van. The water was now thigh-high and the **current** was so powerful it almost pulled him under. He **hoisted** himself up to the cab and looked back. Was the boy following? No, the boy was standing on the car's roof. The water had risen to the windows, and the boy was trying to balance as the car rocked under him, pushed by the **roiling** water.

The man remembered the strong ropes **coiled** in the van. Holding a long rope, he lowered himself into the water. He tied one end to the door handle and struggled once again to the car. He tossed the end of the rope to the boy, who managed to catch it. "Jump!" the man called.

With the rope as a **towline**, the man and the boy reached the van. They climbed onto the roof and watched as the car floated away towards the river.

Later, news reports told about the record-breaking rainfall for the **region** and about a heroic rescue on River Road. "I'm no hero," said the van's driver. "Anyone would have done what I did."

LEVEL 16, UNIT 7
INFORMATIONAL TEXT

Attack of the Spreading Plant

There is a plant that grows so fast that one nickname for it is "the mile-a-minute **vine**." The plant may not be quite that speedy. Still, it can grow at the amazing rate of one foot (30 centimeters) a day. In the southern United States, the plant buries everything in its path under thick, green leaves. The plant is kudzu.

Kudzu is a serious problem in the southern states, where there is plenty of warmth and water to help it grow. Kudzu is a climbing vine. As it climbs toward sunlight, it covers trees and utility poles, street signs, porches, and anything it can grab hold of. It forms a leafy curtain that cuts off sunlight from other plants, killing them. Just trying to keep kudzu growth under control costs millions of dollars a year.

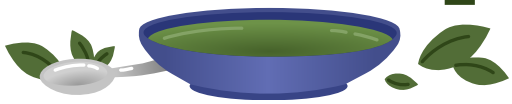
It's hard to believe that Americans once planted kudzu on purpose. But widespread planting is the main reason that kudzu is such a problem today. The plant was first brought to North America in the late 1800s from Japan. American gardeners thought that kudzu's wide leaves and purple flowers were pretty. Kudzu also provided shade. People began to plant it by their homes.

There were other reasons to plant kudzu. It grew even in poor soil, and grazing animals liked eating it. During the 1930s, many farms in the United States were struggling with the loss of soil, which was blowing away. The US government paid landowners to plant kudzu because its deep roots held the soil in place.

Nobody predicted that kudzu would grow out of control. But it was not long before kudzu had a new nickname: "the vine that ate the South."

LEVEL 16, UNIT 8
NARRATIVE TEXT

Green Soup



By Oumalkhaire Abdallah

Iman Al-Masry had dirt on her hands, her dress, and her face. She was tired of planting in the garden, but unfortunately, her mother, Magda, was determined to fill the entire garden with vegetables that afternoon.

"Another one, here," Magda said. Iman's mother indicated the hole with her pointer finger, and Iman dropped the plant into it.

Earlier that Saturday morning, Magda and Iman had found ***molokhia*** plants at the **halal food market**. Magda was overjoyed, but Iman felt less happy and more doubtful. Her mother often bought frozen molokhia and boiled it into a slimy green soup—Iman was not sure how fresh molokhia would taste any different or any less slimy.

Magda worked happily. "I am going to **introduce** this to our community here. When I was a little girl in Egypt, we always had fresh molokhia, which is much better than the frozen leaves they have in the store." Magda stood up and smiled at her daughter. "I will get us something to drink."

Ms. Tuala, their next-door neighbor, was walking her dog, and she came over curiously. "What are you planting, Iman? I don't believe I've seen that **species** of plant before."

Iman thought for a minute. How do you explain molokhia? "It's kind of like Egyptian spinach, I guess."

Magda returned with two bottles, icy and cold. She handed one to Iman and said hello to Ms. Tuala. "Good luck with your garden," Ms. Tuala said.

One month later, Iman and her mother **harvested** the molokhia. They chopped the plants into pieces, put them into boiling water, and prepared rice. Iman enjoyed cooking with her mother, but she secretly wondered if the soup would taste any better than it did when they used frozen molokhia. When it was time to eat, she took a very small bite.

"It's wonderful!" Iman exclaimed happily.

"It's like home," Iman's mother, Magda, said with a smile. "I feel like I'm back in my mother's kitchen. Your grandmother cooked the most wonderful molokhia."

Iman ate, warmed by the soup and also by her mother's **happy glow**. After dinner, Magda spooned several cups of rice and soup into a container, sprinkled it with hot sauce, and snapped the container shut.

"Take some to Ms. Tuala," she instructed Iman.

Ms. Tuala was surprised to receive such a gift. "Thank you!" she said to Iman. As Iman closed the door, she watched Ms. Tuala peek inside the container and smile in **anticipation**.

LEVEL 16, UNIT 9
INFORMATIONAL TEXT

A SPECIAL KIND OF BANK

On an island in **Norway**, there are huge **vaults** built deep inside a mountain. A vault in a bank can hold treasures, like **precious** gems or metals. But the vaults in Norway keep a different kind of treasure safe. The treasure is seeds that have been gathered from countries around the globe.

The Global Seed Vault in Norway is one of many "seed banks" around the world. These are places to keep and protect seeds. What makes this seed bank special is that there are almost one million types of seeds stored there! There are barley seeds from Japan, chickpea seeds from Syria, and tomato seeds from Mexico, just to name a few.

Storing and Protecting Seeds

The vault is specially designed to protect the stored seeds. If seeds get too hot, they may be destroyed. Therefore, all the seeds are dried and kept in an area where the temperature is carefully controlled.

The Need for Seeds

Seed banks have many purposes. One main purpose is to make sure there are always seeds left for farmers to plant. For example, in 2017, a hurricane on the island of Puerto Rico destroyed farmland and many crops. Luckily, the University of Puerto Rico has a seed bank. It was able to give 8,000 pounds of seeds to people across the island. Farmers used these seeds to grow the food people needed.

Seed banks also help protect the many different types of each plant. Not enough variety can cause problems. That was made clear in Ireland in the 1840s. People grew and ate just one kind of potato. Then, a disease attacked the potato plants. As a result, this important source of food was destroyed. One million people died. A seed bank could have provided a different and stronger type of potato plant. Maybe these stronger potatoes would have stayed healthy and provided food.

Learning from Seeds

Seeds also hold information for scientists. The seeds of plants that are no longer farmed can be useful. These seeds might grow into plants that would stay healthy if new diseases strike. They might be able to grow in places other plants can't. These seeds can be studied by scientists who want to help farmers grow better crops.

A Seed Back-Up Plan

Many countries have their own smaller seed banks. But floods, fires, war, and other disasters could destroy these precious seeds. A backup plan is a good idea. That's why the Global Seed Vault was created. The seeds come from all over the world, and they belong to everyone. This special bank truly has treasures for us all. This seed bank makes sure we'll have seeds to grow food, no matter what.

LEVEL 16, UNIT 10
NARRATIVE TEXT

In Grandfather's Day

Sharr and her brother Kaze were visiting Grandfather to **celebrate** his 75th birthday. Grandfather was born way back in the year 2000, and the two grandchildren always enjoyed hearing about what life was like when he was growing up at a time so different from their own.

"Grandfather, tell us what you did before there were Mindcaps," Kaze begged.

"Well, sometimes we typed on a keyboard," Grandfather replied, wiggling his fingers over an imaginary keyboard. "Or we tapped a touchscreen," he added, **demonstrating** with two fingers.

"But it must have taken so long to get anything done that way!" observed Sharr.

"We didn't have thought commands back then," said Grandfather as he placed a Mindcap on his head and glanced at the Wallscreen. The wall lit up with a photograph taken of Grandfather as a boy. "I'm standing in front of our family's car," Grandfather explained.

"Was it fun to drive such a big car?" asked Kaze.

Grandfather **chuckled**. "I was only ten years old, so I couldn't drive a car. Drivers needed special training because driving was dangerous. Today, accidents don't happen. A child can sit in a Plugger, give a thought command, and off it scoots. Nobody dreamed of such a thing back in the early 2000s."

Grandfather blinked at the Wallscreen, and a new image appeared, this one showing seven-year-old Grandfather and his mother in the kitchen of their house.

"What is Great-Grandmother doing?" asked Sharr.

"She is cooking a pot of stew on the stove," said Grandfather. "It took hours."

Sharr said, "I'm glad we have Menu-Mems because who wants to wait hours to eat? Just give a thought command to the slot, and out comes the meal."

Grandfather was smiling as he stared at the picture. "I remember it like it was yesterday," he said dreamily. "I helped peel potatoes while Mom chopped up carrots. The kitchen filled with spicy warmth as the stew **simmered** in the pot." Grandfather breathed in deeply, as if sniffing a wonderful **aroma**.

Kaze and Sharr studied the picture. Then Kaze said, "I wonder what a home-cooked meal tastes like." Sharr nodded in agreement.

"It is unforgettable," said Grandfather with a sigh.

LEVEL 16, UNIT 11
INFORMATIONAL TEXT

Interview with a Material Scientist: Ainissa Ramirez

Donnell Meekins, age 10, talks with **materials scientist** and author **Ainissa Ramirez** about how **advances** in science have shaped our world, and how these advances might shape the future.

DONNELL MEEKINS: **Why are you interested in inventions?**

AINISSA RAMIREZ: I like making things. If you're making an airplane, a materials scientist has to decide: What's the best material for the job? So I am interested in other people's inventions, because they can help me figure out how to make new things.

DONNELL: **In your opinion, what's one big problem science could help solve?**

AINISSA: **Climate change** is something we need to work on. We need better **green technology**, like solar cells that use energy from the sun to create electricity. We also need better magnets so that wind turbines can use wind to make electricity even more **efficiently**.

DONNELL: **You've written about bias in technology. Can you explain what that is?**

AINISSA: Here's an example: Some water faucets have a light sensor that **detects** your hand, but that sensor may be designed only for lighter skin. I have darker skin so if I were to put my hand in front of it, water wouldn't come out. Whoever made this sensor probably had light skin and tested it on themselves and their friends; but they didn't test it on someone who had a different skin tone. That's why we need to have people with a range of experiences working on projects.

DONNELL: **I read that a TV show inspired you to become a scientist. Can you talk about that?**

AINISSA: Yes. The show had kids solving problems. One of the kids was an African-American girl. When I was growing up, you didn't see a lot of African-American people portrayed in a positive way on television. This girl was using her brain. I said, "That's what I want to do."

DONNELL: **What can science fiction stories and movies teach us about science?**

AINISSA: Science fiction can help us imagine the future. It can be like a map that shows us which way we should go with technology, and which way we should not go.

DONNELL: **What advice would you offer a budding scientist?**

AINISSA: Everyone should get a shot at science. Find other people who like science, and encourage one another. And the next time something breaks at home, ask a grown-up, "Can we take this apart?" just to see how things work.

LEVEL 16, UNIT 12
NARRATIVE TEXT

"Oh, no, not again!" Mama cried when she opened the icebox. The melting ice that cooled the box was all gone, and now our milk and meat were spoiled.

"Charlie was supposed to come yesterday," I said, "but it's so hot out, he probably has more customers than ice." Charlie is our ice man. He brings blocks of **artificial** ice from the enormous refrigerator building in town. But this summer has been so hot that everyone needs ice at the same time.

Mama let out a groan of disgust. "And this icebox smells terrible, Doris—as if someone has been neglecting her chore," she observed, turning to me with a disapproving sigh.

"I cleaned out the drainpipe last week," I said, and that was true. The melting water drained down a pipe, which filled with disgusting slime, and it was my job to clean it out with a long brush. "I did clean it," I repeated.

That evening, after we ate a meatless supper, Mama brought out a magazine and showed Papa a picture in it.

"I've been saving," Mama said, "and I think we can afford it."

Papa and I looked at the picture. It was an advertisement for a Monitor Top, the brand-new 1936 model. It ran on electric power, and it didn't need to be refilled with blocks of ice. "Can we get it?" I asked hopefully.

"This should make our life easier," Papa said to Mama and me.

When the Monitor Top was **delivered**, we plugged it in. This electric machine was much noisier than our old icebox, but when we opened the door (which we weren't supposed to do for long), the air felt as fresh and cool as a mountain breeze.

No more spoiled milk and meat, and no more slimy chores! I feel bad for Charlie and the other ice men, though. These new home **refrigerators** are going to **put them out of business**.

LEVEL 16, UNIT 13
INFORMATIONAL TEXT

A Modern-Day DRAGON

What do the words *giant lizard* make you think of? One of the enormous dinosaurs that once roamed the land? Or maybe the imaginary dragons from fairy tales and fantasy films? None of those lizards actually exist in our world, but there is a rather large lizard that does. It's even got *dragon* in its name.

Komodo dragons are the largest and heaviest lizards living on Earth. The biggest on record measured 10.3 feet (3.13 meters) in length and weighed 366 pounds (166 kilograms). But generally these creatures are smaller, about 8 feet (2.5 meters) long and weighing about 200 pounds (91 kilograms).

Like all lizards (and dragons), Komodo dragons have teeth, scaly skin, four legs, clawed feet, and a long tail. They can't fly like dragons. But like many other lizards, they can climb and swim. They also move like their smaller relatives, twisting from side to side, using their tails for balance. This movement comes from the placement of their legs. Lizards' legs stick out to the side, rather than under their bodies. This **arrangement** doesn't slow up Komodo dragons. They can reach speeds of 11 mph for short distances.

Something else the Komodo dragon has in common with dragons and smaller lizards is a long forked tongue. It uses its tongue to "smell" the air. If the wind is right, it can smell a dead animal up to 5 miles (8.5 kilometers) away.

The Komodo dragon cannot breathe fire, but its mouth contains a different weapon. Its bite is poisonous. This causes **fatal** infections in any prey that manages to escape. The Komodo dragon then tracks down the poisoned animal.

There are 3,000-5,000 wild Komodo dragons at any one time, all living on some volcanic islands in **Indonesia**. They are named for the largest of these islands, Komodo. According to fossil evidence, these **creatures** originated 25 to 40 million years ago. But the Komodo dragon was unknown to most of the world until about 100 years ago. Then some Dutch **soldiers** had a run-in with one and sent its photograph to a nearby zoo.

Now the world knows that there really *are* dragons.

LEVEL 16, UNIT 14
INFORMATIONAL TEXT

Sniffing the WORLD

Whenever dogs go for a drive, they love sticking their heads out the car window. Why? The most likely reason is that they're **sightseeing**—or rather, smellsniffing. Sniffing smells is how dogs get information about the world.

The human sense of smell is fine for **detecting** rotten food or enjoying perfumed blossoms. But no human nose could detect a teaspoonful of sugar dissolved in a tank of water the size of two Olympic pools. That's what a sniffing dog could **identify**, according to scientist Alexandra Horowitz. Some scientists say that a dog's sniffing ability is at least ten thousand times stronger than a human's.

Dogs are stupendous sniffers because of their nose **design**. Each doggy sniff brings air through the nostrils into the snout. As the air flows through the moist snout, it is cleaned. The air carries **odor molecules**. They reach an area at the back of the snout. The odors are picked up by smell receptors. Smell receptors help dogs sense the smells that enter their snout. A dog has hundreds of millions of smell receptors. (Humans have about six million.) These smell receptors connect to the brain. The brain **interprets** the signals from the smell receptors. The whole process happens quickly. The dog "knows" what the combination of odors means. "Hey, a squirrel ran across this lawn!"

The connections between a dog's nose and brain make for some amazing achievements. Trained dogs help rescue people buried in snow or in earthquake rubble. They follow a trail to a criminal or a lost child. They locate illegal material in luggage. Some dogs even identify diseases.

Of all dogs, the bloodhound is the best at tracking a scent. Bloodhounds put their noses to the ground. Their floppy ears stir up odor molecules for the dog to sniff. A trained bloodhound can follow a scent that is more than 10 days old. It can follow a trail for more than 100 miles (160 kilometers). Somehow, it is not distracted by countless other odors. It's no wonder that a bloodhound has been called "a nose with a dog attached."

LEVEL 16, UNIT 15
NARRATIVE TEXT

THE HIDDEN HUNTER

It was evening when a camp counselor led a group of youngsters on a narrow trail through the woods. Laughing and chatting, they did not **suspect** that they were being watched as they made their way to a campground by a stream. From high above, in the trees' leafy canopy, a pair of dark brown eyes observed the humans. Even if the campers had **scanned** the treetops with binoculars, they might have missed their observer. The creature sat still, perfectly **concealed** by his streaks and bands of brown, gray, and white feathers.

The creature had **sharp** eyesight. His eyes could **capture** light even on dark nights. Although his eyes could not move, he had no problem **tracking** the campers below. His neck was so flexible, he could almost turn his head in a complete circle.

Even after the campers had disappeared from sight, the creature knew where they were. His eyesight was excellent, but his hearing was **phenomenal**. His larger right earhole was positioned slightly differently from his left earhole. That meant each ear received sound waves in different ways. The creature's brain used the information from both ears to **pinpoint** the **source** of a sound. If a tiny animal scurried under a layer of leaves far below, the creature knew exactly where it was.

The creature stirred on his branch. It was time to hunt. He called loudly to announce himself to others of his kind.

All the campers heard the eight hoots floating through the trees. But they weren't familiar with woodland sounds. "That might be a hound barking," the counselor guessed.

The creature flew towards the stream. His fringed wing feathers **muffled** all sound. Silently, he landed on a tree branch. The campers were roasting marshmallows below. The creature focused his attention on shrubs behind the campfire. A faint squeak came from under a shrub. He launched himself at the spot.

"Did you see that?" asked a camper. "Something just flew right by us."

But nobody else had seen the owl make his sudden landing. In the darkness, nobody saw him lift himself into the air with a mouse held tightly in his talons.

LEVEL 16, UNIT 16
NARRATIVE TEXT

A Change of Heart

When Flora walked her little dog, Bella, past the house of the new family next door, she made sure to stay as far away as possible. A Rottweiler was living at that house, and Flora knew that Rottweilers were a **fierce** breed, trained to guard and protect. The dog's sharp teeth, muscular body, and enormous size made Flora **shudder**. In addition, Bella always barked when she glimpsed the Rottweiler sitting silently and **menacingly** on the front porch, so Flora tried to hurry her dog past the danger zone.

Once, the Rottweiler stood up as Flora walked Bella, and seemed to be heading their way. Flora let out a yelp and ran home as fast as she could. That night, she had a nightmare about the big dog. It sat beside her, growing ever more gigantic.

On one walk, a boy approached Flora and asked if he could pet Bella. As he patted the little dog, he introduced himself. "I'm Manny, and we just moved in," he said, pointing to the house with the scary dog. "Does your dog want to play with Otis?"

"Is Otis your Rottweiler?" asked Flora. When Manny said yes, Flora said, "That dog could eat Bella for breakfast."

"Otis?" said Manny, laughing. "He just looks fierce, but he's very **obedient** and well-behaved." Then he called out, "Otis, come!" The monstrous creature **bounded** from the porch toward them, making Flora gasp in horror.

But Bella seemed delighted, and the two dogs began play-fighting. Otis was careful to treat Bella gently, and Flora was impressed by how the big dog knew his own strength. "He seems so smart!" she blurted.

"He's our gentle giant," said Manny. "He loves people." As if on cue, Otis stepped over to Flora, wagging his tail, and looked up at her with smiling eyes. Before she knew it, Flora was stroking his sleek back. Otis had won her over.

I met the family who moved in next door," Flora informed her mother with a smile that evening.

"The ones with that huge, nasty guard dog?" her mother asked.

"Oh, that's just Otis," said Flora breezily. "He's a big sweetie-pie."

LEVEL 16, UNIT 17
NARRATIVE TEXT

Owen and Mzee

The baby **hippopotamus** was in trouble. He was all alone in the sea off the coast of the African country of **Kenya**. Strong, high waves had flooded the coast days earlier. Nobody knew where the baby's mother was. If the hippo was not rescued, he would die.

People tried to bring the scared hippo to shore. It was hard work because the hippo weighed about 600 pounds (272 kilograms) and **thrashed** at anyone who came near. At last, a man named Owen was able to hold the hippo while a net was fixed in place.

The hippo was taken to a wildlife park in Kenya. He was given the name Owen, after his rescuer.

At the park, caretakers placed Owen in an area with other rescued animals, including a giant **tortoise** named Mzee. The tortoise was about 130 years old, and he kept to himself. Mzee didn't like it when Owen headed right for him and **nestled** beside him. The grumpy tortoise crawled away. But Owen kept following.

It looked as if the hippo was seeking comfort from the tortoise. Maybe the humped shape of the giant tortoise reminded Owen of his mother. As the days passed, Mzee stopped trying to get away from Owen. At times, Mzee followed Owen!

The pair began spending all their time together. They swam and ate together. They rubbed noses. They slept side by side. They communicated with gentle nips and nudges. The wildlife experts at the park had never seen a friendship form between such different animals. It was a strange and wonderful thing.

Owen and Mzee's story was told in photos, videos, articles, and books. All over the world, people learned about the hippo and tortoise that were friends.

When Owen grew too big and **fierce** to live safely with Mzee, they were **separated**. But many visitors still come to the park to see Owen and Mzee, two animals that formed a famous friendship.

LEVEL 16, UNIT 18
FOLKTALE

You Can't Always Tell

Once upon a time, a poor father and son farmed a small plot of land. One spring, heavy rains caused a nearby river to flood. The farmers' land lay underwater, and their hut and **meager** furnishings floated away. "Oh, what a terrible disaster!" cried the son.

The father said, "Things look bad now, but you can't always tell." He suggested that they ask the wagon driver to take them to the village, where it would be dry.

So the pair **waded** through water and **trudged** through mud until they reached the wagon driver's house. They learned that the wagon driver had just left for the village. "Nothing is going right for us!" wailed the son.

"Well, you can't always tell," said the father. "Something good may come of this."

The farmers set out on foot for the village, many miles away. They finally arrived late at night. When they asked at the inn for a place to sleep, the innkeeper told them that every bed was taken.

The son moaned with despair, "All our luck is bad!"

"Well, you can't always tell," said the father, leading his son to the stable, where both made a bed of straw. Exhausted, they quickly fell asleep.

Just before dawn, shouts and shrieks awakened them. From the safe distance of the stable, they saw the inn **engulfed** in flames and watched people **pouring** frantically from its doorway. "How lucky that we weren't inside," observed the father.

Later that day, the farmers met the wagon driver, but he no longer had a wagon. On the way to the village the day before, the wagon driver's horse had stumbled, his wagon had rolled down a steep hill, and he had injured his leg when the wagon crashed at the bottom of the hill.

"How lucky that we weren't passengers in your wagon," exclaimed the father, "for an accident like that can be deadly."

When the floodwaters **receded**, the farmers returned home. On the spot where their home had been, they found an **ancient** chest. Long buried, it had been **dislodged** by the flood. Inside the chest were glittering jewels worth a fortune, so the farmers were never poor again.

When it comes to luck, you can't always tell!

LEVEL 17, UNIT 1
INFORMATIONAL TEXT

Animal Fact, Animal Fiction

Owls

In folktales, owls are wise **characters** who give good advice. In Greek mythology, the **ancient** Greek goddess of wisdom, Athena, was often shown holding an owl. A person who understands many things is "as wise as an owl." And, in nature, owls' enormous, staring eyes and their accurate hunting skills make these birds seem like observant thinkers. But are real owls wise?

In fact, owls are not ranked among the most intelligent birds. To **scientists** who study learning, a smart animal is one that can solve a problem it has never seen before. Owls are not known for this **ability**, and people who train owls report that these birds are not quick to learn new tasks.

Ostriches

Someone who is not facing up to a problem may be compared to a different bird—an ostrich. The person is told, "Don't be an ostrich. Don't **bury** your head in the sand." Does an ostrich really bury its head in the sand?

In fact, ostriches never cover their heads with sand. They need to see danger to stay safe. These big, flightless birds have sharp **eyesight**. They are fast runners and strong fighters. So, how did people come to believe that ostriches bury their heads? Ostriches lower their heads to move eggs in their nest on the ground. Seen from a distance, their heads appear buried by sand. An ostrich may also lie still with its long neck stretched out on the ground as a way of hiding when it senses danger.

Crocodiles

Sometimes, a person who is only pretending to feel sadness is compared to a crocodile. "What crocodile tears!" others say about the **false** show of feeling. It was reported that crocodiles cried while eating animals they had just killed—as if they were sorry about the deed. Do crocodiles really cry tears?

In fact, crocodiles do cry tears. As the crocodile eats, bubbles form in the corners of its eyes and sometimes result in tears that drip down the animal's face. But these tears are not caused by strong feelings, like sadness about its poor victim. The tears are caused by the action of eating, and they work to keep the crocodile's eyes **moist**. The **glands** that **produce** tears are squeezed as the animal works its mighty jaws.

Owls aren't wise, ostriches don't ignore danger, and crocodiles don't show false sorrow. Some ideas about animals turn out to be more fiction than fact.

LEVEL 17, UNIT 2
INFORMATIONAL TEXT

EXPRESSIONS FROM THE ANCIENTS

Greek **myths** and legends belong to a time long gone by, but traces of them can be found in our language. Here are three expressions and the stories behind them.

Midas Touch

If someone is lucky with money and gets rich easily, that person might have a **Midas** touch. Midas ruled the kingdom of **Phrygia**. To reward him for a kind act, the god **Dionysus** granted him a wish. Without thinking, the king wished that everything he touched would turn to gold. The wish was granted. The king enjoyed turning things in his garden into gold, but when he became hungry, he found he could not eat. Any food that touched him immediately turned to gold. So did his loving daughter when she tried to comfort him. Midas begged to have his wish undone, and Dionysus agreed.

Pandora's Box

If someone creates trouble, people might say that person opened a Pandora's box. In Greek mythology, Pandora was the first woman on Earth. Each god gave her a particular gift, such as beauty or musical talent. Zeus, the king of the gods, gave her a sealed jar (not a box) filled with all the miseries of the world. Pandora was told not to open the jar, but one of the gifts she was given was **curiosity**. She opened the jar, as Zeus must have known she would, and out flew terrible things. By the time she managed to close it again, only one thing remained because it was at the bottom of the jar: hope.

Trojan Horse

These days, one meaning for *Trojan horse* has to do with computers. It is something that seems to be useful software but turns into a virus when installed on a computer. The original Trojan horse was built during the Trojan War. The Greeks were trying to **conquer** the Trojans, who ruled the city of Troy. This city was surrounded by a huge wall. The Greeks wanted to sneak some men into the city to open the gates. So a huge wooden horse was constructed. It was hollow, so some soldiers could hide inside. Then the armies withdrew, acting as if they had given up on the war. The horse was left before the gates of Troy as a gift. The gullible Trojans fell for the trick and took the horse inside. Soon after, they lost the war.

LEVEL 17, UNIT 3
NARRATIVE TEXT

Jacinda's class was studying how businesses make and sell **products**. The students were supposed to come up with ideas for new products and show why people would want to buy them. Thinking hard, Jacinda tapped her pencil on her desk. When its point broke, she started to look for her little plastic sharpener, but suddenly stopped. She had an exciting idea!

She eagerly told her product idea to the group. "When your pencil loses its point, why hunt for a sharpener? A sharpener can be attached right to the poincil!" Jacinda heard a few giggles. One girl in her class, Kayla, called out, "That's funny! You said poincil, not pencil!"

Jacinda knew she had **mispronounced** a word, and her face grew hot. She was embarrassed for making such a silly mistake. At that moment, the teacher, Ms. Greco, spoke up. "Jacinda, you're as **inventive** as Lewis Carroll!"

Ms. Greco told the class that Lewis Carroll was a famous writer of the 1800s. She wrote chortle on the whiteboard. "The word chortle comes from Lewis Carroll's nonsense poem Jabberwocky, which includes a lot of made-up words. He invented the word chortle by putting together parts from the words chuckle and snort." Ms. Greco told Kayla to look up chortle in a dictionary and read the definition aloud. Then she asked everyone to chortle.

After the chortling died down, Ms. Greco explained that Lewis Carroll also invented a name for words like chortle. He said they had "two meanings packed up in one word." They were like a portmanteau, which was a suitcase with two parts. Ms. Greco wrote **portmanteau word** on the whiteboard and had Kayla do a dictionary check on that one, too.

"Jacinda has invented a portmanteau word—poincil—that combines point and pencil," said Ms. Greco. Jacinda knew she hadn't invented the word on purpose. Still, she felt pleased with her **accidental creativity**. When Ms. Greco asked, "Do you think that Poincils is a good name for pencils that never lose their points?" Jacinda could already picture the product package.

Jacinda's portmanteau word **inspired** her classmates. Connor came up with an idea for a fridgeradio that could keep food cold and play music at the same time. Angel and Madison were designing a robunch, which was a robot that delivered lunch in the cafeteria. Brianna's motoskoard was a motorized skateboard.

"Can I work with you on designing Poincils?" Kayla asked Jacinda. "I think that your product is a great idea!"

LEVEL 17, UNIT 4
INFORMATIONAL TEXT

Keystone Species

Ecosystems are filled with connections. An ecosystem is all the plants, animals, and nonliving things in a particular area. One connection that can have a big **impact** on an ecosystem is the link between **predator** and **prey** animals.

What to Know About Keystone Species

- Keystone species are living things that have a major impact on how an ecosystem works.
- If you take a keystone species away, the whole ecosystem suffers.
- They are often, but not always, a predator. (They eat other animals.)
- A sea otter is an example of a keystone species.

Take the example of sea otters and sea urchins. Sea otters are mammals that live in the North Pacific Ocean. They are supremely **suited** for **marine** life. Their flipper-like hind feet help them swim. They sleep and eat while floating on their backs, often among the large seaweeds called kelp.

Sea otters eat an enormous amount of food. The animals they eat are called prey animals. A preferred prey animal is the sea urchin. Sea urchins are small, spiny animals with round bodies. They live on the sea bottom, eating algae and a type of seaweed called kelp.

During the 1700s and 1800s, it was a **profitable** business to hunt sea otters for their wonderful fur. Otter-fur hats and coats were popular. Overhunting brought sea otters to the edge of **extinction**. Not until the twentieth century did laws protect them. By then, damage to marine ecosystems had already been done.

Without sea otters to prey on them, the numbers of sea urchins grew nonstop. Sea urchins munched on kelp plants. They kept gobbling until the kelp forests disappeared. The giant green plants were **central** to the ecosystem where they grew. All sorts of marine life depended on kelp. Kelp provided not just food but also shelter. When the kelp vanished, so did the fish and shellfish that needed it to survive.

Kelp is also helpful to the physical **environment**. These plants absorb carbon dioxide. Carbon dioxide is a "greenhouse gas." Greenhouse gases trap heat and raise global temperatures. The result is harm to life on land and sea.

Biologists have a name for an animal that plays a key role in the health of its ecosystem. It's called a keystone species. Sea otters are a keystone species. With protection, some populations of sea otters have made a **comeback**—and so have the valuable kelp forests they live in.

LEVEL 17, UNIT 5
INFORMATIONAL TEXT

Saving the Rainforests of the Ocean

Coral reefs are called "the rainforests of the ocean." Like real rainforests on land, they are home to a rich **variety** of life—sea life. For example, thousands of different **species** of fish, **outrageously** colorful, may live around a single reef.

The rock-like reefs are built by **coral**, tiny animals related to jellyfish. Each coral is called a **polyp**. It is a simple **organism** with a stomach and a mouth surrounded by tentacles that it uses for feeding. It builds a hard skeleton around itself for protection. Thousands of identical polyps live together, their skeletons connecting to form a hard structure. As they live and die, new skeletons are built. The reef grows.

The living coral are closest to the **surface**, where they receive light from the sun. Sunlight is important in providing a source of food for coral polyps. Each polyp has plant-like **algae** living with it, protected by the coral skeleton. The algae use energy from the sun to produce food in a process called **photosynthesis**. Then, the algae share their food with the polyps. Algae also give the coral reef its color.

Thousands of living things rely on a single reef for food and shelter. When it dies, its **inhabitants** are suddenly homeless. And coral reefs are dying.

The outward sign that all or part of a reef is dying is something called "coral **bleaching**." Bleaching results when the algae in the coral are killed or driven out. There are two main causes for this: climate change and pollution.

Coral need clear water and a certain temperature range to stay healthy. Even a rise of one degree in the average water temperature hurts them. Climate change is slowly raising the temperature of the ocean. If the temperature rises around them, coral polyps are damaged and **expel** their algae. With the algae gone, the reef loses its color and the polyps starve.

Pollution also plays a part. It encourages the growth of harmful algae. This algae covers the top of the reef, blocking out sunlight. This kills the good algae and soon kills the coral.

A report released in June 2017 announced that three quarters of coral reefs worldwide have suffered extreme damage. Experts predict that coral reefs could disappear completely by 2050. But scientists have been working on the problem. They are looking for ways to bring algae that can survive in warmer waters into the reefs. They are finding ways to rebuild damaged reefs. With skill and luck, they will help save "the rainforests of the ocean."

LEVEL 17, UNIT 6
INFORMATIONAL TEXT

RACHEL CARSON

Growing up in rural Pennsylvania, USA, Rachel Carson (1907–1964) loved exploring nature. She also loved to write. In college, Carson decided to become a marine **biologist**. After she earned a master's degree, she found a job with the United States Bureau of Fisheries. She worked on the agency's publications, combining her writing skills and science knowledge.

Carson wrote her own books, too. *The Sea Around Us* was published in 1951. Using **vivid** and poetic language, Carson explained science concepts in ways that the public could appreciate. The book became Carson's first bestseller. The money from it allowed her to leave her government job and become a full-time writer.

Carson's research showed her that **manufactured** chemicals in use since the 1940s were causing great harm. **Pesticides** such as DDT were widely sprayed to kill off insects. Farmland was sprayed. Communities were sprayed. Chemical weed killers were sprayed on roadsides and fields. The chemical **industries** insisted their products were safe. Carson knew that all those poisons in soil, air, and water were killing more than their **intended** targets.

Carson was a quiet, studious person who did not seek fame. But she was determined to sound an alarm. She spent years uncovering facts and evidence. She carefully built a case to prove that uncontrolled use of chemical poisons was damaging the earth and its living things.

Her book *Silent Spring* was published in 1962. It became a bestseller immediately. The book begins with a fable about a pleasant American town. Suddenly, sickness and death arrive. When spring comes, there is "a strange stillness. The birds, for example—where had they gone?" The **fable** ends with the cause: "The people had done it themselves."

Silent Spring then explains the real-life effects of overusing chemical poisons. Pesticides designed to kill crop-eating insects also harmed everything that ate the poisoned insects and everything that ate the eaters. Carson argued that "in nature nothing exists alone." Human-made poisons were destroying entire **ecosystems**.

The chemical industries fought back. They **claimed** that the book was fiction and that Carson was not a real scientist. Despite being very ill, Carson spoke publicly to defend her book. She had written the truth.

Silent Spring became one of the most **influential** books of the twentieth century. It led to new laws about pesticide use and **environmental** protection. Because of the book, people thought differently about their relationship to all living things.

Rachel Carson changed how we view the earth.

LEVEL 17, UNIT 7
NARRATIVE TEXT

LOST on the Trail

Clyde and his friend Ajay often walked on Pine Lane, a dirt path beside a wooded area known as the Enchanted Forest. One day, the boys were walking with Clyde's dogs, Bric and Brac. Suddenly, both dogs barked excitedly and ran into the woods. Clyde called after them again and again, but when the dogs did not return, he told Ajay, "We'll have to go and get them."

The two boys entered the woods and called loudly for the dogs. There was no sign of Bric or Brac, but there was a sign on a board nailed to a tree. The boys walked right past it. They didn't notice that it read, "Magic Wish Trail."

After calling **vainly**, Clyde said, "There are so many trees and **shrubs**, we'll never be able to see Bric and Brac. Too bad we're not dogs because we could track those pups in no time. We'd just use our amazing sense of smell."

Ajay rolled his eyes and said, "Yeah, I wish!"

At once, a breeze ruffled the boys' hair. "I feel strange," each said **simultaneously**. Looking at each other, both cried out, "You're a **bloodhound**!"

The bloodhounds shouted at each other for a while, using their low, hoarse voices to howl their shock and alarm. But then, without thinking, they both began sniffing the ground. "A fox must have taken this trail," said Ajay.

"Three foxes," corrected Clyde, "probably a mother and two young **kits**."

The two bloodhounds trotted along, sniffing and commenting on the **aromatic** information that creatures had left behind. They detected the moist fragrance of frogs, the damp smell of **rodents**, and the **wispy** perfume of insects.

"And here is the route that Bric and Brac took," said Clyde confidently. "They were chasing a squirrel, but it climbed that tree over there, so they gave up and went this way." The bloodhounds followed the scent until they reached the edge of the Enchanted Forest. Before them, on Pine Lane, Bric and Brac stood waiting.

Stepping out of the forest and onto the path, the bloodhounds passed through an invisible wall. They transformed instantly into human boys.

"Oh, look," Clyde said to Ajay. "Bric and Brac came out of the woods on their own."

"I'm glad we didn't have to go into the Enchanted Forest," added Ajay. "I've heard that weird things happen there."

LEVEL 17, UNIT 8
NARRATIVE TEXT

What Lester Heard

Lester was lying on his back in the corner of the classroom and his friend, Harold, was lying nearby. All the students were lying on the floor because they were following the instructions of their teacher, Mr. Taylor.

"Direct all of your attention to sounds and try to remember everything you hear," Mr. Taylor told the class. "Do not speak, and do not **squirm**, just lie still and listen. After fifteen minutes, we'll return quietly to our seats and write a description of our soundscape. Ready, set, begin!"

As Lester listened attentively, he heard the blinds tapping against the glass, a bird chirping outside, and footsteps in the hallway.

Lester turned his head to glance at Harold, who was lying still, eyes shut. Lester closed his eyes, too, and listened harder. He heard voices in the hallway, a truck backing up, and a ball bouncing on the tennis court. Lester was surprised at how many different sounds were in the soundscape.

Lester heard a squirrel calling loudly, while, in the distance, someone was using a lawn mower and a **siren** wailed. He heard a plane overhead and a car horn in the street. He also heard a low hum that seemed to be coming from the classroom. Lester could not tell what was causing the hum, so he listened more closely. He decided that it wasn't an insect, and it wasn't a **machine**. It sounded like a purring cat. This was a puzzle!

Lester wondered if Harold was hearing the same sound. He looked over at Harold and then smiled because he solved the puzzle.

Mr. Taylor clapped his hands and said, "OK, now it's time to write about what you heard."

At his desk, Lester listed all the sounds he remembered and then described them in a poem.

The Soundscape
Footsteps and ***murmurs*** *in the hall.*
The echoes of a bouncing ball.
A truck's beep-beeps fill the air.
A siren ***whistles****, "Watch out, beware."*
A honking horn, a growling mower.
Will that buzzing plane come even lower?
A squirrel chip-chips loud and long.
A bird sings a cheerful two-note song.
The blinds give the window a gentle tap.
And Harold snores as he takes a nap.

LEVEL 17, UNIT 9
INFORMATIONAL TEXT

Taste Tests

Here's a taste test you can do with a friend. Together, set out four teaspoons. Fill one with sugar water, one with lemon juice, one with salt water, and one with tonic water (a soft drink made with **quinine**). Close your eyes, and have your friend give you one teaspoon at a time. Will you be able to **identify** the taste in each teaspoon? No problem! It's simple to tell apart sweet, sour, salty, and bitter tastes.

Scientists have long known about those four basic taste types. It wasn't until the year 2000 that scientists worldwide agreed about a fifth taste, identified by Japanese scientists many years earlier. The fifth taste is called umami (oo-MAH-mee). The name is Japanese for "deliciousness." In English, the word savory describes the umami taste. It is found in foods such as mild beef broth and parmesan cheese.

How do we tell apart sweet, sour, salty, bitter, and umami tastes? **Structures** in the mouth, tongue, and throat work together to send **signals** to the brain. If you stick out your tongue, you'll notice tiny bumps on it. Those bumps are called papillae (puh-PIL-ee). Tiny, microscopic structures called taste buds are hidden inside the papillae. When people eat food, **molecules** in that food first travel to the papillae. Then, these taste molecules enter the taste buds. Once the molecules are inside the taste buds, the molecules are picked up by receptor **cells**. The receptor cells are attached to **nerves**, and those nerves then send a signal to the brain about how the food tastes. Finally, once the brain receives the message, the person eating becomes aware of flavors.

Think of a favorite food. It's not just taste that makes the food **appealing**. Other senses are involved, too. The food is your favorite because of its color, shape, texture (how it feels in the mouth), and maybe even its sound (does it crunch?). Most important is its smell.

Smell receptors in the nose **detect** many more kinds of molecules than taste receptors do. Try this test with a friend. Cut a slice of an apple and the same size slice of a raw potato. Close your eyes, and pinch your nose shut. Have your friend feed you one of the slices. Can you tell which one is in your mouth? Probably not. **Distinguishing** flavors requires the sense of smell, as you've probably discovered if you've ever had a bad cold.

LEVEL 17, UNIT 10
DRAMA

Parranda:
A Music Party on the Move

This text is a drama, or a play, written by Marisol Rodriguez. It could be **performed** on stage for a live audience. The cast of characters tells who each person is. Most of the text is dialogue, or characters speaking to one another. Dramas like this one also include stage directions, which are separated in brackets [like this]. Stage directions give details about the setting and action taking place.

Cast of Characters

YVETTE,Teenage girl
ANA MERCEDES,Teenage girl and YVETTE's cousin
SEÑORA PAZ, Leader of the parranda

*[YVETTE and ANA MERCEDES are standing on a street corner with a group of 20 others in **Chicago**. It is a brisk winter evening. Some people in the group are holding **Puerto Rican** flags. Others have musical instruments in their hands, including drums, maracas, and **güiros**]*

SEÑORA PAZ: Okay friends, it's time to get this year's moving music party started—let's begin our parranda! Make sure you wave your flags high with pride. I want everyone with instruments to wait for my cue to begin. When I raise my arms high, you'll know to start playing the first song. Now let's get walking. The first stop is the barbershop. Are we ready? Let's have some fun—***Vamos a gozar***!

[The group, including YVETTE and her cousin ANA MERCEDES, follows SEÑORA PAZ down the street toward the barbershop.]

YVETTE: Cousin! ***Prima***! I'm so happy you were able to visit from Puerto Rico, especially during the winter so you could be part of our parranda, Chicago style! This is one of the best ***cultural traditions***. I love bringing joy to people in our ***community*** through song and music! What are these outdoor musical parties like for you on the island?

ANA MERCEDES: Well, first off, we are a tropical island so no winter coats! But everything else seems similar so far. We sing the same songs, play the same instruments, and enjoy eating with our neighbors after we perform for them.

YVETTE: Here in Chicago, we don't visit our neighbor's homes during our parranda. Instead, we go to different shops to perform. Our last stop is always at the home where our ***abuelo*** and other **senior citizens** live. We stay for a while with grandpa to sing, dance, and eat a delicious Puerto Rican meal of rice with peas, roasted pig, and potato salad. I can't wait for that part!

ANA MERCEDES: I can't wait, either! I can hear my stomach growling!

SEÑORA PAZ: Okay folks, here we are at our first stop: the barbershop. Play your instruments, loud and proud!

*[The group enters the barbershop and performs the song. The barbers and clients start to dance, and they **applaud** at the end of the performance. The group exits the barbershop.]*

SEÑORA PAZ: Next stop, La Plena Restaurant!

ANA MERCEDES: Even though we're in freezing Chicago, it feels like I'm back home in Puerto Rico. I always love how this tradition brings everyone together. Just like on the island, this parranda feels like a big family party!

YVETTE: You're right! I wish the rest of our cousins could have come out tonight. I'm taking lots of pictures and videos to show them when we get back home.

ANA MERCEDES: Send them to me, too! I want to show our family in Puerto Rico what parrandas are like in Chicago!

YVETTE: Let's try out the next song while we walk.

[YVETTE and her cousin ANA MERCEDES link arms and begin to sing as they walk arm in arm down the street.]

LEVEL 17, UNIT 11
NARRATIVE TEXT

By Constance Gibbs

Many people who enjoy music love attending concerts. People who are **deaf or hard of hearing** find ways to get a full experience with the help of **interpreters** who use sign language.

Sign language is a **visual** way to **communicate** using hands, facial expressions, and body language. This can replace or add to spoken communication. It allows people who are deaf and hard of hearing to see what is being said. Sign language concert interpreters sign along with a song to show the song's words (the lyrics) through signs. But interpreters say they do more than that.

Jody Daulton has a team of interpreters who work at events like concerts and plays.

"Not only are we interpreting the lyrics of the song," she said in an interview, "but we are also ***portraying*** the sound of the music. The highs and the lows, the softness or the hardness, the musicality of the whole thing."

The Joy of Music

Sign language concert interpretation isn't easy. Matthew Maxey does it for a living. He created a hip-hop interpretation service. He is also deaf. In an interview, Maxey shared that one of the hardest parts of interpreting concerts is learning the songs in a short period of time.

"Interpreting requires a lot of time and practice," Maxey says. Interpreters have to know which songs an artist is going to **perform** and in what order. They also must know if those songs might be shortened or changed during the concert. "You never realize how hard it is to memorize lyrics until you're pressured to learn a **set list** in two weeks," he says.

Sign language concert interpretation is about providing a joyful and lively performance for all people who attend concerts. "Everybody should have **equal access**," Daulton says.

Unfortunately, that doesn't always happen. Some concert **venues** place interpreters in an inconvenient, hard-to-see location. To be close to the interpreter, deaf audience members might have to pay for costly seats. Sometimes, venues don't provide interpretation at all. But when it works, it's worth it, Daulton says.

The best part of being a sign language interpreter, says Maxey, is "providing communication and access. It's long overdue, and the joy on people's faces shows that!"

LEVEL 17, UNIT 12
DRAMA

Cast of Characters

DIRECTOR
KELLY, Nelly's singing partner
MILLARD, a magician
NELLY, a singer
VINCE, a mind reader

[*The DIRECTOR is sitting on a chair in an* ***auditorium****. NELLY and KELLY walk arm-in-arm onto the stage.*]

DIRECTOR. Welcome to the tryouts for the Stixville Talent Show. I'll be directing the show. What are your names, and what is your talent?

[*NELLY and KELLY speak together,* ***jumbling*** *their replies.*]

NELLY. I'm Nelly, she's Kelly. We're a singing duo...we sing together.

KELLY. I'm Kelly, she's Nelly. We sing together...a singing act.

DIRECTOR. Huh? Well, show me what you can do.

[*NELLY sings one song while KELLY sings a clashing song.*]

DIRECTOR. Stop! Stop! Couldn't you two agree to sing the same song?

[*NELLY and KELLY respond* ***simultaneously****.*]

NELLY. We didn't have time to rehearse.

KELLY. I told her we needed more practice.

DIRECTOR. I'll say! Go home and practice—please.

[*NELLY and KELLY exit. VINCE walks confidently onto the stage.*]

DIRECTOR. Welcome to the tryouts for the Stixville Talent Show. I'll be directing the show. What is your name and your talent?

VINCE. I'm Vince the Mind Reader.

DIRECTOR. [***Skeptically***] You can tell what I'm thinking?

VINCE. Sure! Right now, you're thinking that I can't really read minds.

DIRECTOR. True, but too obvious. Let's get a sample of your act.

[*VINCE takes a deck of cards out of his pocket and shuffles the cards.*]

VINCE. Pick a card, any card, and I'll tell you what it is.

DIRECTOR. OK, I've picked a card.

VINCE. Now put it back in the deck, anywhere at all.

[*As the DIRECTOR puts the card back in the deck, VINCE leans over to view the card.*]

DIRECTOR. [*Surprised*] Hey, you just looked at it before I put it back!

VINCE. No, I didn't.

DIRECTOR. Yes, I saw you look right at it!

VINCE. OK, OK, I had to take a peek because I haven't perfected the trick yet.

DIRECTOR. [*Sighing*] Go home and practice—for a long, long time.

[*VINCE sulks and exits. MILLARD walks onto the stage.*]

DIRECTOR. Welcome to the tryouts for the Stixville Talent Show. I'll be directing the show. [*Under his breath*] If there is one. [*To MILLARD*] What is your name and your talent?

MILLARD. I'm Millard, and I have a magic act based on scientific principles. I pull a tablecloth out from under dishes and glasses, without **disturbing** them.

DIRECTOR. [*Skeptically*] Have you practiced this trick?

MILLARD. Yes, many times.

DIRECTOR. At last! Well, Millard, show me what you can do. Use that table over there. It's already set up for dining.

[*MILLARD walks to a table covered with a tablecloth and set with* ***tableware***.]

MILLARD. [*Confidently*] Ladies and gentlemen, Millard the Magician will now remove the tablecloth, and only the tablecloth. One, two, three...

[*MILLARD yanks the tablecloth off of the table. The tableware crashes to the floor. DIRECTOR and MILLARD stare silently at the mess.*]

DIRECTOR. Um, I thought you said you practiced this trick.

MILLARD. Well, I did... but it never worked at home either.

DIRECTOR. There's a broom. Please sweep up the mess before you go.

[*MILLARD sweeps up the broken glass and then exits.*]

DIRECTOR. [*Thoughtfully*] Directing a talent show is a lot harder than I thought it would be. Of course, it is my first time. I might need more practice.

LEVEL 17, UNIT 13
INFORMATIONAL TEXT

Rainbows

There's something magical about a rainbow. That's probably why people everywhere have told stories about these wonderful arcs of colors. The ancient Greeks said that the goddess Iris used a rainbow as her stairway from the sky to the earth. In Ireland, folktales are told about leprechauns guarding their pot of gold at the end of a rainbow. The Cherokees of North America described a rainbow as the beautiful clothing of the thunder god.

Rainbows seem magical, and in a sense they are. A rainbow is an **optical illusion**. No one can go to a specific spot in the sky and touch a rainbow because it is not really there. But if a rainbow isn't really there, why does it appear?

What to Know About Light

- Light is a form of energy that travels in waves of different lengths. The length of each wave is called a *wavelength*.
- We perceive light as white, but it is actually a mix of 7 (yes, 7!) colors: red, orange, yellow, green, blue, indigo, and violet.
- Each color in the spectrum of light has a different wavelength: red is the longest, violet is the shortest.
- Prisms break white light apart so that we can see the spectrum of colors. Raindrops can act like tiny prisms.

How Rainbows Appear

When you look up toward the sun, you see white rays of light shining down. Rainbows form when white light travels through raindrops in just the right way. Imagine it is late in the afternoon, just after a thunderstorm. As rays of sunlight break through the clouds, they strike the millions of water droplets still in the air. If the beams of light pass through the water droplets at just the right angle, the light bends (**refracts**) and then bounces back (**reflects**). What happens when white light bends and bounces? To put it simply, it breaks apart into separate colors. And—you guessed it—these colors are the colors of the rainbow. A rainbow appears.

How to Find a Rainbow

You'll need a day when sunlight follows rain and the sun sits fairly low in the sky. Stand with your back to the sun. **Scan** the sky before you. Water droplets will bend and split the sunlight passing through them. Some of the light will be reflected, or bounced back, towards your eyes. The angle from the sunlight to the droplets must be the same as the angle from the droplets to you. If it is, you'll see red from high droplets, violet from low droplets, and all the rainbow colors in between.

How to Make a Rainbow

A natural rainbow is hard to find, but you can make your own. You'll need a garden hose and a sunny day. Stand with your back to the sun, and spray fine droplets into the air. Watch as the droplets split the sunlight into your very own rainbow.

LEVEL 17, UNIT 14
NARRATIVE TEXT

CELLPHONE SIGNALS

On a hike with other campers, Lily stopped to check her cell phone. "Too bad. I can't get a signal here," she said to herself. When she looked up, she saw that she was alone, so she jogged ahead on the trail to catch up to the group.

After a few minutes, Lily knew that the campers had not taken this trail, so she ran back, but wasn't sure where to stop. Her heart was beating fast from running, and from fear. She found a path and started walking on it, uphill and down through the woods. When the path **forked**, Lily sometimes went left, sometimes right. Finally, she came to a grassy clearing where she sat on a large rock and said to herself, "Stay calm, and think!"

She looked in her backpack and found an apple, a half-empty water bottle, a sweatshirt, and the useless cell phone. The back of the cell phone was shiny silver, and she saw her **worried** face **reflected** in it.

Lily took a sip from the water bottle but she decided to save the apple until she was hungrier.

She pictured the counselors trying to find her. All she had to do was wait and the clearing seemed like a good spot, because she could be seen more easily in the open.

After three hours of waiting, Lily ate the apple.

It began to drizzle, and Lily put on her sweatshirt. She realized that evening was coming, and she needed better shelter. Earlier, she had **noticed** a rocky **overhang** in the woods. To make sure she would find the way back to the clearing in the morning, Lily collected **twigs**. She placed pairs of them in a crisscross pattern to mark her path.

Lily sat under the rock ledge, her chin resting on her knees. The rain made gentle music, and as darkness came she **dozed off**.

The songs of birds awakened her to a sunny morning and she followed her twig path back to the clearing.

After a while, Lily heard a loud buzzing overhead and looked up. A rescue **helicopter**! She leaped up and waved her arms. "Here! I'm here!" she shouted but it seemed that the helicopter was moving away. "Don't leave!"

Lily grabbed her cell phone and held it up, tilting its silvery back this way and that, trying to catch the sunlight. Would the flashes be seen?

News reports later told about the rescue. "Lily's cell phone had no signal," said one reporter, "but this resourceful camper used it to send a message anyway."

LEVEL 17, UNIT 15
POETRY

Blazing lights

flicker
flash
glitter
gleam
twinkle
sparkle
bedazzle
beam

so

brilliantly
bright.

Reasons
why
city
stays
awake
all
night.

—Lee Bennett Hopkins

LEVEL 17, UNIT 16
NARRATIVE TEXT

TAOS PUEBLO

The **Taos Pueblo** is a Native American community in the land that is now called **New Mexico**. Many Taos people live in modern-day homes outside the village and go to their homes in Taos Pueblo for special events. The **traditional** homes in Taos Pueblo are made of the same materials that have been used for thousands of years.

Jackie's phone alarm chirped, waking her before the sun rose. There was going to be a festival in the **pueblo** later, and she needed to help her grandfather prepare. Jackie had woken up early to make her grandfather a cup of tea before she went.

Jackie's grandfather was a **resident** of Taos Pueblo. Today, she would help him with chores for the festival—but they needed to get started early before the desert heat became too intense to be outside. When she arrived, he was already waiting in a rocking chair beside his front door.

"Morning, Pop!" she called. "I brought some tea for you."

"Well, that's good. We have a long day of making **adobe** today," he replied.

Jackie's grandfather led her to a place where he had set up buckets of water, local red clay, straw, and a large kiddie pool. While Jackie stomped on the mixture barefooted, her grandfather poured ingredients into the pool slowly.

"We are known as the Red Willow people. Our people have always cared for and protected this land," he told her as they worked. Jackie knew this already, of course, but she listened quietly.

"Today, we must mix the adobe to repair the pueblo before our relatives arrive for the festival. These old pueblos are our history. We keep them as our **ancestors** built them a thousand years ago."

Jackie nodded. The red mud between her toes began to thicken and get heavy, but she didn't mind. Her grandfather continued.

"For thousands of years, our people have known that adobe housing is one of the best ways to be comfortable in the desert heat. The adobe walls capture the heat so it doesn't spread to the inside, keeping our homes cool. Then, at night, the heat releases slowly from the walls, keeping us warm while the sun is down. Nothing has been discovered to be more **efficient** in the desert than these earth houses."

Grandfather told Jackie to stop mixing when the adobe reached the correct texture. Together, they scooped the heavy plaster into buckets and pulled the mud and straw mixture to the pueblo with a sturdy cart that did not struggle under the weight. Others soon showed up to begin the important work of re-laying the mud on the pueblo houses. This is how the community had **maintained** the pueblo for so many years.

While they worked, Jackie listened to everyone talk excitedly about the festival. People from her tribe would drive or fly in from all over to visit their sacred lake, Ba Whyea, to tell stories in the Tiwa language, and to do a Corn Dance—the activity Jackie liked best. Jackie could not wait for the festival to begin!

LEVEL 17, UNIT 17
LEGEND

ARCHITECTURE STAR: ZAHA HADID

By Anna M. Lewis

Zaha Hadid is one of the most celebrated **architects**. She designed stunning and unique buildings, winning many awards for her designs. How did Zaha come to be such a talented architect?

Early Influences

Zaha Hadid was born on October 31, 1950, in **Baghdad**, Iraq. She was raised in a family where education and the understanding of other cultures was important. Hadid's father was a leading Iraqi politician. Her mother was an artist and taught her daughter how to draw.

Growing up in Iraq had an enormous impact on Hadid. Her world was filled with living history, including picnic trips to the ancient city of **Samarra**. There, she had views of ancient buildings and other **structures** that were built many hundreds of years ago.

When Hadid was 11, she was fascinated by photos of the **inhabitants** of the marshes of southern Iraq. The photos showed people living in arched homes constructed of **reeds**. When her father/ took her to visit these places, she knew that she wanted to become an architect. She said, "My father took us to see the **Sumerian** cities. Then we went by boat, and then on a smaller one made of reeds to visit villages in the marshes.

The beauty of the **landscape**—where sand, water, reeds, birds, buildings, and people all somehow flowed together—has never left me". This Sumerian region was where architecture first began over 5,000 years ago.

Style of Architecture

Hadid's designs have fluid shapes. The buildings appear to flow effortlessly into their building sites. She feels that her designs are best shown through paintings rather than typical architecture drawings. When a person walks around Hadid's buildings, these structures often look as though they morph. They seem to change shape as they are viewed from different sides. This leads to a science fiction-like feel.

Hadid was **firmly committed** to her unique style. Hadid has said, "I started out trying to create buildings that would sparkle like jewels. Now I want them to connect, to form a new kind of landscape, to flow together with [modern] cities and the lives of their peoples."

LEVEL 17, UNIT 18
INFORMATIONAL TEXT

Cave Dwellings

Who lives in caves? Well, a cartoon image of a cave dweller shows a fur-clad hunter of the Stone Age carrying a club and drawing on a cave wall. The image is supposed to be silly—and it is.

Real-life Stone Age people lived by hunting and gathering food, rather than farming. For them, caves provided shelter at times. Caves had sacred uses, too. However, people didn't actually begin turning caves into homes until about 5,000 years ago. That was after they had learned to raise animals and grow crops. Instead of moving into **natural** caves, people who lived in caves built their own from rocks in the **environment**.

Cave **dwellings** made sense in dry environments where there weren't enough trees to use as lumber for building. If the rocks of the region were soft enough, people developed the tools to carve out underground rooms. Underground, they were safe from sandstorms. And they escaped the extreme differences between day and night temperatures common in deserts.

Tunisia

Cave dwellings are found in the North African country of Tunisia. The **settlement** of Matmata is famous. People of the Berber **culture** began building this village centuries ago. Some of them still live underground, protected from sun and wind. The homes here were built into the walls of a deep pit by cutting into the desert sandstone, a soft rock. A four-cavern hotel is popular among tourists, especially Star Wars fans. (Scenes from the Star Wars movies were filmed here.)

Spain

The town of Guadix, in Spain's Granada province, is also known for cave dwellings. For hundreds of years, people have lived in cave houses here. The underground dwellings are naturally cool during the summer and warm during winter. There are 2,000 cave dwellings in Guadix. The multi-room homes have an airy feel and all the modern **conveniences**.

China

In China today, more than 30 million people live in caves. Many of these dwellings are found in Shaanxi **province**. This region has cliffs that are easy to dig into. Most of these homes are simple rooms, but some are as spacious and modern as city apartments.

Throughout the world, fewer cave dwellings are being used and preserved. But **architects** study these homes to learn about the **benefits** of living underground. Today, underground homes are being built that have up-to-the-minute technology. They are heated and cooled naturally, are safe from stormy weather, and blend into the natural landscape—just like cave dwellings of the past.

LEVEL 18, UNIT 1
INFORMATIONAL TEXT

Flamingos
In the Snow

For most people, flamingos bring up images of hot, tropical **lagoons**. The most common flamingo has pink feathers and stands as tall as an adult person. Its curved, black-tipped beak is bigger than its head. Its neck and legs are thin and extremely long. Flamingos are usually found in warm **climates** near shallow bodies of water.

So imagine the surprise of two young Russian boys in **Siberia**. They were ice fishing in November. The temperature that day was well below zero, and it was snowing heavily. Suddenly, the boys saw a strange-looking pinkish bird in the sky. It slowly circled lower and lower until it fell onto the snow and lay quietly.

Seeing that the bird was still alive, the boys got their father. He carried the flamingo back home. After warming up and getting food, the rescued bird explored the family's apartment. But, when the flamingo tried to bite the family dog, it was moved to a local **greenhouse**. Later, it was named Phila and got a permanent home at a nearby zoo.

Was this a strange one-time event? No! A year later, in nearly the same spot, the same thing happened. Again, the flamingo was rescued. It was sent to the same zoo to live with Phila.

According to flamingo expert Dr. Marita Davison, some flamingos can live in colder climates, including those that nest in an Asian country called **Kazakhstan**. But these birds have an **instinct** that tells them to **migrate** in November when it starts to get really cold.

They usually head south to the warmer climate of Iran. To end up in Siberia, one of the coldest regions in the world, the flamingos would have to fly the same distance in the opposite direction!

Dr. Davison is also surprised that the birds were alone when they landed. Flamingos usually travel in large flocks. Dr. Davison suspects that the rescued flamingos fell out of larger flocks that were flying unseen in the clouds. In fact, a rare sighting of a flock was reported in Siberia in 2015.

Scientists have theories for why the flamingos flew in the wrong direction. But no one knows for sure.

LEVEL 18, UNIT 5
FOLKTALE

Anansi loved food, but he was far too lazy to cook. Instead, this **sly** spider spent his time trying to **cook up** clever ways to taste what his friends were preparing.

One afternoon in his small village, Anansi noticed a delicious **aroma** coming from his friend Rabbit's house. Rabbit was stirring greens in a large black cook pot and kindly invited Anansi to stay for lunch. Anansi wanted to eat with Rabbit, but he also wanted to find even more to eat, so he spun a web, tied one end to the cook pot, and the other end to one of his short, thick legs. He asked Rabbit to pull on the web when the greens were ready, and Anansi would hurry back.

Next, Anansi visited Monkey's house to see what he was cooking. "Good friend, join me for lunch when it's ready," Monkey offered. Anansi wanted to find even more to eat, so he **fastened** one end of a web to Monkey's cook pot and the other end to another one of his thick legs. "Just give a tug when lunch is ready," he told Monkey and waved goodbye.

Just down the road at Hog's house, Anansi smelled sweet potatoes cooking. Hog **graciously** offered to share his meal when it was ready, but just as before, Anansi wanted even more to eat. Again, he fastened a web to the cook pot and to another one of his short legs.

Anansi repeated this trick at the houses of his friends **Tortoise**, Hare, Squirrel, Mouse, and Fox. Soon, all eight legs were connected by webs to eight cook pots.

Down by the river, Anansi was dreaming of the feast he would soon be enjoying when he felt a tug on one leg. Then, there was a tug on another leg, and another, and another. Anansi's legs were pulled and stretched in eight different directions! He jumped into the river to wash away the webs, and when he climbed out, his legs were long and skinny. Anansi regretted being greedy, especially now that he had nothing.

LEVEL 18, UNIT 6
FOLKTALE

The Monkey and The Pea

A Tale from India

Once there lived a king who ruled over a large and **bountiful** country. The king was proud of his rich lands and mighty army, but still he wanted more. So, he decided to **conquer** a small and poor country and add those lands to his kingdom. Then, he would be even richer and more powerful.

The king gathered his army and **departed** for the poor little country. The soldiers in their fine uniforms marched all day until they came to a forest where they could camp for the night. They cared for their horses, filling a feeding **trough** with tasty peas.

Many monkeys lived in the forest, and one of them **eyed** the peas hungrily from a nearby tree. The monkey imagined how delicious the peas would taste. As soon as it was safe, he darted out and scooped up as many peas as his furry hands could hold. Then, he scampered back to the tree to find a high branch where he could sit and enjoy his dinner.

Before the monkey was halfway up the tree, a single pea slipped out of his hand. He **desperately** grabbed at the falling pea and—alas!—dropped all the peas he had been holding. The sad monkey watched the horses gobble up all the peas on the ground. Too late, the monkey understood that in trying to grab more than he needed, he had lost everything.

The king had been thoughtfully **regarding** the greedy monkey. He said to himself, "I do not need to learn my lesson the hard way like this monkey. I have all that I need in my own kingdom." And, with that new knowledge, the king collected his soldiers and marched home the next morning.

LEVEL 18, UNIT 9
INFORMATIONAL TEXT

The Blizzard of 1888

This passage describes a true event that took place more than 100 years ago. The author reviewed and used information from a variety of sources, such as diary entries, newspaper articles, and museum artifacts.

In 1888, William Steinway was living in New York City when a blizzard hit the area. It **raged** for days with fierce winds and heavy snow. The city was **paralyzed**. Few people could get to work. Steinway's piano company and many other businesses were closed. Schools were also closed. High snowdrifts blocked doorways, sidewalks, and streets. The city's trains could not run on tracks covered with ice and snow.

Workers from one of Steinway's factories were able to dig a tunnel through the snow to the **stables** where the company's railroad horses were kept. In better weather, these horses pulled railroad cars along tracks around the city every day. During the blizzard, the horses almost starved when no deliveries of hay or oats could make it through the snow. Steinway's son George took on the Herculean task of making his way through the dangerous storm to buy oats from the city stables. George and his father knew the horses would be needed as soon as the snow could be cleared.

The blizzard also hit one of Steinway's piano factories. The strong winds lifted the factory roof, and it was nearly blown off. Workers tried to make repairs during the storm, but the wind and freezing temperatures **hampered** their efforts.

Steinway remained calm despite the damage done by the blizzard. He estimated the time and money needed to recover and began planning. Steinway knew he was more fortunate than many people who would need to use what little money they had just to survive the storm.

Steinway **predicted** that changes would need to be made for the city to survive another storm such as this. He supported plans to move the railroad to a new location: underground. This was one of the first steps toward building the **subway** systems we use today.

LEVEL 18, UNIT 13
POETRY

Under the Mambo Moon: Mrs. Garcia

This is an excerpt from a longer poem, *Under the Mambo Moon*, by Julia Durango. This part of the poem begins with a young girl named Marisol. She is helping in her father's store when Mrs. Garcia, a customer, arrives.

On summer nights
Papi lets me help out
at the music store.

Papi says you can
read people's souls
by the music
they listen to;
that hearts
fly home
when the music's
Just Right.

Papi says
people come here
to buy dreams
and memories.

Mrs. Garcia
gets off at the bus stop
in front of the store.
She walks slowly,
one hand on her back,
trying to push away an ache.

She's been cleaning houses
all day,
but still she smiles
and stops to talk.

Mrs. Garcia:
On the day of my **quinceañera**,
I wore a gown
of blushing pink
and a gold tiara.

The tiny rosebuds on my cake
matched the real ones
in my **bouquet**,
and my gifts reached the ceiling.

A handsome **mariachi** band
played all afternoon
and **serenaded** me with
"**Las mañanitas**."

On the day of my quinceañera,
I was in Mariachi Heaven.

LEVEL 18, UNIT 14
POETRY

Under the Mambo Moon: Dr. Solís

This is another excerpt from *Under the Mambo Moon* by Julia Durango, a poem about a young girl, Marisol, who helps in her father's music store. In this part of the poem, several customers are visiting the store: João, Catalina, Tia Pepa, and Dr. Solís.

Dr. Solís enters,
his white hair
sticking out all over.
"Hey, **Doc Einstein**!"
João calls.
Dr. Solís chuckles
and wipes his brow
with a linen handkerchief.

Catalina arrives
with mangoes
from the corner grocery.
She sneaks up
and gives Dr. Solís
a peck on the cheek.
João blushes.

Tia Pepa hurries in,
her arms full of shopping bags.
Catalina says, "**Hasta pronto**,"
and hides in the aisles.
João follows.
Even Dr. Solís makes a **beeline**
for the back of the store.
Tia Pepa likes to talk.

Dr. Solís:
Just as the **bomba** drummers
call to each other,
challenging the dancers
to reply,
a salty Puerto Rican breeze
wends its way north
and whispers in my ear.

And just like the dancers
who answer the call,
heeding the **summons**
of the beating drums,
an old man becomes
young again and remembers
his island home.

Glossary

ability (noun) Ability is the skill to do something.

abuelo (noun) *Abuelo* is a Spanish word that means "grandfather."

accidental (adjective) Accidental means not on purpose.

account (noun) An account is a description of an event or experience.

adobe (noun) Adobe is a mixture of dried mud and straw used for building.

advance (noun) An advance is an improvement.

algae (plural noun) Algae are basic water plants without stems or leaves.

ancestors (noun) An ancestor is a relative from long ago.

ancient (adjective) Ancient means very old.

anticipation (noun) Anticipation is a feeling of excitement about something that is going to happen.

appealing (adjective) Appealing means likeable or pleasant.

applaud (verb) To applaud is to clap your hands to show you have enjoyed something, such as a play or music.

architect (noun) An architect is someone who creates plans for buildings.

aroma (noun) An aroma is a pleasant smell.

aromatic (adjective) Aromatic means having a certain smell.

arrangement (noun) An arrangement is the way things are positioned.

artificial (adjective) Artificial means not natural but made by people.

Atacama (proper noun) Atacama is the name of a desert.

auditorium (noun) An auditorium is a big room where people can watch a performance.

Baghdad (proper noun) Baghdad is the capital city of Iraq, a country in Asia.

beeline (noun) A beeline is a straight line between two places.

benefit (noun) A benefit is something good that happens because of something.

bias (noun) Bias is unfairly preferring one group to another.

biologist (noun) A biologist is a scientist who studies living things.

bleaching (noun) Bleaching is when all the color leaves something.

bloodhound (noun) A bloodhound is a dog with a strong sense of smell.

Bomba (proper noun) Bomba is a type of music from Puerto Rico.

bound (verb) To bound is to run with a leaping stride.

bountiful (adjective) Bountiful means having more than enough.

bouquet (noun) A bouquet is a bunch of flowers.

budding (adjective) Budding describes someone who is beginning to be skilled at a subject.

bulrush (noun) Bulrush is a type of tall plant that grows in wet places, often used for weaving.

burly (adjective) Burly means big and strong.

burst (verb) To burst is to suddenly split or break open.

bury (verb) To bury is to put something underground.

capture (verb) To capture is to catch.

cast of characters (noun phrase) A cast of characters is the group of made-up people in a play.

celebrate (verb) To celebrate is to do something fun or special.

cell (noun) A cell is a tiny, basic part of all living things.

central (adjective) Central means very important to something.

character (noun) A character is who a story is about.

Chicago (proper noun) Chicago is the name of a city in the United States, located in the state of Illinois.

chuckle (verb) To chuckle is to laugh quietly.

claim (verb) To claim is to say that something is true when others may disagree.

climate (noun) Climate is what the weather is usually like in a certain area.

climate change (noun) Climate change is a change in the typical weather in a place over a long period of time.

coiled (adjective) Coiled means rolled up.

comeback (noun) A comeback is a return.

communicate (verb) To communicate means to share ideas and information.

community (noun) A community is an area, such as a town, city, or neighborhood, where a group of people live.

conceal (verb) To conceal is to hide.

conquer (verb) To conquer is to take control of.

conqueror (noun) A conqueror is a person who takes control of.

convenience (noun) A convenience is something that makes life more comfortable.

cook up (verb) To cook up means to invent a plan or an excuse.

coqui (noun) Coquí is a species of frog that is found in Puerto Rico.

coral (noun) Coral is a collection of tiny sea animals.

cramped (adjective) Cramped means uncomfortably small.

creativity (noun) Creativity means the ability to think of new ideas.

creature (noun) A creature is an animal or other being.

cultural tradition (noun) A cultural tradition is a belief, event, or way of doing things shared by a group of people.

culture (noun) A culture is a group's values and way of life.

curiosity (noun) Curiosity is interest in learning or knowing something.

current (noun) A current is a body of water moving in one direction.

deaf or hard of hearing (adjective phrase) People who are deaf or hard of hearing have difficulty hearing or cannot hear.

decade (noun) A decade is ten years.

defense (noun) A defense is something used for protection.

deliver (verb) To deliver is to bring and hand over.

demonstrate (verb) To demonstrate is to show clearly.

depart (verb) To depart means to leave.

design (noun) Design means the way something is made.

desperately (adverb) Desperately means in a very worried or needy way.

detect (verb) To detect is to notice or discover something.

Dionysus (proper noun) Dionysus is the name of a character in Greek mythology.

dislodged (adjective) Dislodged means knocked out of position.

distinguish (verb) To distinguish means to notice differences.

disturb (verb) To disturb means to change the position of something.

Doc Einstein (proper noun) Doc Einstein refers to Albert Einstein, a famous scientist with wild white hair.

dormant (adjective) Dormant means not active.

doze off (verb) To doze off is to fall asleep.

dune (noun) A dune is a hill made of sand.

dwelling (noun) A dwelling is a home.

eagerly (adverb) Eagerly means in an interested or hopeful way.

ecosystem (noun) An ecosystem is all the plants, animals, and nonliving things in a particular area.

efficient (adjective) Efficient means working well, without wasting time or energy.

efficiently (adverb) Efficiently means in a way that does not waste time or energy.

El Yunque (proper noun) El Yunque is the name of the national rainforest of Puerto Rico.

encounter (verb) To encounter is to meet or find.

endangered (adjective) When an animal or plant is endangered, it might die off completely.

engulfed (adjective) Engulfed means totally covered.

enthusiastically (adverb) Enthusiastically means in an excited way.

environment (noun) The environment is the land, water, air, and living things in an area.

environmental (adjective) Environmental means about the earth or nature.

equal access (noun phrase) Equal access is the opportunity for everyone to participate.

expel (verb) To expel is to force something out.

extinction (noun) Extinction is when an entire type of plant or animal has died off and become extinct.

eye (verb) To eye means to watch closely.

eyesight (noun) Eyesight is the ability to see.

fable (noun) A fable is a story with animals that teaches a lesson.

false (adjective) False means fake.

fastened (verb) To fasten means to tie or attach.

fatal (adjective) Fatal means causing something to die.

fierce (adjective) Fierce means powerful and aggressive.

firmly committed (adjective phrase) Firmly committed means feeling very strongly about something.

fork (verb) To fork is to split into two.

glacier (noun) A glacier is a large, slow-moving mass of ice.

gland (noun) A gland is an organ in the body.

graciously (adverb) Graciously means in a thoughtful and kind way.

greenhouse (noun) A greenhouse is a warm building used for growing plants.

green technology (noun) Green technology is the use of tools and products made to help the environment.

güiro (noun) A güiro is a musical instrument with ridges that is played by scraping a stick along its side.

halal food market (noun) A halal food market is a shop that sells food prepared in a way that follows Muslim rules.

hamper (verb) To hamper is to get in the way of progress.

happy glow (noun phrase) A happy glow is a look on someone's face that shows a warm and pleasant feeling.

harvest (verb) To harvest is to collect fruits and vegetables to use them.

Hasta pronto (phrase) *Hasta pronto* means "See you later."

helicopter (noun) A helicopter is a type of aircraft.

hippopotamus (noun) A hippopotamus is a large mammal that lives on land and in water.

hoist (verb) To hoist is to raise or lift something.

humid (adjective) Humid weather is when the air feels warm and wet.

identify (verb) To identify is to figure out what something is.

impact (noun) An impact is a result.

impression (noun) An impression is an opinion about someone or something.

Indonesia (proper noun) Indonesia is the name of a country in Asia.

industry (noun) An industry is a group of businesses that do the same kind of work.

influential (adjective) Influential means able to make people change their ideas.

inhabitant (noun) An inhabitant is a person or animal that lives in a place.

inspire (verb) To inspire means to give someone an idea or feeling.

instinct (noun) An instinct is a behavior that is not learned.

intended (adjective) Intended means on purpose.

interpret (verb) To interpret is to figure out what something means.

interpreter (noun) An interpreter is someone who translates spoken language.

introduce (verb) To introduce is to bring something to a place for the first time.

inventive (adjective) Inventive means able to think of new ideas.

jumble (verb) To jumble is to mix together.

Kazakhstan (proper noun) Kazakhstan is the name of a country in Asia.

Kenya (proper noun) Kenya is the name of a country.

kit (noun) A kit is a baby fox.

Komodo (proper noun) Komodo is the name of a lizard.

lagoon (noun) A lagoon is a shallow lake or pond with warm water.

landscape (noun) A landscape is everything someone can see when looking across an area of land.

Las Mañanitas (proper noun) Las Mañanitas is the name of a traditional Mexican birthday song.

local (adjective) Local means coming from a nearby place.

machine (noun) A machine is a mechanical device.

maintain (verb) To maintain is to keep something in good shape by taking care of it.

manufactured (adjective) Manufactured means made by humans or machines.

mariachi (noun) Mariachi is a type of Mexican folk music.

marine (adjective) Marine means relating to the ocean.

massive (adjective) Massive means huge.

materials scientist (noun) A materials scientist improves the materials people use for building, like glass or metal.

meager (adjective) Meager means not enough or limited.

menacingly (adverb) Menacingly means in a threatening way.

Midas (proper noun) Midas is the name of a character in Greek mythology.

migrate (verb) To migrate is to move from one area to another.

mispronounce (verb), To mispronounce is to say a word the wrong way.

moist (adjective) Moist means slightly wet.

molecule (noun) A molecule is the smallest part of something that is still similar to it.

molokhia (noun) Molokhia is the name of a leafy green vegetable and the name of a dish made using that vegetable.

muffle (verb) To muffle is to make a sound more quiet.

murmur (noun) A murmur is a quiet or gentle sound.

myth (noun) A myth is a kind of traditional story.

natural (adjective) Natural means made by earth.

nerve (noun) A nerve is a small part of the body that carries messages to and from the brain.

nestle (verb) To nestle is to settle into something.

New Mexico (proper noun) New Mexico is a name of a state in the Southwestern United States.

no te preocupes (verb phrase) *No te preocupes* means "Do not worry" in Spanish.

Norway (proper noun) Norway is a country in northern Europe.

notice (verb) To notice is to become aware of something.

oases (noun, plural of oasis) An oasis is a spot in the desert where water is found.

obedient (adjective) Obedient means well behaved.

odor (noun) An odor is a smell.

optical illusion (noun) An optical illusion is something that looks different from what it actually is.

organism (noun) An organism is any living thing, such as a plant, animal, or fungus.

outrageously (adverb) Outrageously means extremely.

overhang (noun) An overhang is a part that hangs over something.

papis (plural noun) *Papi* means "daddy" in Spanish.

paralyzed (adjective) Paralyzed means unable to move.

parranda (noun) parranda is a Spanish word for a party where you visit homes or shops while playing music.

perceive (verb) To perceive is to notice something.

perform (verb) To perform is to put on a show, play music, or dance in front of an audience.

pesticide (noun) A pesticide is a substance used to kill insects.

phenomenal (adjective) Phenomenal means amazing.

photosynthesis (noun) Photosynthesis is the process by which plants use energy from the sun to produce food.

Phrygia (proper noun) Phrygia is the name of a place.

pinpoint (verb) To pinpoint is to find exactly where something is.

polyp (noun) A polyp is a tiny sea animal with no backbone.

portmanteau word (noun) A portmanteau word uses parts of two different words to create a new word.

portray (noun) To portray is to show something.

pour (verb) To pour is to flow quickly.

precious (adjective) Precious means valuable.

predator (noun) A predator is an animal that hunts and eats another.

predicted (verb) To predict is to tell what is in the future.

preserve (verb) To preserve is to keep something safe from harm or loss.

prey (noun) Prey is an animal that is hunted and eaten by another.

prima (noun) *Prima* is a Spanish word that means "cousin."

process (noun) A process is a series of actions that make something.

produce (verb) To produce is to make.

product (noun) A product is something made and sold.

profitable (adjective) Profitable means something that makes a lot of money.

protected areas (noun phrase) Protected areas are places kept safe for animals and plants.

province (noun) A province is an area of a country.

pueblo (noun) A pueblo is a type of Native American village in the Southwest USA, often with stone or adobe buildings.

Puerto Rican (adjective) Puerto Rican means something that comes from a territory in the United States called Puerto Rico.

put out of business (verb phrase) To put out of business means to force to close down.

quinceañera (noun) A quinceañera is a celebration of a girl's fifteenth birthday.

quinine (noun) Quinine is a medicine and ingredient that tastes bitter.

rage (verb) To rage is to move with harmful force.

rainforest (noun) A rainforest is a forest with very tall trees, where it is very warm and rains almost every day.

recede (verb) To recede is to move back or away.

reflect (verb) To reflect is to send something, like light, back.

refract (verb) To refract is to change the direction of light or sound.

refrigerator (noun) A refrigerator is a device that is used to keep food and drinks cold.

regard (verb) To regard means to pay attention to.

region (noun) A region is an area that is different from other places in some way.

reliable (adjective) Reliable means able to be trusted.

replace (verb) To replace is to take the place of something else.

resident (noun) A resident is a person who lives in a particular place.

roiling (adjective) Roiling means moving in a fierce and choppy way.

Sahara (proper noun) Sahara is the name of a desert.

Samarra (proper noun) Samarra is a city in Iraq that has existed for thousands of years.

scan (verb) To scan is to search.

science fiction (noun) Science fiction is a story with imaginary events about science or technology.

scientist (noun) A scientist is a person who studies science.

sea level (noun) Sea level is the average level of the sea and is used to measure the height of an area of land.

senior citizen (noun) A senior citizen is an older person, specifically someone more than 65 years old.

separated (verb, past participle) Separated means moved apart.

serenade (verb) To serenade is to perform music for someone, often outside a window.

set list (noun) A set list is a list of songs played at a concert.

settle (verb) To settle is to set up a home somewhere new.

settlement (noun) A settlement is a group of homes in a new area.

sharp (adjective) Sharp means able to see or notice things easily.

shrub (noun) A shrub is a bush.

shudder (verb) To shudder is to shiver with fear or disgust.

Siberia (proper noun) Siberia is the name of a region in Russia.

sightseeing (noun) Sightseeing is the activity of visiting interesting places.

signal (noun) A signal is a message used to share information.

simmer (verb) To simmer is to boil gently.

simultaneously (adverb) Simultaneously means happening at the same time.

siren (noun) A siren is a device that makes a loud warning sound.

skeptically (adverb) Skeptically means with doubt.

sly (adjective) Sly means clever in a sneaky way.

soldier (noun) A soldier is a person who serves in an army.

source (noun) The source of something is where it comes from.

species (noun) A species is a kind of plant or animal.

squirm (verb) To squirm is to wiggle around.

stable (noun) A stable is a building where horses live and are cared for.

structure (noun) A structure is something built by putting parts together.

subway (noun) A subway is a train that runs on underground tracks.

suited (adjective) Suited means a good match for something.

summit (noun) The summit is the top of the mountain.

summons (noun) A summons is an order to come to a certain place.

surface (noun) The surface is the outer layer.

suspect (verb) To suspect is to guess.

tableware (noun) Tableware are items like dishes and glasses that are used when eating.

tackle (verb) To tackle is to try to do something difficult.

Taos Pueblo (proper noun) Taos Pueblo is the town where Taos people protect their traditions, or older ways of living.

technique (noun) A technique is a way of doing a task.

temperature (noun) Temperature is the amount of heat in something.

thrash (verb) To thrash is to strike out at.

tortoise (noun) A tortoise is a turtle that lives on land.

towline (noun) A towline is a rope or chain used to pull something.

track (verb) To track is to watch where someone moves.

traditional (adjective) Traditional describes traditions, or old ways of thinking or doing things.

traditional art (noun phrase) Traditional art is art that has been handed down over time by a group of people.

tremble (verb) To tremble is to shake.

tribute (noun) A tribute is something given, done, or said to show respect or honor for someone.

triumphantly (adverb) Triumphantly means in a way that celebrates success.

trough (noun) A trough is a long container used to give food or water to animals.

trudge (verb) To trudge is to walk with slow and heavy steps.

twigs (noun) A twig is a small tree branch.

vainly (adverb) Vainly means without success.

vamos a gozar (verb phrase) *Vamos a gozar* is a Spanish phrase that means "Let's have some fun!"

variety (noun) A variety is an assortment of many different things.

vast (adjective) Vast means very great in size.

vault (noun) A vault is a room for keeping important items safe.

vehicle (noun) A vehicle is something used for carrying people or goods.

venues (plural noun) A venue is a place where an event is held.

vine (noun) A vine is a climbing plant.

visual (adjective) Visual describes something you can see.

vivid (adjective) Vivid means clear and life-like.

wade (verb) To wade is to walk through water.

wend (verb) To wend is to move slowly in a curving path.

whistle (verb) To whistle is to make a loud, clear sound.

wispy (adjective) Wispy means thin or airy.

worried (adjective) Worried means nervous.