

GRADE 3 UNITS 1-9

DECODABLE PASSAGES

Grade 3

Units 1–9

Decodable Passages

Acknowledgement: Thank you to all the Texas educators and stakeholders who supported the review process and provided feedback. These materials are the result of the work of numerous individuals, and we are deeply grateful for their contributions. **Notice:** These learning resources have been built for Texas students, aligned to the Texas Essential Knowledge and Skills, and are made available pursuant to Chapter 31, Subchapter B-1 of the Texas Education Code.

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Grade 3 | Units 1–9

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Grade 3 | Units 1-9

Introduction

DECODABLE PASSAGES

This Grade 3 supplement includes decodable reading passages to support reading instruction. Decodable passages are short literary or informational texts that incorporate the decoding skills students learn in the Texas Elementary Literacy Program; the texts provide ongoing practice opportunities in isolation and in connected, controlled text that follows the instructional focus. Each decodable passage corresponds to specific lessons in Units 1–9 and connects to the instructional reading material for each of those lessons. In addition to decodable words in each passage, five skill words are highlighted for students to practice the skill before reading the passage. These materials may be used during small-group instruction, partner work, or independent reading practice after the lesson is taught or during Pausing Points.

1

Grade 3 | Unit 1

Lesson 1: "Summary of 'The Riverbank, Part I'"

Lesson 3: "Summary of 'The Open Road'"

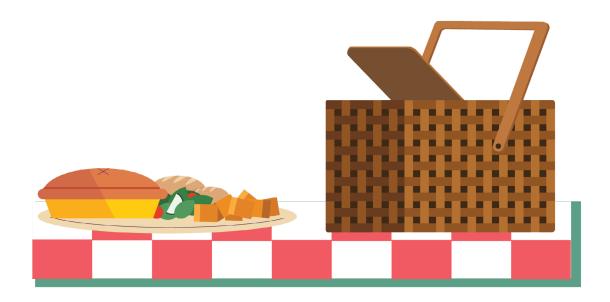
Lesson 5: "Summary of 'Mr. Badger'"

Lesson 11: "Summary of 'The Further Adventures of Toad, Part II'"

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Lesson 13: "Summary of 'The Return of Toad, Part II'"

Lesson 14: "Summary of 'The Open Road, Part II'"



Summary of "The Riverbank, Part I"

Skill: Short Vowel Review

spring

swept

picnic

basket

lunch

The Wind in the Willows follows the adventures of many animals who live in the English countryside. The animals in the story act like people.

The chapter "The Riverbank" begins with Mole doing his spring cleaning. He has swept and dusted. But when he is mixing some paint, he smells a hint of the fresh spring air outside. He drops his brush and runs up the tunnel. The world outside his den is all warm grass and yellow sunlight.

He happily jumps and skips across the grass until he comes to a hedge. He walks until he comes to a river that is full to the brim with rushing water. He sits down to rest as he watches and listens to the river. Soon, a water rat comes out of a hole on the riverbank. Rat says hello to Mole and asks if Mole would like to go for a boat ride. Mole has never been in a boat before and can't wait to hop in.

Mole has such a good time that Rat invites him to stay on the boat all day. He packs a picnic basket, and they float down the river. Mole relaxes and drags a paw in the cool water as they go. After a while, Mole asks Rat about the places they are passing by. Rat tells him about the Wild Wood, where many other creatures live but where they must always be careful. Mole asks what is past the Wild Wood. Rat doesn't seem to want to talk about it. He tells Mole that no one with any sense goes into the Wide World! Then they stop in a backwater to have their lunch.

Summary of "The Open Road"

Skill: Long Vowel Review

take

late

strikes

behind

drive

"The Open Road" begins with Mole and Rat on the riverbank. Mole says that he would like to meet Mr. Toad. Rat agrees to take Mole for a visit. They row a boat up the river.

Mr. Toad's house is old and quite nice. Rat says that Mr. Toad is rich. To their surprise, Mr. Toad is waiting for Rat on the porch. He hopes Rat will help him with something. He shows them a brand-new covered wagon painted bright yellow and green. The inside is complete with bunks for sleeping, a tiny living space, and a kitchen.

Toad announces that everything is ready for them to leave that very afternoon. Mole is excited, but Rat is not so sure. Toad talks to them over lunch. Rat agrees to take the trip. He is full of praise for "the open road." They harness Toad's gray horse and set off through the countryside.

They sleep in the bunks. In the morning, Mr. Toad sleeps late. Rat and Mole must do all the work of finding and making breakfast. On the second morning, they make Mr. Toad join in doing the chores. He complains.

Later that day, they plod along the narrow lane, and disaster strikes. From behind comes the strange noise "pup-pup!" and a white cloud of dust. A motorcar races up the lane. It passes them so quickly that the caravan goes off the road and crashes. Rat and Mole try to restore it so they can drive home, but Mr. Toad does not help. He no longer cares. He has seen what he wants: a motorcar.

Summary of "Mr. Badger"

Skill: Syllables with 'le'

middle

candle

settle

people

jumble

The setting for "Mr. Badger" begins in the middle of a cold, snowy night. Rat and Mole have lost their way and are waiting outside Badger's house. Mole is hurt, with a cut on his shin.

When Badger opens his door, they tumble inside. The house is a set of underground tunnels, and Badger is a very capable host. With a candle, he leads them to his kitchen. It is warm and cozy. They hear the crackle of a fire and see a comfortable place to settle. Badger gives them food and helps Mole tend to his shin. Later, he offers them two little beds to sleep in.

In the morning, the weather is worse. In Badger's kitchen, they find a couple of young hedgehogs who have lost their way. They all sit at the table for breakfast. Badger has already eaten and has settled into his armchair for a nap. Later, Otter rings the doorbell and asks for Rat and Mole. They have been gone a long time, and their friends are worried about them.

Badger gives them a tour of his home. It is not simple at all! Instead, it is a huge tangle of tunnels and rooms. He explains that it was built by people who left long ago. As the daylight begins to dwindle, they shuffle along the passages to a shortcut home, with a jumble of vines and plants hiding the door.

5

Summary of "The Further Adventures of Toad, Part II"

Skill: Spellings 'g' and 'c': /s/, /k/, /j/, /g/

cents

clever

plunges

genius

gasping

"The Further Adventures of Toad, Part II" begins with Toad in disguise, riding a horse he stole. He is tired and hungry, and he has no money. Soon, he meets a traveler with a covered wagon cooking stew over a fire. The traveler offers to buy the horse. Toad bargains for a higher price that includes a very good breakfast.

Toad starts to walk with some cents in his pocket and a big meal in his belly. He shows his pride by singing a song about how clever he is. Then a fancy motorcar comes along. Toad decides to ask for a ride but then remembers the car. It is the one he stole! He is sure he will be caught, and he plunges to the ground.

Luckily, the drivers do not know it is Toad because he is still in disguise. They gently lift him into the car. Soon, Toad regains his energy. He convinces them to let him drive. Thinking himself quite the genius, he jumps behind the wheel. He begins by driving carefully. Then he goes faster and faster. He reveals that he is Toad. They try to grab him, but he crashes the car, and everyone goes flying.

Angry with himself, Toad runs away. Then he sees that the gentlemen from the car are chasing him. With them are two policemen. It looks like he can't get away. All of a sudden, he is splashing and gasping. He has fallen into the river!

Summary of "The Return of Toad, Part I"

Skill: Spelling alternatives 'wh,' 'qu,' 'wr,' 'kn'

whisk

quickly

wrong

quarrels

know

When "The Return of Toad, Part I" begins, Toad is soaking wet and on the run. He thinks the gentlemen chasing him will whisk him away. Then he sees a familiar face in a hole in the riverbank. Rat quickly pulls him inside the hole.

Rat tells Toad to change out of his stolen clothes while Rat makes lunch. After washing up, Toad tells Rat about everything he has done. He quietly admits that he was wrong to steal the motorcar. Toad wants to go home. He doesn't yet know that he can't return. Over lunch, Rat tells Toad that some of the animals from the Wild Wood have wrongfully taken over Toad Hall.

Outraged, Toad storms off to his home. He marches up to the gate. There, he quarrels with a ferret. Feeling upset, Toad runs back to Rat's house. But he isn't ready to give up. He makes a request to borrow Rat's boat and goes quietly up the river. Two stoats drop a huge stone from a bridge onto the boat. The boat sinks.

Toad returns to Rat, who is upset at the loss of his boat. Toad says he will quit making decisions without his friends' approval. Rat suggests that they wait for Mole and Badger, who might know what to do to get the house back. Soon, Badger knocks at the door.

Summary of "The Return of Toad, Part II"

Skill: Spelling alternatives 'sh,' 'ch,' 'ph,' 'th'

cushions

aches

speeches

triumph

thoughtful

In "The Return of Toad, Part II," Rat ushers in Mole to join Toad and Badger. The friends chat about what they should do to reclaim Toad Hall. Toad cannot stop showing off. He has not learned his lesson about bragging.

Badger hushes everyone and tells Toad that he should be ashamed. Toad sobs into the sofa cushions. He aches for home and feels hopeless. But Badger tells them about a secret passage into Toad Hall. Together, they make a plan.

The next night, the weasels are having a birthday party in Toad Hall. The four friends creep in along the secret passage. Soon, they are below the party. They hear cheering, speeches, and chatter. They push open the trap door and surprise the weasels. They march into the room. They swing and thump sticks. It seems like there are more than four of them. The four heroes are like fighting machines! The weasels screech and rush away, turning over tables and chairs. Toad can reclaim his ownership of Toad Hall in triumph.

Toad thinks he should be praised for the victory. But his friends remind him of the problems his bragging has caused before. He thinks about it and takes on a new philosophy. He tries to change. As time goes on, Toad becomes more thoughtful.

Summary of "The Open Road, Part II"

Skill: R-controlled vowels

informs
bird
depart
charming
eager

At the beginning of "The Open Road, Part II," Toad orders Rat and Mole to help him. He informs them that it is important. Rat, who knows Toad very well, is not sure he wants to be of service.

It turns out that Toad has purchased a wagon with a motor for traveling and camping. It carries beds, food, water, books, and even a bird in a birdcage. Toad wants to start their journey today. As a matter of fact, he wants to depart this very afternoon.

Toad doesn't care that Rat has other plans. He doesn't care that Rat would prefer to go boating on the river.

Rat firmly says no. However, Toad paints a charming picture. As he dances and whirls about them with excitement, he tells of the splendor of the road. He says their life in the open air will be carefree and thrilling. Mole is quite eager to experience it. He has never had such an adventure.

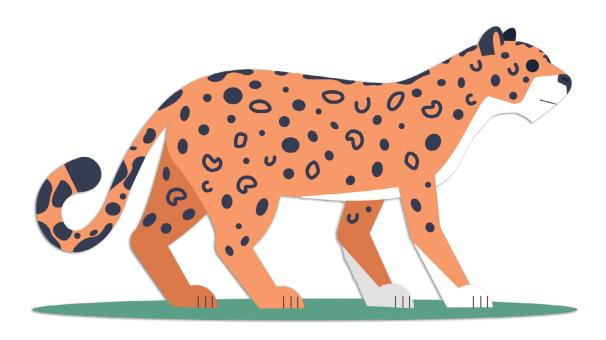
Rat starts to waver. He is no longer so sure. He begins to think that a journey could be fun after all.

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Grade 3 | Unit 2

Lessons 1 and 6: "Rattenborough and Frieda"

Lesson 11: "All About Woodpeckers"



Unit 2 | Lessons 1 and 6

Rattenborough and Frieda

Skill: Root Words, <i>-ing</i> , and <i>-ed</i>	
waving tripped flashed guessed drifting	

Rattenborough here! I was waving at you, but I wasn't sure you saw me.

That reminded me of the time I met my friend Frieda in the woods. I was hiking, and it was just after sunset. I had a flashlight so that I could see where I was going. Between the trees, I thought I saw another flashlight bobbing up and down. But then it blinked off. I thought someone must have tripped while they were hiking. I rushed over to help. I looked all around in the dark, but nobody was there.

Then a small light flashed right next to me. I guess you could say I was shocked. I jumped and almost dropped my flashlight. But then a little voice yelped, "Watch where you're going!" That's when I saw where the light was coming from.

Have you guessed? It was Frieda. She's a firefly. Fireflies talk to each other with light. Chemicals mix in their bodies, creating light.

Despite the name, fireflies are really part of the beetle family. They have strong, shell-like wings. They like living in warm, humid woods and fields, and they love drifting near lakes and ponds.

I don't know about you, but I think being able to light up would be pretty useful. For one thing, you wouldn't have to carry a flashlight. For another thing, firefly lights are more efficient than any light bulb humans have ever invented.

Frieda says that some fireflies are endangered. Humans are moving into the places where fireflies once lived. But people can help by planting bug-friendly gardens. People can also start letting autumn leaves rot on the ground instead of bagging them up as well as turning off outdoor lights that could be confusing for insects like Frieda.

All About Woodpeckers

Skill: Root Words and -es

pries

flies

crawlies

territories

cavities

Rat-a-tat! Rat-a-tat! What is that?

Maybe you've heard something that sounds like quick hammering in the trees. It might be a woodpecker. Different kinds of woodpeckers live in the forests of almost every continent.

A woodpecker's hammering noise comes from its beak. The beak is long and sturdy, like a sharp tool. And like a sharp tool, the woodpecker uses its beak to dig into the wood. The woodpecker bangs its beak into tree trunks. It also pulls and pries dry bark off the trunk.

Why would woodpeckers spend so much time shredding branches? Do they hate trees? Nope! They're hungry. Woodpeckers eat insects like flies and beetles, as well as spiders and millipedes. Many of these creepy-crawlies live in trees or lay eggs in the wood.

Woodpeckers also eat nuts, grains, and seeds. The acorn woodpecker drills holes into the sides of trees and stores acorns in these holes.

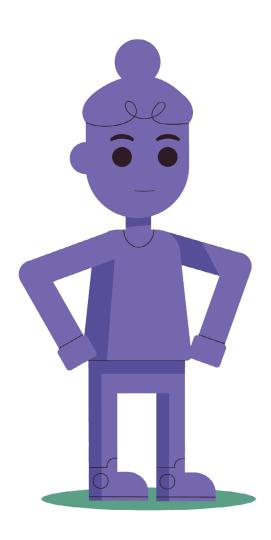
A woodpecker's noise carries far and wide. It helps other woodpeckers know where to find it. The sound also helps woodpeckers define their territories, or the areas where they live.

So, why don't woodpeckers hurt themselves? If we hit our heads against the trees, we could get badly hurt, but woodpeckers are fine. For one thing, their brains are much smaller and lighter than ours. We also know that some of the bones in their necks are like sponges. They have open cavities, or pockets of air, that might offer padding. Lastly, when woodpeckers are pecking, most of the force is spread out towards their body and very little to the bird's brain. Woodpeckers remind us of the beauty of nature and the world around us.

Grade 3 | Unit 3

Lessons 1 and 6: "How Do Your Skeleton and Your Joints Help You Walk?"

Lesson 11: "All About the Bones in Your Ears"



Unit 3 | Lessons 1 and 6

How Do Your Skeleton and Your Joints Help You Walk?

Skill: Regular and Irregular Singular and Plural Nouns

wolves

feet

babies

lives

arches

You probably do something difficult every day without even thinking about it. You walk!

People are the only mammals that usually walk on two feet. Adults and children all walk on two feet. Other mammals, like wolves, sheep, and deer, walk on four. Some mammals, like bears, can balance on two feet. They might even walk a few steps, but that isn't the main way they get around.

Can you think of any other animals that *always* walk on two feet? Here's a hint: *Honk!* That's right—geese. In fact, all birds

walk (or hop, or waddle) on two feet.

Babies don't walk. They crawl until the first or second year of their lives. They have to learn to walk. It takes a lot of practice. It also takes a lot of falling down. The muscles in their legs and feet have to get stronger.

Wiggle your toes. Spread them out wide. Point and flex your foot. Rotate it in a circle. Your feet and ankles can move in many different ways. The calf—the big muscle below your knee on the back of the leg—helps your feet move. If you touch your calves, you can feel them working as you move your feet and toes.

Why do you think your feet and toes need to move in so many different ways? One reason is that you move in many ways. You walk, run, jump, and dance. You go forward and backward and sideways. That takes balance. It takes flexibility. The bones in your feet form three different arches. These help your feet respond to changes in the ground you walk on. The joints in each of your legs—ankle, knee, and hip—also help. If you step on a small pebble, you don't fall over.

Walking takes strength too. Your legs are heavy. When you walk or run, your feet take a beating from the weight. Did you know your feet were that strong?

All About the Bones in Your Ears

Skill: Mixed Review of Suffix Spellings putting vibrates shaking amplifies shaped

You can see and feel the shapes of some of your bones. If you watch your fingers moving, you can see where the different bones begin and end. By putting your hand on your knee, you might be able to feel your patella, or kneecap, as you bend and straighten your leg to raise your foot.

But you have other bones that are covered. You can't see them or touch them. Three of these bones are inside each of your ears. They're the smallest bones in the human body. These bones help people hear.

The hammer bone is next to your eardrum. The eardrum vibrates, or moves back and forth quickly when a sound enters the ear. When that shaking reaches the hammer, the hammer shakes too. It shakes in a way that increases the vibrations.

Next to the hammer is the anvil bone. An anvil is a hard metal surface that a blacksmith strikes. A blacksmith is a person who melts iron and uses tools to make metal objects like horseshoes. The bones look a little bit like a hammer and anvil. When the hammer vibrates, the anvil starts to vibrate too. Although it is smaller than the hammer, the anvil amplifies the vibrations even more.

The vibrations reach the tiniest bone of all, the stirrup. It is shaped like the stirrup on a saddle. At its end is a membrane, which connects to the inner ear. The stirrup carries the vibrations to the fluid in the inner ear. Waves in this fluid reach the hairlike cells in the cochlea. (Remember, the cochlea is the bony, snail-shaped tube in the inner ear.) The cells translate the waves into nerve signals. When the signals reach your brain, you hear the sound!

That's a complicated process. But it happens very fast, without you ever having to think about it.

Grade 3 | Unit 4

Lesson 1: "The Founding of Rome"

Lesson 6: "What Did Ancient Romans Eat?"

Lesson 11: "All About the Pantheon"



The Founding of Rome

Skill: R-Controlled Vowels

started forced survived shepherd storm How did the city of Rome get its start? One story is that Rome was founded, or started, by the twins Romulus and Remus.

According to the myth, Princess Rhea Silvia gave birth to twin boys named Romulus and Remus. Their father was the Roman god of war, Mars. You might also know him by his Greek name, Ares.

Rhea was the daughter of Numitor, the king of Alba Longa.

Numitor had been forced from his throne by his brother

Amulius. Amulius was afraid that the twins would grow up and take control of the kingdom. The boys were put in a basket and sent down the Tiber River. Miraculously, they survived!

The river's waters carried them to a fig tree growing on the riverbank. There, a she-wolf and a woodpecker fed the boys. The twins were rescued by a shepherd, who raised them.

When they grew up, Romulus and Remus returned to Alba Longa. They helped their grandfather Numitor become king again. Later, they built the city of Rome at the place where they had been rescued from the river. The Tiber River still runs through Rome today.

Unfortunately, this story doesn't have the happiest ending. Romulus wanted more power. He built a city wall to get rid of Remus. For a while, Romulus ruled with the leader of a nearby group of people called the Sabines. Then, he disappeared in a storm. In one version of the story, he became the immortal Roman god Quirinus.

The story of brother against brother is common in many Greek and Roman myths. So is the story of the fearful ruler who tries to protect their power. Over the years, people who retold the stories of real historical figures may have also added other details. So we will likely never know the whole true story of how Rome got its start.

What Did Ancient Romans Eat?

Skill: /ee/ > 'e' and 'ee'

plebeian

cheese

beef

recipes

sweets

What were daily mealtimes like in ancient Rome? A plebeian might eat vegetables with cheese and bread. The bread would have been made from wheat or barley, like today's multigrain bread. Protein would usually come from peas, beans, or seafood. Beef was expensive, so it wasn't in every dish.

Dishes might be spicy or salty. Romans liked fresh herbs and pepper. Many people seasoned their food with a fish sauce called garum. It might have tasted a bit salty. Romans wrote down some of these recipes. We can still see the old recipes today.

Wealthy patrician Romans ate differently. Their meals included poultry and even songbirds. Would you like to taste peacock or flamingo? The wealthiest patricians did! They also liked to eat dormice, or tiny rodents. Romans stuffed them with sausage and spices. For them, this was a delicacy, or luxurious treat.

Romans liked sweets too, just as we do. The taste of sweetness often came from honey or fruits, like dates or grapes. Little cakes or cookies with sesame seeds were both sweet and nutty.

Some people ate at home. Others bought food at street vendors or bakeries in the city. Two things they didn't eat were pizza and spaghetti. We now think of those as typical foods that come from Italy, where modern-day Rome is located. However, tomatoes were first grown by people in South America and were not brought to Rome or other parts of Europe until the 1500s. The ancient Romans didn't eat them at all.

All About the Pantheon

Skill: /ee/ > 'ie.' 'ea.' 'e.' 'i'

cities

seawater

Pantheon

removed

married

You might think of concrete as something modern. After all, it's in many cities. But it's actually ancient! Romans made concrete many centuries—or hundreds of years—ago. Roman concrete was made from a mix of seawater, lime, and ash from volcanoes.

Roman concrete can be seen in an ancient temple called the Pantheon. Its concrete dome is the largest in the world. You might think all that concrete would be heavy, and you would be right. The dome weighs nearly 5,000 tons. The concrete coffers, or building blocks, were carefully placed in rings so that the blocks pressed against each other to stay in place.

Inside the Pantheon, there is more beauty to behold. The marble floor and walls are decorated with paintings and small nooks which hold statues. The domed ceiling used to be covered in bronze, but now it is bare. In the 1600s, the bronze was removed and used to make weapons and decorations.

The Pantheon does not have windows. At the top of the dome is the oculus, a round hole. It lets light into the building. It also lets in rain, so the floor has a cleverly built drain. During the day, a circle of light creeps around the inside.

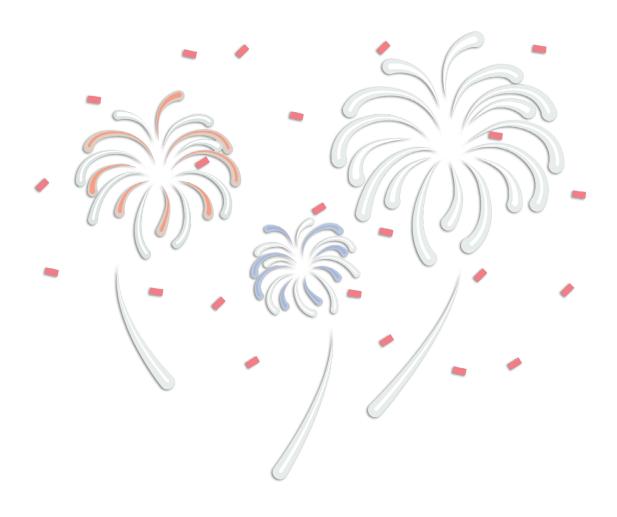
Many of the magnificent buildings of ancient Rome are ruins now. The Pantheon is not. This is partly because it has been used since it was built. It became a church. It is also a place where great artists and saints of the past are buried. People still get married there today. The Pantheon can feel quite empty. Even in a crowd, you might feel as though you are alone with the circle of sky you can see through the oculus.

Grade 3 | Unit 5

Lesson 1: "Summary of 'What Is Light?, Part I'"

Lesson 6: "All About Refraction"

Lesson 11: "Samuel Explains Energy to Amy and Ethan"



Summary of "What Is Light?, Part I"

Skill: /ee/ > 'ea,' 'y,' 'i,' 'e,' 'ee,' 'ie,' 'ey,' 'e_e' reveals energy easily helium gleams

Chapter 1 reveals information about a form of energy we see every day: light. Light moves through the world at great speed—up to 186,000 miles per second.

Light travels as a wave. The waves have many lengths. The length of a wave determines whether or not we can see the light. Wavelengths also affect how we see color. We see the longest waves as red and the shortest as violet.

Some animals' eyes are different from ours. They can see light people can't see with our eyes alone. Bees, for example, can see a color called ultraviolet. There are ultraviolet patterns on flower petals. We need special lenses to view these colors. However, we can see red easily and bees can't!

The sun is our main source of energy. That energy comes to us as heat and light, which are created when the sun's hydrogen atoms are converted to helium. The energy travels through space to Earth. The sun's light is called white light. That means it is made up of a combination of all the colors we can see: red, orange, yellow, green, blue, indigo, and violet. The moon can also look as though it gleams with white light. Actually, it doesn't create light of its own. It reflects the light of the sun.

We use electricity to power our own sources of light and heat. Electricity is a type of energy. Where do you think the energy for electricity comes from?

All About Refraction

Skill: /ae/ > 'ai,' 'ea,' 'ay'

straight

break

dainty

greater

array

You already know that light rays travel at a very fast speed. You also know that light rays travel in straight lines. But what happens when something gets in the way of a ray's movement?

Light waves can pass through many things. Some things do not break the wave, but they change its shape. They bend it, or change the direction in which it is moving. This is known as refraction. When light rays bend, they look different to us.

Maybe you have seen the way someone seems to change shape when they are in a swimming pool. Their legs may look flat or the parts of the body that are out of the water may look dainty. That's because light slows down as it moves from air to water, and the water bends rays of light.

A convex lens curves out. When light rays pass through a convex lens, they bend in, toward the center of the lens. This makes what you see through the lens look magnified, or greater. Convex lenses help us see tiny details more plainly. They also help us see things that are far away, like the faintest stars in the night sky. Our eyes contain convex lenses. We also use them in cameras, microscopes, and telescopes.

A concave lens curves in, toward its center. It bends the light rays so they move away from each other. This makes what you see through the lens look smaller. It can help the lens show a wider array, or range, of things. When might we need to use a concave lens? What would someone gain by making things look smaller?

Samuel Explains Energy to Amy and Ethan

Skill: /ae/> 'a_e,' 'a' inhaled Amy space vibrating baking

Tick, tick, tick, tick . . . ding!

"Finally!" yelled Ethan. "The cake has finished baking!" Samuel raced to put on an apron and oven mitts. As he took out the cake, he inhaled the fragrant smell of chocolate that filled the air.

"How can you still crave cake after everything we just ate?" asked Amy. The Thanksgiving plates were piled high on the table. Everyone had eaten turkey, potatoes, kale salad, stuffing, gravy, and Jack's famous maple-glazed bacon and

carrots. Jack was snoozing in Samuel's armchair.

"I can always make space for cake," said Ethan.

"Same here," said Samuel. "We'll just have to be patient while I make the frosting." The oven made a vibrating sound and then whirred.

"What was that?" yelped Ethan.

"There's a fan in the oven," Samuel explained. "It helps cool down the oven after I turn it off."

Amy stared through the oven window. "Does baking use energy?" she asked.

"It sure does," said Samuel. "It takes energy to heat something up. There's a gas flame in the oven."

"There's a lot of energy in a kitchen, isn't there?" asked Amy.

"Yes!" agreed Samuel. "You're probably thinking about things like the oven and the microwave and the refrigerator. Those all use energy from gas or electricity, and they release light, heat, and sound waves. But there's also energy in things like that kale salad. Food stores energy. When we eat the food, we get the energy to do things like walk, paint, play baseball—"

"Or eat cake," interrupted Ethan.

"Or eat cake," Samuel smiled.

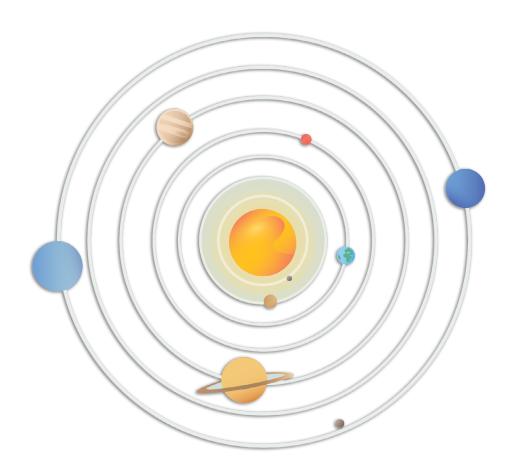
Grade 3 | Unit 6

Lesson 1: "Seasons and Equinoxes"

Lesson 6: "Who Was Annie Jump Cannon?"

Lesson 11: "All About Gravity"

Unit 6



24

Seasons and the Equinoxes

Skill: /j/ > 'ge,' 'dge,' 'g,' 'j,' 'dg'
orange
edge
giant
June
ages

Today is my favorite day of the year: September 22. It's not just because the trees are starting to turn gold and orange and red—though they are. It's not just because right now you can get the best-tasting apples of the whole year—though you can. It's not just because the edge of Lake Michigan is a beautiful, shining blue—though it is.

No, today is my favorite because it's one of the two days each year when day and night are exactly the same length. There

are only two times of the year like this. One is on or around March 20. The other is on or around September 22. After today, nights here will be longer, because the Northern Hemisphere will be tilting away from the sun. These days are called equinoxes.

My aunt showed me pictures of a place in England called Stonehenge. It's a big circle of giant wedges of rock. Some ancient people arranged the rocks. My aunt said we don't know much about those people, but they must have been observing the skies and the seasons. At the summer solstice—the longest day of the year, in June—the sun appears to set exactly in line with a gap in the rocks. It's pretty amazing that people who lived so long ago had the knowledge to figure out these patterns.

We live in Chicago, which is in the Northern Hemisphere. Today, my aunt and I are going downtown. During the fall equinox, the sun appears to set exactly in line with a gap between the skyscrapers. It floods the streets with orange light edging across the landscape. People call this "Chicagohenge." I can't wait to see it for myself.

What I find most amazing about the equinox is that people have been observing it for so long. It's as though, throughout the ages, people have understood how special this planet is. They must have understood how the sun gives us just the right amount of heat—along with gorgeous orange light. They must have understood how the trees lose their leaves and then regrow them (and then grow apples!). And they must have understood how all of these patterns of change let us change and grow along with them. Is it any wonder that this is my favorite day?

Who Was Annie Jump Cannon?

Skill: /n/ > 'kn,' 'nn,' 'gn,' 'n'

knowledge announced scanned knack

assign

Humans have been studying the sky for centuries. Bit by bit, scientists have gained knowledge and helped us better understand the stars and the universe.

One such scientist was Annie Jump Cannon. Cannon was a computer. Back in the 1890s, the word *computer* didn't mean what it means today. It referred to a person who did repetitive mathematical work. Many of the first computers were women.

Cannon worked with a number of other women in a laboratory at Harvard University. Astronomer Edward Pickering ran the lab. He had announced a goal of listing all the stars seen in the sky. That work would have once involved telescopes. Innovations in photography meant that the lab had images of the stars. The computers scanned photographs of the night sky. They counted and classified each point of light.

Two computers, Williamina Fleming and Antonia Maury, had created a system. When Cannon joined the work, she changed certain things in their system. She had a knack for identifying the different forms of light that the stars seemed to give off. She designed a system to assign the stars to different groups. Other scientists soon recognized that Cannon was actually organizing stars by their temperatures. Her system became the standard way to classify stars.

New technology helps scientists find stars and galaxies that hadn't been visible before. But scientists still use Annie Jump Cannon's system to classify the stars they find.

Unit 6 26

All About Gravity

Skill: Mixed Review of /ae/, /s/, /k/, /j/, /n/

matter

mass

weaker

jump

nearly

Gravity is a force of attraction. Gravity pulls matter—all matter—together. You can't see it, but you can see and feel what it does. If you've ever been to the shore of a large body of water and been captivated by the rise and fall of the water level with the tide, you've seen gravitational pull in action.

Objects with great mass—that is, a great amount of matter—have a strong gravitational pull. Earth and the sun have strong gravitational pulls. An object with less mass has a weaker gravitational pull. The moon has less mass than Earth, and its pull is weaker. A house has much less mass than the moon has. You don't even notice its gravitational pull, but it's there!

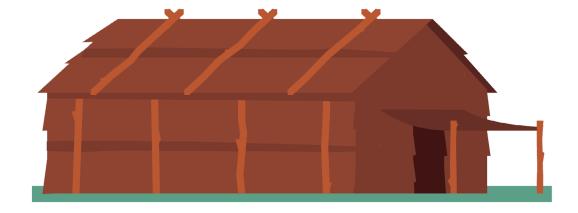
Mass is not the only thing that affects gravity. Distance does too. The pull is stronger from close objects than from those that are far away. That's why, even when you jump, you quickly return to the surface of Earth instead of flying through space toward the sun. In another example, when planets move farther from the sun in their orbits, the force of gravity becomes weaker between the sun and those planets.

The sun has nearly all of the mass in our solar system. It is far larger than any of the planets, even the gas giants like Jupiter. It is larger than moons, comets, and asteroids. So the sun has the strongest gravitational pull in the system. However, it is balanced by the speed at which the planets move in their orbits. Instead of falling in toward the sun, the entire system keeps moving.

Grade 3 | Unit 7

Lesson 1: "Etu and the Mammoth Hunt"

Lesson 6: "Traditions: Old and New"



Etu and the Mammoth Hunt

Skill: /ə/ > 'a,' 'e'

avoid

herd

shelter

area

several

"Etu, the Hunter" begins with young Etu following his brothers Hakan and Delsin across the snow. Delsin steps carefully in Hakan's footprints, and Etu must do the same. It is his first hunt, and he must learn from his brothers. They all move silently to avoid scaring any animals.

It is winter again. The land is covered in snow, and a cold wind is blowing. Tall grasses peek out above the snow. Etu and his brothers are hunting woolly mammoths, following a herd that eats these grasses. Etu's people will eat the mammoth meat and use the skin and bones for clothes, shelter, and tools. Each woolly mammoth is huge and will provide enough meat to last a long time.

The camp area was damaged by a storm several days ago, so Etu's mother and sister stayed behind to repair a shelter. It is a warm tent made of mammoth skins and bones.

In the distance, Etu's father and uncles are moving through the snow. They carry spears and spear-throwers. They will be the ones to corner a woolly mammoth and surround it for the hunt. They could still face problems, since the mammoth might panic and run toward them. It might even cause the whole herd to stampede. This is why they must move with such silence.

Late in the day, one mammoth falls behind the herd. The hunters gather around it and trap it in a ditch, or a low-lying area. The hunt is successful.

Unit 7 29

Traditions: Old and New

Skill: /ə/ + /l/ > 'al,' 'le,' 'el': 'tion' > /sh/ + /ə/ + /n/

buckled castle

survival

traditional

sensational

"I had an excellent day in school," said Luna, as she hopped into the car and buckled her seatbelt.

Oliver smiled. Curious to hear more, he casually asked his little sister, "Why? What did you learn today?"

"At recess, we used our imaginations and made a castle for animals who live in the jungle. It was fun," said Luna. "We worked on our snail survival investigation during Science, and after that, we read a story about the Ancestral Puebloans from this area."

Oliver's eyes sparkled. "I love learning about the people who came before us. What was the story about?"

"The title of the story was 'Alemeda, the Basket Weaver," explained Luna. "It was about an Indigenous, or Native, girl who lived in the American Southwest. Her people had a tradition of making baskets. The basket construction skills were passed down from mother to daughter. Alemeda would rather hunt, so she hid. But her little brother revealed where she was, and her mother reminded her that she must do her work. Alemeda learned that baskets woven by the Ancestral Puebloans were both traditional and important for survival."

"Wow," said Oliver. "That reminds me of a project our Aunt Mabel was talking about. She works with a national organization of Native Americans in Arizona. They help teach others about the Indigenous food systems used by earlier generations. They preserve local seeds to grow crops that are originally from the area. They also teach people how to cook traditional meals using those regional crops. Grandmother said that Aunt Mabel has been busy planning a Community

Unit 7 30

Healing Meal event."

"What's a Community Healing Meal?" asked Luna.

"A Community Healing Meal will bring local people together for a meal made with Indigenous ingredients," answered Oliver. "The meal will be made to meet the community's needs and share ancestral traditions. I hope I can go."

"What a sensational idea!" exclaimed Luna. "You are bringing your favorite little sister too, right?"

Oliver laughed. "Sure! It can be a new tradition for us."

"Now, let's go to the market and pick up some ingredients to make an after-school snack."

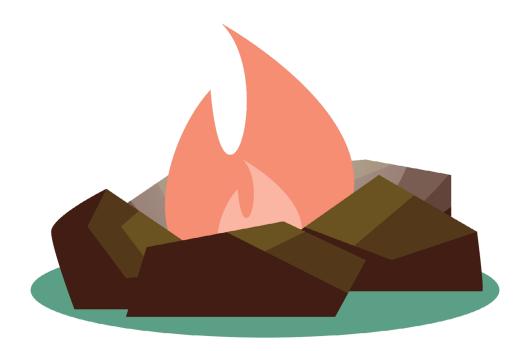
Grade 3 | Unit 8

Lesson 1: "Sailors Needed!"

Unit 8

Lesson 6: "Coronado Describes Hawikuh to the King of Spain"

Lesson 10: "A Tale of Mutiny on Henry Hudson's Last Voyage"



32

Sailors Needed!

Skill: /ue/ > 'u_e,' 'ue,' 'u' rudely rescued cumin perfume issue

"Crew needed! Sailors needed! Gold, silver, and endless adventure!" *Clang! Clang!* The mariner continued along the street, shouting and ringing a large bell. Young boys followed him, and behind the boys were several dogs and chickens whose naps had been rudely disturbed. "Crew needed! Sailors needed! Leaving in two days!"

Jack and Wilfredo stared after the mariner as the hubbub faded. *Endless adventure* . . .

Wilfredo tugged at Jack's sleeve. "Jack! You're a thousand miles away."

"I wish," said Jack. "Have you ever thought of sailing, Wilfredo?"

"No," said Wilfredo, laughing. "Absolutely not. Why would anyone want to? The crews on half of those ships wind up needing to be rescued. The other half of them don't find anything useful. Everything's salty and damp. Everyone gets seasick. You're stuck wearing a stiff, stinking uniform."

"But you could find gold," Jack argued. "They say there's a whole city of gold! Think of it, Wilfredo! You could find spices like cumin, perfume, or silks in every hue."

"Bah," said Wilfredo. "What use is gold? Oh, it's beautiful, sure. But no one has ever built a city of it. You know the issue with gold? It's heavy, and it's soft—two things you don't want building materials to be. Your city of gold is just a rumor."

The mariner's bell echoed from a neighboring street. Jack fell into a thoughtful silence, musing.

"Stay here," said Wilfredo. "Learn to make shoes, like I do. You have to occupy your time somehow. You might as well be of use to the world."

"I do have to occupy my time somehow," said Jack. "And of course shoes are useful. But . . . Wilfredo, I want to see and explore the world before I decide to stay in one place."

"Suit yourself, of course," said Wilfredo, just as a delicious smell of stew reached them from a nearby window. "For me, this place has amusement enough."

Two days later, just as the sun rose, Jack stepped onto the deck of the ship. He had never left his town before. He would never see it the same way again.

Coronado Describes Hawikuh to the King of Spain

Skill: /oo/ > 'oo,' 'ew,' 'o_e,' 'o' looked shrewd lose strewn proves

Perched on his throne, the King of Spain was surrounded by his advisors. He faced Francisco Vázquez de Coronado, who had just made a proposal to the king. "It seems terribly risky." The king, who did not trust Francisco, raised an eyebrow and looked at his advisors. He knew they were shrewd and would tell him what they thought of Francisco's plan.

Francisco did not want to lose his opportunity to persuade the king. "Your Majesty, Friar Marcos saw the place. He swore to

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witnessing the city of El Dorado. The people there call it Hawikuh."

"You talk of gold," said the king as he threw a disapproving glance at the maps strewn across the advisors' table. "You talk of riches. You don't talk of the men who died after claiming to see the place."

Francisco coughed. "Some misunderstandings are—ahem—bound to happen when two groups of people meet each other."

"Nearly fifty years!" an advisor shouted from behind the king. "For nearly fifty years, Spain has sent ships, armies, food, and supplies to the New World, always with the promise of gold, gold, and more gold. What have we gained? Shipwrecks and, as you say, misunderstandings."

"We have never had a lookout like Friar Marcos," said Francisco.

"That proves nothing," hissed the advisor. "You want the crown to set you loose with even more resources when there's no proof—" The king held up a jeweled hand, and the advisor stopped speaking. The throne room filled with an uncomfortable silence.

Francisco coughed again. "I am prepared to—ahem—invest a large amount of my own money in this expedition."

The king's mouth grew into a smile. "Your own money! Ah, then, sir, Spain will give you support. And we look forward to the report that you have claimed this El Dorado, this Hawikuh, for New Spain."

A Tale of Mutiny on Henry Hudson's Last Voyage

Skill: /f/> 'ph,' 'gh,' 'ff,' 'f'

Ralph
enough
stuff
folks
fuming

"Sausage pie," said Stefan, seeming to see something far off in the distance. "That's what I'll eat first. Steaming hot, full of egg and cheese . . . a flaky, buttery crust . . ."

"Stop," moaned Ralph. "It's too much to think about."

Stefan laughed. "If you're hungry, Ralph, there's plenty more dried fish. There's enough of that to go around forever."

Peter wrinkled his nose. "Don't I know it! It's foul stuff. I'll never get that smell out of my nose."

"Fine then," said Stefan. "What will you eat, Peter, when you're back in Amsterdam?"

"Fresh figs," said Peter, looking as though he had just seen the love of his life. "Have you ever tasted them? They're like honey turned into fruit. Most figs don't grow on the land so far north, but my folks have a tree, in a warm part of the garden, where the walls keep the leaves safe. You can eat the fruit right off the tree. It's fantastic."

Before Stefan could respond, the three of them were flung to the wooden deck. The ship had crashed hard against a bank of ice. For days they had been sailing slowly and carefully between the floating chunks. A rough-edged iceberg could easily tear a hole in the side of the ship and leave them stranded in the frozen lands at the top of the world.

Peter lifted his head. "Is everyone all right?" he asked.

"Fine enough," said Stefan, pushing himself up and fighting for balance. Half the ship seemed to be on top of the ice, and the deck was tilted.

"Oof," muttered Ralph. He had landed face down, and a large piece of dried fish was stuck to his beard.

The door to the cabin fell open, and Captain Hudson staggered out, doing his best to appear confident while walking across the slippery floor. "Well!" he said. "We've found an ice bank, haven't we? Best to hop off and push with some oars until the bottom of the ship is back in the water. Then we can sail northward."

For a moment, his phrases hung in the air. Everyone on the deck was silent. Ralph was staring at Hudson, fuming, flakes of fish slowly falling off of his face.

"Come on now," said Hudson. "If we stay here, the sheet of floating ice will freeze solid. Over the side! Hurry up!" He clapped his gloved hands for emphasis.

Ralph spoke then, and his voice was even more frigid than the Arctic air. "You can go over the side," he said. "We have gone far enough north."

Grade 3 | Unit 9

Lesson 1: "Life on Roanoke Island"

Lesson 6: "A Day in Anna's Life in Maryland"

Lesson 12: "William Penn's Dream Comes True"



Life on Roanoke Island

Skill: /ə/, /f/, /ə/ + /l/, /sh/ + /ə/ + /n/, /ue/, /oo/

sun rough difficult food starvation The October sun was low behind the trees as I rose from the rough earth of the garden. I dusted off my skirt and wobbled a bit as I stooped for my basket. There was not enough in it. I had planted long rows of herbs and beans, just as I would have in England, but they had not grown well on this island, with its raw sea winds. This would be a feeble harvest.

Father joined me as I walked back to the log house. "How are you, Eleanor?" he asked.

"I am well," I said. "Just hungry." I was always hungry. All of

us were. All summer we had caught fish, but now the fish had moved to warmer waters. On the mainland, when we could reach it, we could gather nuts. But for two weeks now, the waters had been too rough to allow a crossing.

"At least you have reason to be hungry," said Father, smiling at the spherical curve of my belly. "Some of the men here . . . they complain of hunger, but they do scarcely any work." His voice sounded bitter. Leading our group had been difficult for him. Some who wished to occupy the new land could not work together to feed themselves. Since April, he had been speaking of the need to secure a food supply. Now, as we gathered the poor harvests, starvation seemed to loom over us.

At the door of the house, my husband raised his hand in greeting. "I have a surprise, Eleanor," he said. He lifted a large basket. "Beans! Two Powhatan were on the east shore earlier, seeking trade." The Powhatan could cross to and from the mainland even when we could not. They used low boats that cut smoothly through the water.

"What did you trade with them?" I asked.

He looked sheepish. "My coat," he said. "It's no matter. We must be able to provide for you and the baby."

Father shook his head in disapproval. "If you two fear starvation—you, who work so much—then I fear for the rest of the group. I will have to sail back to England for more supplies."

"Perhaps we can trade more," I began, but my father cut me off.

"We have nothing left to trade," he said. "We need flour and oats. We need more seeds—perhaps different seeds—and fruit tree saplings to make orchards. And you need a coat. The winter will only get colder. Eleanor," he added suddenly, "you should sail back with me. The baby could be born in England."

"I want to stay here," I said. "It will be tougher, but we should be together."

Father sighed. "You're free to choose, of course."

All at once I imagined what this place might be like after he had left. I had never seen the beach without the great sailing ship at anchor. It had always seemed to promise us that we would be safe. When it was gone, our isolation would feel absolute.

Unit 9 **42**

A Day in Anna's Life in Maryland

Skill: /oi/ > 'oi,' 'oy'

voice
annoyed
oysters
disappointing
poised

"Anna! Mercy on me, haven't you finished the chores yet?"

"I've almost finished," I said, hoping my voice didn't betray how guilty I felt. As I was gathering the eggs from the henhouse, I saw a beautiful orange and black bird with a white stripe on its wing. I had never seen that kind of bird before. I stopped to enjoy it—only for a moment!—as it chittered and peeped. Then, before I knew it, the sun was higher in the sky, and Mama was waiting in the doorway, looking annoyed.

"You've been avoiding work long enough, young lady. I want you to run down to the shore and find some clams and oysters."

"Yes, Mama," I replied, trying to disguise my joy. I had thought I was going to have to sit quietly inside and practice my embroidery—needlepoint, to be more specific. I do not like needlepoint. You make tiny stitch after tiny stitch, your neck hurts, your eyes squinch up, and you poke your fingers with the needle—all for a disappointing scrap of fabric. I would far rather go oystering on the shore.

I grabbed my basket and hurried through the streets. The streets really are streets now, full of people, horses, and carts. A few years ago, they were just stretches of soil and grass. But now this is becoming what Papa calls "a proper town." There are stores, workshops, and three different churches. People have begun to make the voyage here because Maryland allows people to practice different kinds of Christianity. That seems to be rare, for some reason I can't understand, since we all get to make our own choices.

I came over the hill, and all at once the bay spread out before me—teal, turquoise, and royal blue. I breathed in the clean salty smell of the ocean. I stood poised at the top of the hill, with the wind blowing in my face. I love the ocean. It's always changing, always shifting with the wind or the sky, and yet always the same.

Another orange and black bird darted ahead of me. It perched on a nodding bit of seagrass, as though to remind me not to become distracted. I sighed and hurried down to the dunes.

William Penn's Dream Comes True

Skill: /ou/ > 'ou,' 'ow'

doubt
astounded
towering
empowered
counselor

William read through the letter three times and then set it down on his desk. Though it described exactly what he had been promised, he didn't believe it. Doubt crept in. He slouched in his chair and read it again. It astounded him that it was all there: the grant of land in North America, the boundaries, the charming name "Penn's Sylvania," the royal seal.

For years he had cherished a vision of a town founded in true equality. It would have wide, serene streets, laid out on a grid, shaded by towering trees. All men and women would be empowered to speak up. All religious faiths would be allowed. During the long, lonely months when he was imprisoned in the Tower of London, he had occupied himself with these dreams and plans. Now, at last, those dreams could become real.

What to do first? There were many people who needed to be told and accounts that needed to be managed. Perhaps he should write to his friend and counselor, Thomas. Thomas was another Quaker who shared William's belief in equality. He would help bring people of different backgrounds to the new colony. However, when William started to talk about stone foundations and grids, Thomas tended to smile and lose interest.

There was another person who would be involved—very closely, William hoped. Miss Springett had waited for about four years. Even at the announcement of his arrest, she had remained true to him. Now, at last, they could be married.

But William set that letter aside too. The first people he needed to talk to were the ones who would be most affected—the ones who lived on the land now. Without their agreement, his plans would sour. William knew what he needed to do. He began to plan his voyage. Soon he would be bound for America.

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