TULSA PUBLIC SCHOOLS

6th Grade

(5/4-15/20)

Distance Learning Activities

Dear families,

These learning packets are filled with grade level activities to keep students engaged in learning at home. We are following the learning routines with language of instruction that students would be engaged in within the classroom setting. We have an amazing diverse language community with over 65 different languages represented across our students and families.

If you need assistance in understanding the learning activities or instructions, we recommend using these phone and computer apps listed below.

Google Translate

- Free language translation app for Android and iPhone
- Supports text translations in 103 languages and speech translation (or conversation translations) in 32 languages
- Capable of doing camera translation in 38 languages and photo/image translations in 50 languages
- Performs translations across apps

Microsoft Translator

- Free language translation app for iPhone and Android
- Supports text translations in 64 languages and speech translation in 21 languages
- Supports camera and image translation
- Allows translation sharing between apps

ENROLL TULSA!

TULSA PUBLIC SCHOOLS

DID YOU MISS THE ENROLLMENT WINDOW IN DECEMBER AND JANUARY? ARE YOU NEW TO TULSA?

We have great schools that still have room for your child. Don't miss this opportunity!

THE WINDOW TO ENROLL AT THESE SCHOOLS IS
MAY 1–21, 2020

We want to make it simple and easy for families to choose - and stay with - Tulsa Public Schools! Our improved enrollment system ensures that our families have an easy and simple process to access the schools that are the best fit for their children.

START YOUR APPLICATION AT Enroll.TulsaSchools.org.
If you need help, please leave a message at 918-746-7500 and an enrollment specialist will return your call or email enroll@tulsaschools.org.

For more information, visit TulsaSchools.org/EnrollTulsa

INSCRIBA A SU HIJO EN LAS ESCUELAS PÚBLICAS DE TULSA

TULSA PUBLIC SCHOOLS

¿TE PERDISTE LA VENTANA DE INSCRIPCIÓN EN DICIEMBRE Y ENERO? ¿ERES NUEVO EN TULSA?

Tenemos excelentes escuelas que todavía tienen espacio para su hijo. ¡No te pierdas esta oportunidad!

LA VENTANA PARA INSCRIBIRSE EN ESTAS ESCUELAS ES DEL
1 AL 21 DE MAYO DE 2020

¡Queremos que sea simple y fácil para las familias elegir, y quedarse con, las Escuelas Públicas de Tulsa! Nuestro sistema de inscripción mejorado garantiza que nuestras familias tengan un proceso fácil y simple para acceder a las escuelas que mejor se adapten a sus hijos.

INICIE SU SOLICITUD EN Enroll.TulsaSchools.org.
Si necesita ayuda, deje un mensaje al 918-746-7500 y un especialista en inscripción le devolverá la llamada. También puede enviarnos un correo electrónico a enroll@tulsaschools.org.

Para más información, visite TulsaSchools.org/EnrollTulsa

Grade 6 ELA

May 4-15

Over the two weeks from May 4 to May 15, read both of the following texts.
Recommended: choose one to read the week of May 4.Read the other text the week of May 11.

- As you read, annotate each text.
  - With the first text, note any questions you have.
  - With the second text, note similarities and connections between the two.
- Answer questions as directed.
- Think about how these two texts help you explore the idea of resilience.

MYTH	"Jupiter and His Mighty Company," James Baldwin 1895
INFORMATION	"Jewel Bird," by Robin A. Zimmerman, 2016

Jupiter and His Mighty Company by James Baldwin 1895

James Baldwin (1841-1925) was an educator and prolific children's book author who re-wrote many classic legends and myths for young readers. Myths and folktales can tell us a lot about how the world came to be and, even now, prompt us to ask ourselves questions about the world. Many cultures depend on mythology to express their values, histories, and systems of thought. Greek and Roman myths have been widely read in the West and translated into various different styles and genres: from sophisticated poetry to novel adaptations and even movies. In this myth, James Baldwin retells the tale of Jupiter and His Mighty Company in an accessible style.

As you read, take note of some of the themes within the myth.
How might these themes teach us lessons about the world we live in today?

1. A long time ago, when the world was much younger than it is now, people told and believed a great many wonderful stories about wonderful things which neither you nor I have ever seen. They often talked about a certain Mighty Being called Jupiter, or Zeus, who was king of the sky and the earth; and they said that he sat most of the time amid the clouds on the top of a very high mountain where he could look down and see everything that was going on in the earth beneath. He liked to ride on the storm-clouds and hurl burning thunderbolts right and left among the trees and rocks; and he was so very, very mighty that when he nodded, the earth quaked, the mountains trembled and smoked, the sky grew black, and the sun hid his face.

   Jupiter had two brothers, both of them terrible fellows, but not nearly so great as himself. The name of one of them was Neptune, or Poseidon, and he was the king of the sea. He had a glittering, golden palace far down in the deep sea-caves where the fishes live and the red coral grows; and whenever he was angry the waves would rise mountain high, and the storm-winds would howl fearfully, and the sea would try to break over the land; and men called him the Shaker of the Earth.

The other brother of Jupiter was a sad pale-faced being, whose kingdom was underneath the earth, where the sun never shone and where there was darkness and weeping and sorrow all the time. His name was Pluto, or Aidoneus, and his country was called the Lower World, or the Land of Shadows, or Hades. Men said that whenever any one died, Pluto would send his messenger, or Shadow Leader, to carry that one down into his cheerless kingdom; and for that reason they never spoke well of him, but thought of him only as the enemy of life.

Q1: Jupiter and his brothers can be best described as...

A great number of other Mighty Beings lived with Jupiter amid the clouds on the mountain top, — so many that I can name a very few only. There was Venus, the queen of love and beauty, who was fairer by far than any woman that you or I have ever seen. There was Athena, or Minerva, the queen of the air, who gave people wisdom and taught them how to do very many useful things. There was Juno, the queen of earth and sky, who sat at the right hand of Jupiter and gave him all kinds of advice. There was Mars, the great warrior, whose delight was in the din of battle. There was Mercury, the swift messenger, who had wings on his cap and shoes, and who flew from place to place like the summer clouds when they are driven before the wind. There was Vulcan, a skillful blacksmith, who had his forge in a burning mountain and wrought many wonderful things of iron and copper and gold. And besides these, there were many others about whom you will learn by and by, and about whom men told strange and beautiful stories.

They lived in glittering, golden mansions, high up among the clouds — so high indeed that the eyes of men could never see them. But they could look down and see what men were doing, and oftentimes they were said to leave their lofty homes and wander unknown across the land or over the sea.

And of all these Mighty Folk, Jupiter was by far the mightiest.

Q2: How are the Mighty Beings known to the people?

THE GOLDEN AGE

Jupiter and his Mighty Folk had not always dwelt amid the clouds on the mountain top. In times long past, a wonderful family called Titans had lived there and had ruled over all the world. There were 12 of them — six brothers and six sisters — and they said that their father was the Sky and their mother the Earth. They had the form and looks of men and women, but they were much larger and far more beautiful.

The name of the youngest of these Titans was Saturn; and yet he was so very old that men often called him Father Time. He was the king of the Titans, and so, of course, was the king of all the earth besides.

Men were never so happy as they were during Saturn's reign. It was the true Golden Age then. The springtime lasted all the year. The woods and meadows were always full of blossoms, and the music of singing birds was heard every day and every hour. It was summer and autumn, too, at the same time. Apples and figs and oranges always hung ripe from the trees; and there were purple grapes on the vines, and melons and berries of every kind, which the people had but to pick and eat.

Of course nobody had to do any kind of work in that happy time. There was no such thing as sickness or sorrow or old age. Men and women lived for hundreds and hundreds of years and never became gray or wrinkled or lame, but were always handsome and young. They had no need of houses, for there were no cold days nor storms nor anything to make them afraid.

Nobody was poor, for everybody had the same precious things — the sunlight, the pure air, the wholesome water of the springs, the grass for a carpet, the blue sky for a roof, the fruits and flowers of the woods and meadows. So, of course, no one was richer than another, and there was no money, nor

any locks or bolts; for everybody was everybody's friend, and no man wanted to get more of anything than his neighbors had.

Q3: Saturn's reign is called the Golden Age because…

When these happy people had lived long enough they fell asleep, and their bodies were seen no more. They flitted away through the air, and over the mountains, and across the sea, to a flowery land in the distant west. And some men say that, even to this day, they are wandering happily hither and thither about the earth, causing babies to smile in their cradles, easing the burdens of the toilworn and sick, and blessing mankind everywhere.

What a pity it is that this Golden Age should have come to an end! But it was Jupiter and his brothers who brought about the sad change.

It is hard to believe it, but men say that Jupiter was the son of the old Titan king, Saturn, and that he was hardly a year old when he began to plot how he might wage war against his father. As soon as he was grown up, he persuaded his brothers, Neptune and Pluto, and his sisters, Juno, Ceres, and Vesta, to join him; and they vowed that they would drive the Titans from the earth.

Then followed a long and terrible war. But Jupiter had many mighty helpers. A company of one-eyed monsters called Cyclopes were kept busy all the time, forging thunderbolts in the fire of burning mountains. Three other monsters, each with a hundred hands, were called in to throw rocks and trees against the stronghold of the Titans; and Jupiter himself hurled his sharp lightning darts so thick and fast that the woods were set on fire and the water in the rivers boiled with the heat.

Of course, good, quiet old Saturn and his brothers and sisters could not hold out always against such foes as these. At the end of ten years they had to give up and beg for peace. They were bound in chains of the hardest rock and thrown into a prison in the Lower Worlds; and the Cyclopes and the hundred-handed monsters were sent there to be their jailers and to keep guard over them forever.

Then men began to grow dissatisfied with their lot. Some wanted to be rich and own all the good things in the world. Some wanted to be kings and rule over the others. Some who were strong wanted to make slaves of those who were weak. Some broke down the fruit trees in the woods, lest others should eat of the fruit. Some, for mere sport, hunted the timid animals which had always been their friends. Some even killed these poor creatures and ate their flesh for food.

At last, instead of everybody being everybody's friend, everybody was everybody's foe.

So, in all the world, instead of peace, there was war; instead of plenty, there was starvation; instead of innocence, there was crime; and instead of happiness, there was misery.

And that was the way in which Jupiter made himself so mighty; and that was the way in which the Golden Age came to an end.

Q4: Why does The Golden Age come to an end?

1. PART A: Which of the following best identifies the central theme of this text?
    A. Peace never lasts.
    B. Only the strong survive.
    C. Power can corrupt.
    D. People are selfish.

2. PART B: Which TWO phrases from the text best support the answer to Part A?
    A. “He had a glittering, golden palace far down in the deep sea-caves where the fishes live and the red coral grows;” (Paragraph 2)
    B. “The other brother of Jupiter was a sad pale-faced being, whose kingdom was underneath the earth,” (Paragraph 3)
    C. “And of all these Mighty Folk, Jupiter was by far the mightiest.” (Paragraph 6)
    D. “Men were never so happy as they were during Saturn’s reign. It was the true Golden Age then.” (Paragraph 9)
    E. “What a pity it is that this Golden Age should have come to an end!” (Paragraph 13)
    F. “[M]en say that Jupiter was the son of the old Titan king, Saturn, and that he was hardly a year old when he began to plot how he might wage war against his father.” (Paragraph 14)

3. PART A: How do the attitudes and actions of the Mighty Beings affect the men on Earth?
    A. Many men die during the war against the Titans.
    B. The men on Earth are happy after the Mighty Beings drive out the Titans.
    C. The men become dissatisfied and turn on each other.
    D. The men are able to become Mighty Beings.

4. PART B: Which phrase from the text best supports the answer to Part A?
    A. “What a pity it is that this Golden Age should have come to an end! But it was Jupiter and his brothers who brought about the sad change.” (Paragraph 13)
    B. “Of course, good, quiet old Saturn and his brothers and sisters could not hold out always against such foes as these.” (Paragraph 16)
    C. “At last, instead of everybody being everybody’s friend, everybody was everybody’s foe.” (Paragraph 18)
    D. “And that was the way in which Jupiter made himself so mighty; and that was the way in which the Golden Age came to an end.” (Paragraph 20)

DISCUSSION:

The people in the myth are happy when they have the same things, but is equality the same thing as fairness? Use evidence from the myth or from other stories you know to support your answer.

Grade 6 ELA

Jewel Bird by Robin A. Zimmerman 2016

"Male Resplendent Quetzal" by rwamit is licensed under CC BY-NC-ND 2.0.

The resplendent quetzal is a bird found in Mexico and Central America and is known for its brilliant coloring.

As you read, take notes about what quetzals meant to ancient civilizations.

Brilliant they were then
And wrapped in the feathers of quetzal
And of doves.
Thence came the name
Of Kukulcán, the Quetzal-serpent.
—from Popol Vuh, the sacred book of the Maya

1. Can a bird's feathers be more precious than gold? To the ancient Maya Indians, the answer was yes. The three-foot-long shimmery green tail feathers of the resplendent quetzal were priceless. Only kings and high priests could adorn their elaborate headdresses with the bird's twin tail feathers. The Maya considered the bird sacred, and killing a quetzal was forbidden.

2. The quetzal lives in the high mountainous regions of Mexico and Central America and has fascinated Maya, Aztec, and other civilizations for more than 2,000 years. The quetzal swoops, dips, and glides through low, misty clouds. Its long, emerald tail feathers stream behind it in a glittering ebb and flow. Flashes of blue, green, and gold glisten in the sunlight. Rounded wings help the bird fly in tight spaces among mossy branches and hanging vines.

Q1: An outstanding feature of the Quetzal bird was its…

3. The Maya and Aztec revered the quetzal. Their royal color green imitates the lavishly colored plumes of this mysterious bird. The quetzal inspired many forms of art as well as a feathered serpent god. The ancient cultures painted or carved the image of this magnificent half-bird half-serpent on stone columns, monuments, murals, and temples throughout their lands.

4. The Maya called the feathered serpent god Kukulcán. *Kukul* means "feathered" and cán means "serpent." The Aztec called this god Quetzalcoatl (ket-tsul-kwot-ul). *Quetzal* means "bird" and coatl means "serpent."

5. Maya and Aztec traveling merchants used the priceless quetzal plumes as currency. They carefully plucked tail feathers from trapped quetzals and carried the plumes over treacherous trails along trade routes and through foreign lands. It was not permitted to keep a quetzal captive. Many believed that if captured and caged, the mystical bird might die. So the merchants released the precious birds into the forest, where the plumes grew back within a year.

6. Many Maya believed the quetzal held magical powers. One legend tells of a Maya chief and his soldiers fighting for freedom. Above the battlefield, hundreds of graceful quetzals swooped down and guarded the wounded soldiers until sunrise. When the battle ended, the birds flew away — their chests stained red forever.

Q2: Explain why the quetzal was valued.

7. The quetzal's habitat is shrinking. The destruction of highland forests for timber; the cultivation of land, especially for coffee plantations; and the illegal trapping of the birds for feathers have reduced their numbers. The quetzals are now considered "near threatened," but countries are taking steps to save the magnificent bird. In Costa Rica, strict laws, national parks, and wildlife preserves have been established to protect the quetzal.

8. Although there are fewer quetzals, these jewel birds still glide through the lofty cloud forests singing their smooth, melodic song: "*Keow-kowee-keow-k'loo-keow-keloo*." And their feathers are more precious than gold.

Q3: What is happening to the quetzal today?

1. Which of the following describes the author's purpose in the text?
   A. to inform readers about the value of quetzals in the past and present
   B. to discourage people from harming the now endangered species
   C. to show how a civilization's beliefs and values can change over time
   D. to criticize human's negative relationship with the environment today

2. PART A: Which statement identifies the central idea of the text?
   A. People today don't have the same respect for animals that civilizations in the past did.
   B. Quetzals were nearly hunted to extinction by past civilizations for their valuable tail feathers.
   C. The Maya and Aztec negatively impacted the quetzal's population by building in their habitat.
   D. Quetzals were important birds to ancient civilizations and continue to be protected today.

3. PART B: Which TWO details from the text best support the answer to Part A?
   A. "The three-foot-long shimmery green tail feathers of the resplendent quetzal were priceless." (Paragraph 1)
   B. "Rounded wings help the bird fly in tight spaces among mossy branches and hanging vines." (Paragraph 2)
   C. "Many Maya believed the quetzal held magical powers. One legend tells of a Maya chief and his soldiers fighting for freedom. Above the battlefield, hundreds of graceful quetzals swooped down and guarded the wounded soldiers until sunrise." (Paragraph 6)
   D. "The quetzal's habitat is shrinking. The destruction of highland forests for timber; the cultivation of land, especially for coffee plantations" (Paragraph 7)
   E. "The quetzals are now considered 'near threatened,' but countries are taking steps to save the magnificent bird." (Paragraph 7)
   F. Although there are fewer quetzals, these jewel birds still glide through the lofty cloud forests singing their smooth, melodic song: "Keow-kowee-keow-k'loo-keow-keloo." (Paragraph 8)

4. How does paragraph 7 contribute to the development of ideas in the text?
    A. It warns people that quetzals may not be alive in the next few years.
    B. It stresses the importance of quetzals to people's cultures today.
    C. It shows how quetzals are being negatively impacted by humans today.
    D. It reveals what people can do to help quetzals today.

5. Describe the relationship between quetzals and the Maya.

DISCUSSION: use evidence from the article to support your answers to these questions.

The quetzal is Guatemala's national bird. What, if anything, can you infer about the nation of Guatemala based on their national bird? What are some of the qualities we connect from our national bird to our nation as a whole?

6th Grade, Social Studies, At Home Activities and Resources

Directions:

- For the instructional weeks of April 20-May 1 students received a large packet of Social Studies materials. Make sure the packet is complete prior to moving on to these activities.
- Activities 1, 2, and 5 are shorter activities and numbers 3, 4, 6, and 7 can be done over multiple days.

Activity 1	Time for Kids	Time for Kids website- this has digital articles, videos, and some assessments, often with information in Spanish. The resources are available for students in grades Kindergarten to 6th. There are free resources available. https://www.timeforkids.com/
Activity 2	Diary of a Revolutionary	Pretend you are a colonist or soldier during the Revolutionary War and write a page-long diary entry about your life. Include what you might have experienced during that time.
Activity 3	Oral History	Interview a family or community member to write, or draw, an oral history. Ask about a historical event (including questions such as who, what, when, where, why and how). Ask how the historical event impacted the life of the person they are interviewing.
Activity 4	Letter to a Government Official	Write a letter to a government official- such as the mayor of Tulsa, a tribal leader, the Oklahoma governor, or the President. Identify a major issue and what you would like the government leader to do to help. Include important facts that support your ideas.
Activity 5	Home Map & Scavenger Hunt	First, make a map of your home. Next, divide it up into a grid and use cardinal directions(north, south, east, west) to label each section of the grid. Then leave clues on pieces of paper in different parts of the grid that lead the student to the next clue. The hunt should end in a specific object or a piece of candy. For example, the first piece of paper would say, “look under the chair that’s in the SE square of the home.” Then under the

		chair would be another piece of paper that says, “look inside the shoe that’s in the NW part of the home.” And so on, until all the hidden clues are found.
Activity 6	Comparing Memories and Stories	Think about a specific memory you have with your family. Summarize the specific memory. Now, interview each family member about the same memory. Detail the account of each person and compile all the information you can. In the end, examine the final body of work. Compare and contrast the different accounts about the same event. Why are there differences? What made similarities possible? What does this tell us about larger historical events? How will this impact how you analyze other parts of history or current events?
Activity 7	What a Time!	Did you know that you are living through a historic time? In future decades, like the 2030s, researchers will research the COVID-19 pandemic.. They will look to primary sources, first-hand accounts or other data sources to learn how people were affected by this pandemic. To support them: 1. Write down what news you are hearing every day, noting the changes that are taking place, for one week. 2. Provide your perspective and personal experiences to the news you are hearing. 3. Interview at least three (3) people that are older than you about their experience. Identify the similarities and differences in how they have reacted.

Grade 6 ELA

May 4-15

Over the two weeks from May 4 to May 15, read both of the following texts.
Recommended: choose one to read the week of May 4.Read the other text the week of May 11.

- As you read, annotate each text.
  - With the first text, note any questions you have.
  - With the second text, note similarities and connections between the two.
- Answer questions as directed.
- Think about how these two texts help you explore the idea of resilience.

MYTH	"Jupiter and His Mighty Company," James Baldwin 1895
INFORMATION	"Jewel Bird," by Robin A. Zimmerman, 2016

Jupiter and His Mighty Company by James Baldwin 1895

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As you read, take note of some of the themes within the myth.
How might these themes teach us lessons about the world we live in today?

1. A long time ago, when the world was much younger than it is now, people told and believed a great many wonderful stories about wonderful things which neither you nor I have ever seen. They often talked about a certain Mighty Being called Jupiter, or Zeus, who was king of the sky and the earth; and they said that he sat most of the time amid the clouds on the top of a very high mountain where he could look down and see everything that was going on in the earth beneath. He liked to ride on the storm-clouds and hurl burning thunderbolts right and left among the trees and rocks; and he was so very, very mighty that when he nodded, the earth quaked, the mountains trembled and smoked, the sky grew black, and the sun hid his face.

   Jupiter had two brothers, both of them terrible fellows, but not nearly so great as himself. The name of one of them was Neptune, or Poseidon, and he was the king of the sea. He had a glittering, golden palace far down in the deep sea-caves where the fishes live and the red coral grows; and whenever he was angry the waves would rise mountain high, and the storm-winds would howl fearfully, and the sea would try to break over the land; and men called him the Shaker of the Earth.

The other brother of Jupiter was a sad pale-faced being, whose kingdom was underneath the earth, where the sun never shone and where there was darkness and weeping and sorrow all the time. His name was Pluto, or Aidoneus, and his country was called the Lower World, or the Land of Shadows, or Hades. Men said that whenever any one died, Pluto would send his messenger, or Shadow Leader, to carry that one down into his cheerless kingdom; and for that reason they never spoke well of him, but thought of him only as the enemy of life.

Q1: Jupiter and his brothers can be best described as...

A great number of other Mighty Beings lived with Jupiter amid the clouds on the mountain top, — so many that I can name a very few only. There was Venus, the queen of love and beauty, who was fairer by far than any woman that you or I have ever seen. There was Athena, or Minerva, the queen of the air, who gave people wisdom and taught them how to do very many useful things. There was Juno, the queen of earth and sky, who sat at the right hand of Jupiter and gave him all kinds of advice. There was Mars, the great warrior, whose delight was in the din of battle. There was Mercury, the swift messenger, who had wings on his cap and shoes, and who flew from place to place like the summer clouds when they are driven before the wind. There was Vulcan, a skillful blacksmith, who had his forge in a burning mountain and wrought many wonderful things of iron and copper and gold. And besides these, there were many others about whom you will learn by and by, and about whom men told strange and beautiful stories.

They lived in glittering, golden mansions, high up among the clouds — so high indeed that the eyes of men could never see them. But they could look down and see what men were doing, and oftentimes they were said to leave their lofty homes and wander unknown across the land or over the sea.

And of all these Mighty Folk, Jupiter was by far the mightiest.

Q2: How are the Mighty Beings known to the people?

THE GOLDEN AGE

Jupiter and his Mighty Folk had not always dwelt amid the clouds on the mountain top. In times long past, a wonderful family called Titans had lived there and had ruled over all the world. There were 12 of them — six brothers and six sisters — and they said that their father was the Sky and their mother the Earth. They had the form and looks of men and women, but they were much larger and far more beautiful.

The name of the youngest of these Titans was Saturn; and yet he was so very old that men often called him Father Time. He was the king of the Titans, and so, of course, was the king of all the earth besides.

Men were never so happy as they were during Saturn's reign. It was the true Golden Age then. The springtime lasted all the year. The woods and meadows were always full of blossoms, and the music of singing birds was heard every day and every hour. It was summer and autumn, too, at the same time. Apples and figs and oranges always hung ripe from the trees; and there were purple grapes on the vines, and melons and berries of every kind, which the people had but to pick and eat.

Of course nobody had to do any kind of work in that happy time. There was no such thing as sickness or sorrow or old age. Men and women lived for hundreds and hundreds of years and never became gray or wrinkled or lame, but were always handsome and young. They had no need of houses, for there were no cold days nor storms nor anything to make them afraid.

Nobody was poor, for everybody had the same precious things — the sunlight, the pure air, the wholesome water of the springs, the grass for a carpet, the blue sky for a roof, the fruits and flowers of the woods and meadows. So, of course, no one was richer than another, and there was no money, nor

any locks or bolts; for everybody was everybody's friend, and no man wanted to get more of anything than his neighbors had.

Q3: Saturn's reign is called the Golden Age because…

When these happy people had lived long enough they fell asleep, and their bodies were seen no more. They flitted away through the air, and over the mountains, and across the sea, to a flowery land in the distant west. And some men say that, even to this day, they are wandering happily hither and thither about the earth, causing babies to smile in their cradles, easing the burdens of the toilworn and sick, and blessing mankind everywhere.

What a pity it is that this Golden Age should have come to an end! But it was Jupiter and his brothers who brought about the sad change.

It is hard to believe it, but men say that Jupiter was the son of the old Titan king, Saturn, and that he was hardly a year old when he began to plot how he might wage war against his father. As soon as he was grown up, he persuaded his brothers, Neptune and Pluto, and his sisters, Juno, Ceres, and Vesta, to join him; and they vowed that they would drive the Titans from the earth.

Then followed a long and terrible war. But Jupiter had many mighty helpers. A company of one-eyed monsters called Cyclopes were kept busy all the time, forging thunderbolts in the fire of burning mountains. Three other monsters, each with a hundred hands, were called in to throw rocks and trees against the stronghold of the Titans; and Jupiter himself hurled his sharp lightning darts so thick and fast that the woods were set on fire and the water in the rivers boiled with the heat.

Of course, good, quiet old Saturn and his brothers and sisters could not hold out always against such foes as these. At the end of ten years they had to give up and beg for peace. They were bound in chains of the hardest rock and thrown into a prison in the Lower Worlds; and the Cyclopes and the hundred-handed monsters were sent there to be their jailers and to keep guard over them forever.

Then men began to grow dissatisfied with their lot. Some wanted to be rich and own all the good things in the world. Some wanted to be kings and rule over the others. Some who were strong wanted to make slaves of those who were weak. Some broke down the fruit trees in the woods, lest others should eat of the fruit. Some, for mere sport, hunted the timid animals which had always been their friends. Some even killed these poor creatures and ate their flesh for food.

At last, instead of everybody being everybody's friend, everybody was everybody's foe.

So, in all the world, instead of peace, there was war; instead of plenty, there was starvation; instead of innocence, there was crime; and instead of happiness, there was misery.

And that was the way in which Jupiter made himself so mighty; and that was the way in which the Golden Age came to an end.

Q4: Why does The Golden Age come to an end?

1. PART A: Which of the following best identifies the central theme of this text?
    A. Peace never lasts.
    B. Only the strong survive.
    C. Power can corrupt.
    D. People are selfish.

2. PART B: Which TWO phrases from the text best support the answer to Part A?
    A. “He had a glittering, golden palace far down in the deep sea-caves where the fishes live and the red coral grows;” (Paragraph 2)
    B. “The other brother of Jupiter was a sad pale-faced being, whose kingdom was underneath the earth,” (Paragraph 3)
    C. “And of all these Mighty Folk, Jupiter was by far the mightiest.” (Paragraph 6)
    D. “Men were never so happy as they were during Saturn’s reign. It was the true Golden Age then.” (Paragraph 9)
    E. “What a pity it is that this Golden Age should have come to an end!” (Paragraph 13)
    F. “[M]en say that Jupiter was the son of the old Titan king, Saturn, and that he was hardly a year old when he began to plot how he might wage war against his father.” (Paragraph 14)

3. PART A: How do the attitudes and actions of the Mighty Beings affect the men on Earth?
    A. Many men die during the war against the Titans.
    B. The men on Earth are happy after the Mighty Beings drive out the Titans.
    C. The men become dissatisfied and turn on each other.
    D. The men are able to become Mighty Beings.

4. PART B: Which phrase from the text best supports the answer to Part A?
    A. “What a pity it is that this Golden Age should have come to an end! But it was Jupiter and his brothers who brought about the sad change.” (Paragraph 13)
    B. “Of course, good, quiet old Saturn and his brothers and sisters could not hold out always against such foes as these.” (Paragraph 16)
    C. “At last, instead of everybody being everybody’s friend, everybody was everybody’s foe.” (Paragraph 18)
    D. “And that was the way in which Jupiter made himself so mighty; and that was the way in which the Golden Age came to an end.” (Paragraph 20)

DISCUSSION:

The people in the myth are happy when they have the same things, but is equality the same thing as fairness? Use evidence from the myth or from other stories you know to support your answer.

Grade 6 ELA

Jewel Bird by Robin A. Zimmerman 2016

"Male Resplendent Quetzal" by rwamit is licensed under CC BY-NC-ND 2.0.

The resplendent quetzal is a bird found in Mexico and Central America and is known for its brilliant coloring.

As you read, take notes about what quetzals meant to ancient civilizations.

Brilliant they were then
And wrapped in the feathers of quetzal
And of doves.
Thence came the name
Of Kukulcán, the Quetzal-serpent.
—from Popol Vuh, the sacred book of the Maya

1. Can a bird's feathers be more precious than gold? To the ancient Maya Indians, the answer was yes. The three-foot-long shimmery green tail feathers of the resplendent quetzal were priceless. Only kings and high priests could adorn their elaborate headdresses with the bird's twin tail feathers. The Maya considered the bird sacred, and killing a quetzal was forbidden.

2. The quetzal lives in the high mountainous regions of Mexico and Central America and has fascinated Maya, Aztec, and other civilizations for more than 2,000 years. The quetzal swoops, dips, and glides through low, misty clouds. Its long, emerald tail feathers stream behind it in a glittering ebb and flow. Flashes of blue, green, and gold glisten in the sunlight. Rounded wings help the bird fly in tight spaces among mossy branches and hanging vines.

Q1: An outstanding feature of the Quetzal bird was its…

3. The Maya and Aztec revered the quetzal. Their royal color green imitates the lavishly colored plumes of this mysterious bird. The quetzal inspired many forms of art as well as a feathered serpent god. The ancient cultures painted or carved the image of this magnificent half-bird half-serpent on stone columns, monuments, murals, and temples throughout their lands.

4. The Maya called the feathered serpent god Kukulcán. *Kukul* means "feathered" and cán means "serpent." The Aztec called this god Quetzalcoatl (ket-tsul-kwot-ul). *Quetzal* means "bird" and coatl means "serpent."

5. Maya and Aztec traveling merchants used the priceless quetzal plumes as currency. They carefully plucked tail feathers from trapped quetzals and carried the plumes over treacherous trails along trade routes and through foreign lands. It was not permitted to keep a quetzal captive. Many believed that if captured and caged, the mystical bird might die. So the merchants released the precious birds into the forest, where the plumes grew back within a year.

6. Many Maya believed the quetzal held magical powers. One legend tells of a Maya chief and his soldiers fighting for freedom. Above the battlefield, hundreds of graceful quetzals swooped down and guarded the wounded soldiers until sunrise. When the battle ended, the birds flew away — their chests stained red forever.

Q2: Explain why the quetzal was valued.

7. The quetzal's habitat is shrinking. The destruction of highland forests for timber; the cultivation of land, especially for coffee plantations; and the illegal trapping of the birds for feathers have reduced their numbers. The quetzals are now considered "near threatened," but countries are taking steps to save the magnificent bird. In Costa Rica, strict laws, national parks, and wildlife preserves have been established to protect the quetzal.

8. Although there are fewer quetzals, these jewel birds still glide through the lofty cloud forests singing their smooth, melodic song: "*Keow-kowee-keow-k'loo-keow-keloo*." And their feathers are more precious than gold.

Q3: What is happening to the quetzal today?

1. Which of the following describes the author's purpose in the text?
   A. to inform readers about the value of quetzals in the past and present
   B. to discourage people from harming the now endangered species
   C. to show how a civilization's beliefs and values can change over time
   D. to criticize human's negative relationship with the environment today

2. PART A: Which statement identifies the central idea of the text?
   A. People today don't have the same respect for animals that civilizations in the past did.
   B. Quetzals were nearly hunted to extinction by past civilizations for their valuable tail feathers.
   C. The Maya and Aztec negatively impacted the quetzal's population by building in their habitat.
   D. Quetzals were important birds to ancient civilizations and continue to be protected today.

3. PART B: Which TWO details from the text best support the answer to Part A?
   A. "The three-foot-long shimmery green tail feathers of the resplendent quetzal were priceless." (Paragraph 1)
   B. "Rounded wings help the bird fly in tight spaces among mossy branches and hanging vines." (Paragraph 2)
   C. "Many Maya believed the quetzal held magical powers. One legend tells of a Maya chief and his soldiers fighting for freedom. Above the battlefield, hundreds of graceful quetzals swooped down and guarded the wounded soldiers until sunrise." (Paragraph 6)
   D. "The quetzal's habitat is shrinking. The destruction of highland forests for timber; the cultivation of land, especially for coffee plantations" (Paragraph 7)
   E. "The quetzals are now considered 'near threatened,' but countries are taking steps to save the magnificent bird." (Paragraph 7)
   F. Although there are fewer quetzals, these jewel birds still glide through the lofty cloud forests singing their smooth, melodic song: "Keow-kowee-keow-k'loo-keow-keloo." (Paragraph 8)

4. How does paragraph 7 contribute to the development of ideas in the text?
    A. It warns people that quetzals may not be alive in the next few years.
    B. It stresses the importance of quetzals to people's cultures today.
    C. It shows how quetzals are being negatively impacted by humans today.
    D. It reveals what people can do to help quetzals today.

5. Describe the relationship between quetzals and the Maya.

DISCUSSION: use evidence from the article to support your answers to these questions.

The quetzal is Guatemala's national bird. What, if anything, can you infer about the nation of Guatemala based on their national bird? What are some of the qualities we connect from our national bird to our nation as a whole?

GRADES 6-8 SCIENCE! (ESPAÑOL P. 10-19)

MAY 4-MAY 14

USE THIS TIME TO MAKE SURE ALL YOUR WORK IS COMPLETED. BE SURE TO FINISH YOUR PROJECTS AND ANSWER ALL THE QUESTIONS IN YOUR PACKET.

IF YOU HAVE ALREADY FINISHED, YAY! HERE ARE SOME EXPERIMENTS YOU SHOULD TRY AT HOME. ANSWER THE QUESTIONS ABOUT EACH EXPERIMENT YOU CONDUCT.

SKITTLE SWIRL:
This experiment is all about concentration gradients. This is the idea that liquids and gases will move from high concentration towards low concentration.

You will need:
- A small plate (white plates work best)
- Skittles
- Water
- Sugar cube (optional)

Methods:
1. Pour just enough water to cover the bottom of your plate.
2. Place 3 skittles in a triangle on the plate (about 1-2 inches apart from each other)
3. Write down your observations. Describe what you see.

4. If you have a sugar cube, place it in the center of the skittle triangle.
5. Write down your observations. Describe what you see.

Extra option:
On a clean plate, place a ring of skittles all around the inside edge of the plate. Then, slowly pour warm water on the plate. What happens?

Think about it!
Alejandra sprays perfume in a room, the concentration of perfume is very high near her when she sprays it. Over time, more people in the same room can smell it.

Over a short amount of time, what happens to the concentration of perfume next to Alejandra? (hint: think about how *strong* the smell is)

What happens to the concentration of perfume in the room?

How does the skittle experiment help you understand how concentration changes over time?

GROWING CRYSTALS:

A solution is a homogeneous (equally distributed) mixture of two or more substances. A solution may exist in any phase.

A solution consists of a solute and a solvent. The solute is the substance that is dissolved in the solvent. The amount of solute that can be dissolved in solvent is called its solubility. For example, in a saline (saltwater) solution, salt is the solute dissolved in water as the solvent.

Unsaturated	Saturated	Supersaturated
A solution that contains enough solvent to completely dissolve the solute, leaving no remaining substances.	A solution that contains so much solute that it is unable to dissolve anymore, leaving the undissolved solute at the bottom of the container.	A solution with more solute than the saturated solution. Since it contains more undissolved solute than the saturated solution it has the tendency to crystallize.

Materials:

- Clean wooden skewer or chopstick
- Clothespin or other clip
- 1 cup water
- 2-3 cups sugar
- Tall narrow glass or jar
- Food coloring (optional)

Methods:

1. Clip the wooden skewer into the clothespin so that it hangs down inside the glass and is about 1 inch (2.5 cm) from the bottom of the glass.
2. Remove the skewer and clothespin and put them aside for now.
3. Get a helpful adult!
4. Pour the water into a pan and bring it to boil.
5. Pour about 1/4 cup of sugar into the boiling water, stirring until it dissolves. Add 4-5 drops of food coloring (optional).
6. Keep adding more and more sugar, each time stirring it until it dissolves, until no more will dissolve. This will take time and patience and it will take longer for the sugar to dissolve each time.Be sure you don't give up too soon. Once no more sugar will dissolve, remove it from heat and allow it to cool for at least 20 minutes.
7. NOTE: While it is cooling, some people like to dip half of the skewer in the sugar solution and then roll it in some sugar to help jump start the crystal growth. If you do this, be sure to let the skewer cool completely so that sugar crystals do not fall off when you place it back in the glass
8. Have your friendly ADULT carefully pour the sugar solution into the jar almost to the top. Then submerge the skewer back into the glass making sure that it is hanging straight down the middle without touching the sides.
9. Allow the jar to fully cool and put it someplace where it will not be disturbed.
10. Now just wait. The sugar crystals will grow over the next 3-7 days. Then you can eat it!

While you wait:
Each day, look at your jar (don't shake it!) and record your observations below:

Day 1	Day 2	Day 3	Day 4	Day 5, etc.

What was the solvent in this experiment? How do you know?

What was the solute in this experiment? How do you know?

What type of solution did you create? How do you know?

BALLOON ROCKET:

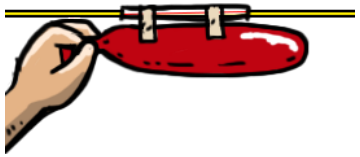
Newton's Third Law of Motion states that "for every action, there is an equal and opposite reaction." In this experiment you will observe how a balloon losing air out the back of the balloon creates "thrust" in the forward direction. Thrust is a pushing force created by energy. In the balloon experiment, our thrust comes from the energy of the balloon forcing the air out. In a real rocket, thrust is created by the force of burning rocket fuel as it blasts from the rockets engine – as the engines blast down, the rocket goes up!

Materials:

- 1 balloon (round ones will work, but the longer "airship" balloons work best)
- 1 long piece of string (about 10-15 feet long)
- 1 plastic straw
- tape

Methods:

1. Tie one end of the string to a chair, door knob, or other support.
2. Put the other end of the string through the straw.
3. Pull the string tight and tie it to another support in the room (bed frame, dresser knob, etc.).
4. Blow up the balloon (but don't tie it.) Pinch the end of the balloon and tape the balloon to the straw as shown. You're ready for launch.



5. Let go and watch the rocket fly!

Questions to answer:

1. Measure: how far did the rocket fly? How much time did it take to stop?

2. If you have another balloon with a different shape, try the experiment again. Does the shape of the balloon affect how far (or fast) the rocket travels?

3. Cut the straw to make a shorted straw and redo the experiment. Does the length of the straw affect how far (or fast) the rocket travels?

4. Does the type of string affect how far (or fast) the rocket travels? (try fishing line, nylon string, cotton string, etc.)

5. Does the angle of the string affect how far (or fast) the rocket travels?

FOOD SCRAP GARDEN:

America has more than enough food to feed everyone. But each year, an enormous amount of food is wasted in the United States. Each year, 72 billion pounds of food goes to waste while 37 million Americans struggle with hunger.
This amount of waste has far-reaching impacts on food security, resource conservation and climate change:

- Wholesome food that could have helped feed families in need is sent to landfills.
- The land, water, labor, energy and other inputs used in producing, processing, transporting, preparing, storing, and disposing of discarded food are pulled away from uses that may have been more beneficial to society – and generate impacts on the environment that may endanger the long-run health of the planet.
- Food waste, which is the single largest component going into municipal landfills, quickly generates methane, helping to make landfills the third largest source of methane in the United States.

Here are some ways to reduce food waste:

- Make a meal plan and buy exactly what you need
- Compost your leftover food
- Make sure your refrigerator is at the right temperature
- Pickle or can leftover items
- Make a big batch and freeze individual portions

We can also reduce food waste by growing food from our scraps. Several foods can be grown from the food pieces we normally throw away.

Materials:

- Clear cups or glass jars (any size)
- Water
- Scraps from any of these vegetables:
    - Green onions (the white rooty part)
    - Celery (the bottom part)
    - Garlic
    - Romaine lettuce (the "core")
    - Bok Choy (the bottom part)
    - (lots more, but we'll start here!)

Methods:

1. Get a jar/glass for each type of scrap you will plant.
2. Place the food scrap in a jar with the "bottom" of the plant down.
3. Place water in the jar until it covers the bottom part of the food scrap.
4. Change the water every 2-3 days and replace with fresh water.
5. Once your scraps begin to grow, you can keep them in jars and keep replacing the water, or plant them in a pot with soil.
6. Record observations & measure your plants every day for 3 weeks.
7. Watch your veggies grow and then eat them!

Observations:

Plant Type	Week 1 observations	Week 2 observations	Week 3 observations

Create a data table below to record the growth of your plants each day. You should use millimeters or centimeters to measure your plants, NOT inches.

Which plant grew the fastest?

How does regrowing food scraps impact food security, resource conservation and climate change?

HAVE A WONDERFUL SUMMER! WE HOPE YOU HAVE FUN AND STAY SAFE!

"WHERE THERE'S HOPE, THERE'S LIFE.
IT FILLS US WITH FRESH COURAGE AND MAKES US STRONG AGAIN."
— ANNE FRANK, THE DIARY OF A YOUNG GIRL

CIENCIAS GTO-8VO GRADO!
4 AL 14 DE MAYO

USA ESTE TIEMPO PARA ASEGURARTE DE QUE TODAS TUS TAREAS ESTÉN COMPLETAS. ASEGURATE DE COMPLETAR TUS PROYECTOS Y TODAS LAS PREGUNTAS EN TU PAQUETE.

SI YA TERMINASTE, YUPI! AQUÍ HAY ALGUNOS EXPERIMENTOS QUE PUEDES INTENTAR EN CASA. RESPONDE A LAS PREGUNTAS SOBRE CADA EXPERIMENTO QUE HAGAS.

REMOLINO DE SKITTLES:
Este experimento nos enseña sobre los gradientes de concentración. Esta es la idea de que los líquidos y gases se mueven desde altas concentraciones hacia bajas concentraciones.

Necesitas:
- Un plato pequeno (un plato blanco es ideal)
- Skittles
- Agua
- Cubo de azucar (opcional)

Experimento:
1. Vierte agua en un plato, suficiente para cubrir solo el fondo.
2. Coloca 3 Skittles en el plato en forma de triángulo (a 1-2 pulgadas de distancia uno del otro)
3. Escribe tus observaciones. Describe lo que ves.

4. Si tienes un cubo de azúcar, colócalo en el centro del triángulo de Skittles.
5. Escribe tus observaciones. Describe lo que ves.

Opción adicional:
En un plato limpio, coloca un anillo de Skittles alrededor del borde inferior del plato. Luego, vierte agua tibia en el plato lentamente. Qué sucede?

Analiza!
Si Alejandra rocía perfume en una habitación, la concentración de perfume es muy alta cerca de ella cuando lo roció. Al pasar el tiempo, más personas en el mismo lugar lo pueden oler..

Qué sucede con la concentración de perfume junto a Alejandra en un periodo corto de tiempo? (Una pista: piensa en que tan fuerte el olor es).

Qué sucede con la concentración de perfume en la habitación?

De qué manera(s) te ayuda el experimento de Skittles a entender como la concentración cambia a través del tiempo?

CULTIVO DE CRISTALES:

Una solución es una mezcla homogénea (distribuida a partes iguales) de dos o más sustancias. Las soluciones pueden existir en cualquier fase.

Una solución consiste en solvente y soluto. El soluto es la sustancia disuelta en el solvente. La cantidad de soluto que puede ser disuelta en el solvente se le llama solubilidad. Por ejemplo, en una solución salina (agua salada) la sal es el soluto disuelta en agua, que actúa como solvente.

Insaturada	Saturada	Supersaturada
Una solución que contiene suficiente solvente para disolver completamente el soluto, sin dejar residuos.	Una solución que contiene tanto soluto que no puede disolverse más, dejando el soluto no disuelto en el fondo del recipiente.	Una solución con más soluto que la solución saturada. Como contiene más soluto no disuelto que la solución saturada, estas soluciones tienden a cristalizarse.

Materiales:
- Pincho limpio de madera o palito chino.
- Clip u otro gancho
- 1 taza de agua
- 2-3 tazas de azúcar
- Recipiente de vidrio alto y estrecho
- Colorante (opcional)

Experimento:
1. Sostén el pincho de madera con el gancho o clip, de forma que cuelgue dentro del recipiente de vidrio y quede a más o menos una pulgada (2.5 cms) del fondo del recipiente.
2. Remueve el pincho y el gancho y colocalos aparte por el momento.
3. Pide a un adulto que te ayude!

4. Coloca el agua en una olla a fuego bajo en la estufa/cocina hasta que hierva.
5. Vierte alrededor de ¼ de taza de azúcar en el agua hirviendo, mezclando hasta que se disuelva. Agrega 4-5 gotas de colorante (opcional).
6. Continúa agregando más y más azúcar, revolviendo hasta que se disuelva. Agrega azúcar hasta que no se disuelva más. Esta parte toma tiempo y paciencia, y cada vez tomará más tiempo para disolver el azúcar a medida que la agregas. No te rindas demasiado rapido! Una vez que no puedas disolver más azúcar, retira del fuego y deja refrescar por al menos 20 minutos.
7. NOTA: Mientras la mezcla se enfría, algunas personas sumergen la mitad del pincho de madera en la solucion de azucar y luego cubrirlo con azúcar para acelerar el cultivo de los cristales. Si haces esto, asegúrate de dejar que el pincho de madera se enfríe completamente, para que los cristales de azúcar no se caigan cuando coloques el pincho en el recipiente de vidrio.
8. Pídele a tu ayudante ADULTO que con mucho cuidado vierta la solución de azúcar en el recipiente hasta casi el tope. Luego, sumerge el pincho de madera en el recipiente, asegurandote de que cuelgue justo en el medio, sin tocar los lados. .
9. Deja que el recipiente se enfríe completamente y colocalo en un lugar donde no se mueva..
10. Ahora, solo falta esperar. Los cristales de azúcar se cultivan en 3-7 días. Cuando estén listos, te los puedes comer!

Mientras esperas...
Observa el recipiente cada dia (no lo revuelvas ni lo muevas!) y anota tus observaciones aquí:

Dia 1	Dia 2	Dia 3	Dia 4	Dia 5, etc.

Que sustancia actúa como solvente en este experimento? Como lo sabes?

Que sustancia actúa como soluto en este experimento? Como lo sabes?

Que tipo de solución creaste? Como lo sabes?

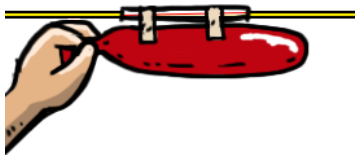
COHETE CON GLOBOS:

La Tercera Ley de Newton, también conocida como el Principio de Accion y Reaccion, dice “si un cuerpo ejerce una acción sobre otro, este realizará una acción igual en sentido contrario“. En este experimento, observaremos como un globo perdiendo aire desde atrás crea “impulso“ en dirección delantera. El impulso es una fuerza de empuje creada usando energía. En este experimento con un globo, el impulso viene de la energía que el globo realiza para expulsar el aire. En un cohete de verdad, el impulso se crea por la fuerza generada al quemar combustible que explota desde el motor del cohete - a medida que los motores arrancan, el cohete se eleva!

Materiales:
- 1 globo (los redondos funcionan, pero los mejores para este experimento son los más largos, también conocidos como globos dirigibles)
- 1 pedazo largo de hilo o cuerda (10-15 pies de largo) long piece of string
- 1 sorbete o pajilla de plastico
- Cinta adhesiva

Experimento:
1. Amarra uno de los dos extremos del hilo o cuerda a una silla, manubrio de una puerta, o cualquier otro apoyo.
2. Pasa el otro extremo del hilo o cuerda a través de la pajilla o sorbete de plástico. .
3. Hala el hilo o cuerda con fuerza y amarralo a otro soporte en el cuarto (marco de cama, perilla de tocador, etc.)

4. Infla el globo (pero no lo amarres). Sostén el globo entre tus dedos y usa cinta adhesiva para pegar la pajilla al globo como en el dibujo. Estás listo para lanzamiento..



5. Suelta el globo y observa el cohete volar!

Preguntas:

1. Medida: qué distancia ha recorrido el cohete? Cuánto tiempo tomó para que se detuviera?
2. Si tienes otro globo con otra forma, intenta el experimento otra vez. Tiene algún efecto la forma del globo en la distancia que recorre el cohete, o qué tan rápido se mueve?

3. Corta la pajilla o sorbete para hacerla más corta y repite el experimento. Tiene algún efecto el largo de la pajilla o sorbete en la distancia o velocidad del cohete?

4. Explica si el tipo de cuerda o hilo afecta la distancia o velocidad del cohete. (Intenta el experimento con sedal, hilo de nylon, hilo de algodon, etc.)

5. Hay alguna diferencia en la distancia o velocidad del cohete dependiendo del ángulo del hilo o cuerda?

JARDIN DE SOBRAS DE ALIMENTOS:

Los Estados Unidos tiene más que suficiente comida para alimentar a todos sus habitantes. Pero cada año, una cantidad enorme de comida se echa a perder en los Estados Unidos. Mientras 37 millones de estadounidenses padecen de hambre, cada año en los Estados Unidos se desechan 70 mil millones de toneladas de alimentos. Esta cantidad de comida desperdiciada tiene impactos significativos en la seguridad alimentaria, preservación de recursos y cambio climático en el país:

- Alimentos nutritivos que podrían haber ayudado a alimentar familias son enviados a los vertederos.
- La tierra, el agua, la mano de obra, energía y otros insumos que se usan en producir, procesar, transportar, preparar, almacenar, y descartar estos alimentos se podrían usar de formas más beneficiosas para la sociedad - y generan un impacto ambiental que puede poner en peligro la salud del planeta a largo plazo.
- El desperdicio de comida, ques es hoy día el mayor componente de los desperdicios en los vertederos municipales, genera metano muy

rápidamente, convirtiendo los vertederos en la tercera mayor fuente de metano en los Estados Unidos.

Estas son algunas maneras de reducir tu desperdicio de alimentos:

- Haz un plan con lo que vas a preparar para cada una de tus comidas y compra exactamente lo que necesitas.
- Colecta las sobras de tus alimentos para compostaje (compost)
- Revisa la temperatura de tu refrigerador - asegúrate que esté a la temperatura correcta.
- Prepara alimentos en conservas.
- Prepara porciones grandes de tus platos favoritos y congela porciones individuales.

Otra forma de reducir nuestro desperdicio de alimentos es cultivando hortalizas usando sobras. Varios vegetales se pueden replantar a partir de las piezas que normalmente echamos a la basura. .

Materiales:

- Tazas o jarros transparentes o de vidrio (de cualquier tamaño)
- Agua
- Sobras de cualquiera de estos vegetales:
    - Cebollinos o chalotes (la parte blanca con las raíces)
    - Apio (la parte de abajo)
    - Ajo
    - Lechuga romana (el corazon)
    - Bok Choy o repollo chino (la parte de abajo)
    - (hay muchos más pero por algo se empieza!)

Experimento:

1. Usa un jarro o vaso por cada tipo de sobra que vayas a plantar.
2. Coloca el pedazo del vegetal en un jarro con la raíz o cepa (la parte de abajo) hacia abajo.
3. Coloca agua en el vaso o jarro hasta que cubra la parte inferior del pedazo de vegetal. Cambia el agua cada 2-3 días y reemplaza con agua fresca.
4. Una vez que las sobras empiecen a crecer, las puedes dejar en el vaso o jarro, o plantarlas en una maceta con tierra.
5. Anota tus observaciones y mide tus plantas cada dia por 3 semanas.
6. Observa tus vegetales crecer y disfruta tu cosecha!

Observaciones:

Tipo de Planta	Semana 1 - observaciones	Semana 2 - observaciones	Semana 3 - observaciones

Crea un cuadro de datos debajo para registrar el crecimiento de tus plantas cada dia. Usa milimetros o centimetros para medir tus plantas, NO pulgadas.

Number Correct: _____

Addition of Decimals I—Round 1

Directions: Evaluate each expression.

1.	$5.1 + 6$	
2.	$5.1 + 0.6$	
3.	$5.1 + 0.06$	
4.	$5.1 + 0.006$	
5.	$5.1 + 0.0006$	
6.	$3 + 2.4$	
7.	$0.3 + 2.4$	
8.	$0.03 + 2.4$	
9.	$0.003 + 2.4$	
10.	$0.0003 + 2.4$	
11.	$24 + 0.3$	
12.	$2 + 0.3$	
13.	$0.2 + 0.03$	
14.	$0.02 + 0.3$	
15.	$0.2 + 3$	
16.	$2 + 0.03$	
17.	$5 + 0.4$	
18.	$0.5 + 0.04$	
19.	$0.05 + 0.4$	
20.	$0.5 + 4$	
21.	$5 + 0.04$	
22.	$0.5 + 0.4$	

23.	$3.6 + 2.1$	
24.	$3.6 + 0.21$	
25.	$3.6 + 0.021$	
26.	$0.36 + 0.021$	
27.	$0.036 + 0.021$	
28.	$1.4 + 42$	
29.	$1.4 + 4.2$	
30.	$1.4 + 0.42$	
31.	$1.4 + 0.042$	
32.	$0.14 + 0.042$	
33.	$0.014 + 0.042$	
34.	$0.8 + 2$	
35.	$0.8 + 0.2$	
36.	$0.08 + 0.02$	
37.	$0.008 + 0.002$	
38.	$6 + 0.4$	
39.	$0.6 + 0.4$	
40.	$0.06 + 0.04$	
41.	$0.006 + 0.004$	
42.	$0.1 + 9$	
43.	$0.1 + 0.9$	
44.	$0.01 + 0.09$	

Number Correct: _____

Improvement: _____

Addition of Decimals I—Round 2

Directions: Evaluate each expression.

1.	$3.2 + 5$	
2.	$3.2 + 0.5$	
3.	$3.2 + 0.05$	
4.	$3.2 + 0.005$	
5.	$3.2 + 0.0005$	
6.	$4 + 5.3$	
7.	$0.4 + 5.3$	
8.	$0.04 + 5.3$	
9.	$0.004 + 5.3$	
10.	$0.0004 + 5.3$	
11.	$4 + 0.53$	
12.	$6 + 0.2$	
13.	$0.6 + 0.02$	
14.	$0.06 + 0.2$	
15.	$0.6 + 2$	
16.	$2 + 0.06$	
17.	$1 + 0.7$	
18.	$0.1 + 0.07$	
19.	$0.01 + 0.7$	
20.	$0.1 + 7$	
21.	$1 + 0.07$	
22.	$0.1 + 0.7$	

23.	$4.2 + 5.5$	
24.	$4.2 + 0.55$	
25.	$4.2 + 0.055$	
26.	$0.42 + 0.055$	
27.	$0.042 + 0.055$	
28.	$2.7 + 12$	
29.	$2.7 + 1.2$	
30.	$2.7 + 0.12$	
31.	$2.7 + 0.012$	
32.	$0.27 + 0.012$	
33.	$0.027 + 0.012$	
34.	$0.7 + 3$	
35.	$0.7 + 0.3$	
36.	$0.07 + 0.03$	
37.	$0.007 + 0.003$	
38.	$5 + 0.5$	
39.	$0.5 + 0.5$	
40.	$0.05 + 0.05$	
41.	$0.005 + 0.005$	
42.	$0.2 + 8$	
43.	$0.2 + 0.8$	
44.	$0.02 + 0.08$	

Lesson 16: Write Expressions in Which Letters Stand for Numbers

Video Lesson

Classwork

Opening Exercise

Underline the key words in each statement.

a. The sum of twice b and 5

b. The quotient of c and d

c. a raised to the fifth power and then increased by the product of 5 and c

d. The quantity of a plus b divided by 4

e. 10 less than the product of 15 and c

f. 5 times d and then increased by 8

Mathematical Modeling Exercise 1

Model how to change the expressions given in the Opening Exercise from words to variables and numbers.

a. The sum of twice b and 5

b. The quotient of c and d

c. a raised to the fifth power and then increased by the product of 5 and c

d. The quantity of a plus b divided by 4

e. 10 less than the product of 15 and c

f. 5 times d and then increased by 8

Mathematical Modeling Exercise 2

Model how to change each real-world scenario to an expression using variables and numbers. Underline the text to show the key words before writing the expression.

Marcus has 4 more dollars than Yaseen. If y is the amount of money Yaseen has, write an expression to show how much money Marcus has.

Mario is missing half of his assignments. If a represents the number of assignments, write an expression to show how many assignments Mario is missing.

Kamilah's weight has tripled since her first birthday. If w represents the amount Kamilah weighed on her first birthday, write an expression to show how much Kamilah weighs now.

Nathan brings cupcakes to school and gives them to his five best friends, who share them equally. If c represents the number of cupcakes Nathan brings to school, write an expression to show how many cupcakes each of his friends receive.

Mrs. Marcus combines her atlases and dictionaries and then divides them among 10 different tables. If a represents the number of atlases and d represents the number of dictionaries Mrs. Marcus has, write an expression to show how many books would be on each table.

To improve in basketball, Ivan's coach told him that he needs to take four times as many free throws and four times as many jump shots every day. If f represents the number of free throws and j represents the number of jump shots Ivan shoots daily, write an expression to show how many shots he will need to take in order to improve in basketball.

Exercises

Mark the text by underlining key words, and then write an expression using variables and/or numbers for each statement.

1. b decreased by c squared
2. 24 divided by the product of 2 and a
3. 150 decreased by the quantity of 6 plus b
4. The sum of twice c and 10
5. Marlo had $\$35$ but then spent $\$m$.
6. Samantha saved her money and was able to quadruple the original amount, m.
7. Veronica increased her grade, g, by 4 points and then doubled it.
8. Adbell had m pieces of candy and ate 5 of them. Then, he split the remaining candy equally among 4 friends.
9. To find out how much paint is needed, Mr. Jones must square the side length, s, of the gate and then subtract 15.
10. Luis brought x cans of cola to the party, Faith brought d cans of cola, and De'Shawn brought h cans of cola. How many cans of cola did they bring altogether?

Video Lesson

Lesson 17: Write Expressions in Which Letters Stand for Numbers

Classwork

Exercises

Station One	1. The sum of a and b
	2. Five more than twice a number c
	3. Martha bought d number of apples and then ate 6 of them.
Station Two	1. 14 decreased by p
	2. The total of d and f, divided by 8
	3. Rashod scored 6 less than 3 times as many baskets as Mike. Mike scored b baskets.
Station Three	1. The quotient of c and 6
	2. Triple the sum of x and 17
	3. Gabrielle had b buttons but then lost 6. Gabrielle took the remaining buttons and split them equally among her 5 friends.

Station Four	1. d doubled
	2. Three more than 4 times a number x
	3. Mali has c pieces of candy. She doubles the amount of candy she has and then gives away 15 pieces.
Station Five	1. f cubed
	2. The quantity of 4 increased by a, and then the sum is divided by 9.
	3. Tai earned 4 points fewer than double Oden's points. Oden earned p points.
Station Six	1. The difference between d and 8
	2. 6 less than the sum of d and 9
	3. Adalyn has x pants and s shirts. She combined them and sold half of them. How many items did Adalyn sell?

Lesson 18: Writing and Evaluating Expressions—Addition and Subtraction

Video Lesson

Classwork

Opening Exercise

How can we show a number increased by 2?

Can you prove this using a model?

Example 1: The Importance of Being Specific in Naming Variables

When naming variables in expressions, it is important to be very clear about what they represent. The units of measure must be included if something is measured.

Exercises 1–2

1. Read the variable in the table, and improve the description given, making it more specific.

Variable	Incomplete Description	Complete Description with Units
Joshua's speed (J)	Let J represent Joshua's speed.	
Rufus's height (R)	Let R represent Rufus's height.	
Milk sold (M)	Let M represent the amount of milk sold.	
Colleen's time in the 40-meter hurdles (C)	Let C represent Colleen's time.	
Sean's age (S)	Let S represent Sean's age.	

2. Read each variable in the table, and improve the description given, making it more specific.

Variable	Incomplete Description	Complete Description with Units
Karolyn's CDs (K)	Let K represent Karolyn's CDs.	Let K represent the number of CDs Karolyn has.
Joshua's merit badges (J)	Let J represent Joshua's merit badges.	
Rufus's trading cards (R)	Let R represent Rufus's trading cards.	
Milk money (M)	Let M represent the amount of milk money.	

Example 2: Writing and Evaluating Addition and Subtraction Expressions

Read each story problem. Identify the unknown quantity, and write the addition or subtraction expression that is described. Finally, evaluate your expression using the information given in column four.

Story Problem	Description with Units	Expression	Evaluate the Expression If:	Show Your Work and Evaluate
Gregg has two more dollars than his brother Jeff. Write an expression for the amount of money Gregg has.	Let j represent Jeff's money in dollars.	$j + 2$	Jeff has \$12.	$j + 2$ $12 + 2$ 14 Gregg has \$14.
Gregg has two more dollars than his brother Jeff. Write an expression for the amount of money Jeff has.	Let g represent Gregg's money in dollars.	$g - 2$	Gregg has \$14.	$g - 2$ $14 - 2$ 12 Jeff has \$12.
Abby read 8 more books than Kristen in the first marking period. Write an expression for the number of books Abby read.			Kristen read 9 books in the first marking period.	

Number Correct: _____

Addition of Decimals I—Round 1

Directions: Evaluate each expression.

1.	$5.1 + 6$	
2.	$5.1 + 0.6$	
3.	$5.1 + 0.06$	
4.	$5.1 + 0.006$	
5.	$5.1 + 0.0006$	
6.	$3 + 2.4$	
7.	$0.3 + 2.4$	
8.	$0.03 + 2.4$	
9.	$0.003 + 2.4$	
10.	$0.0003 + 2.4$	
11.	$24 + 0.3$	
12.	$2 + 0.3$	
13.	$0.2 + 0.03$	
14.	$0.02 + 0.3$	
15.	$0.2 + 3$	
16.	$2 + 0.03$	
17.	$5 + 0.4$	
18.	$0.5 + 0.04$	
19.	$0.05 + 0.4$	
20.	$0.5 + 4$	
21.	$5 + 0.04$	
22.	$0.5 + 0.4$	

23.	$3.6 + 2.1$	
24.	$3.6 + 0.21$	
25.	$3.6 + 0.021$	
26.	$0.36 + 0.021$	
27.	$0.036 + 0.021$	
28.	$1.4 + 42$	
29.	$1.4 + 4.2$	
30.	$1.4 + 0.42$	
31.	$1.4 + 0.042$	
32.	$0.14 + 0.042$	
33.	$0.014 + 0.042$	
34.	$0.8 + 2$	
35.	$0.8 + 0.2$	
36.	$0.08 + 0.02$	
37.	$0.008 + 0.002$	
38.	$6 + 0.4$	
39.	$0.6 + 0.4$	
40.	$0.06 + 0.04$	
41.	$0.006 + 0.004$	
42.	$0.1 + 9$	
43.	$0.1 + 0.9$	
44.	$0.01 + 0.09$	

Number Correct: _____

Improvement: _____

Addition of Decimals I—Round 2

Directions: Evaluate each expression.

1.	$3.2 + 5$	
2.	$3.2 + 0.5$	
3.	$3.2 + 0.05$	
4.	$3.2 + 0.005$	
5.	$3.2 + 0.0005$	
6.	$4 + 5.3$	
7.	$0.4 + 5.3$	
8.	$0.04 + 5.3$	
9.	$0.004 + 5.3$	
10.	$0.0004 + 5.3$	
11.	$4 + 0.53$	
12.	$6 + 0.2$	
13.	$0.6 + 0.02$	
14.	$0.06 + 0.2$	
15.	$0.6 + 2$	
16.	$2 + 0.06$	
17.	$1 + 0.7$	
18.	$0.1 + 0.07$	
19.	$0.01 + 0.7$	
20.	$0.1 + 7$	
21.	$1 + 0.07$	
22.	$0.1 + 0.7$	

23.	$4.2 + 5.5$	
24.	$4.2 + 0.55$	
25.	$4.2 + 0.055$	
26.	$0.42 + 0.055$	
27.	$0.042 + 0.055$	
28.	$2.7 + 12$	
29.	$2.7 + 1.2$	
30.	$2.7 + 0.12$	
31.	$2.7 + 0.012$	
32.	$0.27 + 0.012$	
33.	$0.027 + 0.012$	
34.	$0.7 + 3$	
35.	$0.7 + 0.3$	
36.	$0.07 + 0.03$	
37.	$0.007 + 0.003$	
38.	$5 + 0.5$	
39.	$0.5 + 0.5$	
40.	$0.05 + 0.05$	
41.	$0.005 + 0.005$	
42.	$0.2 + 8$	
43.	$0.2 + 0.8$	
44.	$0.02 + 0.08$	

Lección 16: Escribir expresiones en las que las letras representan números

Video Lesson

Trabajo en clase

Ejercicio inicial

Subraya las palabras clave en cada enunciado.

a. La suma de dos veces b y 5
b. El cociente de c y d
c. a elevado a la quinta potencia y luego aumentado por el producto de 5 y c
d. La cantidad de a más b dividida por 4
e. 10 menos que el producto de 15 y c
f. 5 por d y luego aumentado por 8

Ejercicio de representación matemática 1

Representa cómo cambiar las expresiones dadas en el Ejercicio inicial de palabras a variables y números.

a. La suma de dos veces b y 5

b. El cociente de c y d

c. a elevado a la quinta potencia y luego aumentado por el producto de 5 y c

d. La cantidad de a más b dividida por 4

e. 10 menos que el producto de 15 y c

f. 5 por d y luego aumentado por 8

Ejercicio de representación matemática 2

Representa cómo cambiar cada situación del mundo real a una expresión usando variables y números. Subraya el texto para mostrar las palabras clave antes de escribir la expresión.

Marcus tiene 4 más dólares que Yaseen. Si y es la cantidad de dinero que Yaseen tiene, escribe una expresión para mostrar cuánto dinero tiene Marcus.

A Mario le falta la mitad de sus tareas. Si a representa el número de tareas, escribe una expresión para mostrar el número de tareas que le faltan a Mario.

El peso de Kamilah se ha triplicado desde su primer cumpleaños. Si w representa la cantidad que Kamilah pesó en su primer cumpleaños, escribe una expresión para mostrar cuánto pesa Kamilah ahora.

Nathan trae pastelitos a la escuela y se los da a sus cinco mejores amigos, quienes los comparten por igual. Si c representa el número de pastelitos que Nathan llevó a la escuela, escribe una expresión para mostrar cuántos pastelitos recibió cada uno de sus amigos.

La Sra. Marcus combina sus atlas y diccionarios y los divide entre 10 mesas diferentes. Si a representa el número de atlas y d representa el número de diccionarios que la Sra. Marcus tiene, escribe una expresión para mostrar cuántos libros habría en cada mesa.

Para mejorar en baloncesto, el entrenador de Iván le dijo que tenía que intentar cuatro veces más tiros libres y cuatro veces más tiros en elevación todos los días. Si f representa el número de tiros libres y j representa el número de tiros en elevación que Iván intenta diariamente, escribe una expresión para mostrar cuántos tiros necesitará intentar para mejorar en baloncesto.

Ejercicios

Marca el texto subrayando las palabras clave y luego escribe una expresión usando variables y/o números para cada enunciado.

1. b disminuido por c al cuadrado
2. 24 dividido por el producto de 2 y a
3. 150 disminuido por la cantidad de 6 más b
4. La suma de dos veces c y 10
5. Mario tenía $\$35$ pero luego gastó $\$m$
6. Samantha ahorró su dinero y pudo cuadruplicar la cantidad original, m.
7. Verónica aumentó su calificación, g, por 4 puntos y luego la duplicó.
8. Adbell tenía m piezas de dulces y se comió 5. Luego dividió el resto de dulces por igual entre 4 amigos.
9. Para averiguar cuánta pintura se necesita, el Sr. Jones debe elevar al cuadrado la longitud lateral de la puerta, s, y luego restar 15.
10. Luis trajo x latas de refresco de cola para la fiesta, Faith trajo d latas y De'Shawn trajo h latas. ¿Cuántas latas de cola trajeron en total?

Video Lesson

Lección 17: Escribir expresiones en las que las letras representan números

Trabajo en clase

Ejercicios

Estación uno:	1. La suma de a y b
	2. Cinco más que dos veces un número c
	3. Marta compró d número de manzanas y luego se comió 6 de estas manzanas.
Estación dos:	1. 14 disminuido por p
	2. El total de d y f, dividido por 8
	3. Rashod anotó 6 menos que 3 veces las canastas de Mike. Mike anotó b canastas.
Estación tres:	1. El cociente de c y 6
	2. El triple de la suma de x y 17
	3. Gabrielle tenía b botones, pero luego perdió 6. Gabrielle tomó los botones restantes y los dividió en partes iguales entre sus 5 amigos.

Estación cuatro:	1. d duplicado
	2. Tres más que 4 veces un número x
	3. Mali tiene c piezas de dulces. Ella duplica la cantidad de dulces que tiene y luego regala 15 piezas.
Estación cinco:	1. f al cubo
	2. La cantidad de 4 incrementado por a y luego la suma se divide entre 9.
	3. Tai ganó 4 puntos menos que el doble de los puntos de Oden. Oden ganó p puntos.
Estación seis:	1. La diferencia entre d y 8
	2. 6 menos que la suma de d y 9
	3. Adalyn tiene x pantalones y s camisetas. Los combinó y vendió la mitad de ellos. ¿Cuántos artículos vendió Adalyn?

Video Lesson

Lección 18: Escribir y resolver expresiones—suma y resta

Trabajo en clase

Ejercicio inicial

¿Cómo podemos mostrar un número aumentado por 2?

¿Puedes comprobar esto usando una representación?

Ejemplo 1: La importancia de ser específico en la asignación de nombres de variables

Al identificar variables en las expresiones, es importante dejar muy claro qué representan. Las unidades de medida se deben incluir si se mide algo.

Ejercicios 1–2

1. Lee la variable en la tabla y mejora la descripción dada para que sea más específica.

Variable	Descripción incompleta	Descripción completa con unidades
Velocidad de Joshua (J)	Deja que J represente la velocidad de Joshua.	
Estatura de Rufus (R)	Deja que R represente la estatura de Rufus.	
Leche vendida (M)	Deja que M represente la cantidad de leche vendida.	
Tiempo de Colleen en los 40 metros con vallas (C)	Deja que C represente el tiempo de Colleen.	
Edad de Sean (S)	Deja que S represente la edad de Sean.	

2. Lee cada variable en la tabla y mejora la descripción dada para que sea más específica.

Variable	Descripción incompleta	Descripción completa con unidades
CDs de Karolyn (K)	Deja que K represente los CDs de Karolyn.	Deja que K represente el número de CDs que Karolyn tiene.
Insignias de mérito de Joshua (J)	Deja que J represente las insignias de mérito de Joshua.	
Tarjetas coleccionables de Rufus (R)	Deja que R represente las tarjetas coleccionables de Rufus.	
Dinero para la leche (M)	Deja que M represente la cantidad de dinero para la leche.	

Ejemplo 2: Escribir y resolver expresiones de suma y resta

Lee cada problema razonado. Identifica la cantidad desconocida y escribe la expresión de suma o resta que se describe. Por último, resuelve tu expresión utilizando la información dada en la columna cuatro.

Problema razonado	Descripción con unidades	Expresión	Resuelve la expresión si:	Muestra tu trabajo y resuelve
Gregg tiene dos dólares más que su hermano Jeff. Escribe una expresión para la cantidad de dinero que tiene Gregg.	Deja que j represente el dinero de Jeff en dólares.	$j + 2$	Jeff tiene \$12.	$j + 2$ $12 + 2$ 14 Gregg tiene \$14.
Gregg tiene dos dólares más que su hermano Jeff. Escribe una expresión para la cantidad de dinero que tiene Jeff.	Deja que g represente el dinero de Gregg en dólares.	$g - 2$	Gregg tiene \$14.	$g - 2$ $14 - 2$ 12 Jeff tiene \$12.
Abby leyó 8 libros más que Kristen en el primer período de calificaciones. Escribe una expresión para el número de libros que Abby leyó.			Kristen leyó 9 libros en el primer período de calificaciones.	

Number Correct: _____

Division of Fractions—Round 1

Directions: Evaluate each expression and simplify.

1.	9 ones ÷ 3 ones	
2.	$9 \div 3$	
3.	9 tens ÷ 3 tens	
4.	$90 \div 30$	
5.	9 hundreds ÷ 3 hundreds	
6.	$900 \div 300$	
7.	9 halves ÷ 3 halves	
8.	$\frac{9}{2} \div \frac{3}{2}$	
9.	9 fourths ÷ 3 fourths	
10.	$\frac{9}{4} \div \frac{3}{4}$	
11.	$\frac{9}{8} \div \frac{3}{8}$	
12.	$\frac{2}{3} \div \frac{1}{3}$	
13.	$\frac{1}{3} \div \frac{2}{3}$	
14.	$\frac{6}{7} \div \frac{2}{7}$	
15.	$\frac{5}{7} \div \frac{2}{7}$	
16.	$\frac{3}{7} \div \frac{4}{7}$	
17.	$\frac{6}{10} \div \frac{2}{10}$	
18.	$\frac{6}{10} \div \frac{4}{10}$	
19.	$\frac{6}{10} \div \frac{8}{10}$	
20.	$\frac{7}{12} \div \frac{2}{12}$	
21.	$\frac{6}{12} \div \frac{9}{12}$	
22.	$\frac{4}{12} \div \frac{11}{12}$	

23.	$\frac{6}{10} \div \frac{4}{10}$	
24.	$\frac{6}{10} \div \frac{2}{5} = \frac{6}{10} \div \frac{\quad}{10}$	
25.	$\frac{10}{12} \div \frac{5}{12}$	
26.	$\frac{5}{6} \div \frac{5}{12} = \frac{\quad}{12} \div \frac{5}{12}$	
27.	$\frac{10}{12} \div \frac{3}{12}$	
28.	$\frac{10}{12} \div \frac{1}{4} = \frac{10}{12} \div \frac{\quad}{12}$	
29.	$\frac{5}{6} \div \frac{3}{12} = \frac{\quad}{12} \div \frac{3}{12}$	
30.	$\frac{5}{10} \div \frac{2}{10}$	
31.	$\frac{5}{10} \div \frac{1}{5} = \frac{5}{10} \div \frac{\quad}{10}$	
32.	$\frac{1}{2} \div \frac{2}{10} = \frac{\quad}{10} \div \frac{2}{10}$	
33.	$\frac{1}{2} \div \frac{2}{4}$	
34.	$\frac{3}{4} \div \frac{2}{8}$	
35.	$\frac{1}{2} \div \frac{3}{8}$	
36.	$\frac{1}{2} \div \frac{1}{5} = \frac{\quad}{10} \div \frac{\quad}{10}$	
37.	$\frac{2}{4} \div \frac{1}{3}$	
38.	$\frac{1}{4} \div \frac{4}{6}$	
39.	$\frac{3}{4} \div \frac{2}{6}$	
40.	$\frac{5}{6} \div \frac{1}{4}$	
41.	$\frac{2}{9} \div \frac{5}{6}$	
42.	$\frac{5}{9} \div \frac{1}{6}$	
43.	$\frac{1}{2} \div \frac{1}{7}$	
44.	$\frac{5}{7} \div \frac{1}{2}$	

Number Correct: _____

Improvement: _____

Division of Fractions—Round 2

Directions: Evaluate each expression and simplify.

1.	12 ones ÷ 2 ones	
2.	12 ÷ 2	
3.	12 tens ÷ 2 tens	
4.	120 ÷ 20	
5.	12 hundreds ÷ 2 hundreds	
6.	1,200 ÷ 200	
7.	12 halves ÷ 2 halves	
8.	$\frac{12}{2} \div \frac{2}{2}$	
9.	12 fourths ÷ 3 fourths	
10.	$\frac{12}{4} \div \frac{3}{4}$	
11.	$\frac{12}{8} \div \frac{3}{8}$	
12.	$\frac{2}{4} \div \frac{1}{4}$	
13.	$\frac{1}{4} \div \frac{2}{4}$	
14.	$\frac{4}{5} \div \frac{2}{5}$	
15.	$\frac{2}{5} \div \frac{4}{5}$	
16.	$\frac{3}{5} \div \frac{4}{5}$	
17.	$\frac{6}{8} \div \frac{2}{8}$	
18.	$\frac{6}{8} \div \frac{4}{8}$	
19.	$\frac{6}{8} \div \frac{5}{8}$	
20.	$\frac{6}{10} \div \frac{2}{10}$	
21.	$\frac{7}{10} \div \frac{8}{10}$	
22.	$\frac{4}{10} \div \frac{7}{10}$	

23.	$\frac{6}{12} \div \frac{4}{12}$	
24.	$\frac{6}{12} \div \frac{2}{6} = \frac{6}{12} \div \frac{\quad}{12}$	
25.	$\frac{8}{14} \div \frac{7}{14}$	
26.	$\frac{8}{14} \div \frac{1}{2} = \frac{8}{14} \div \frac{\quad}{14}$	
27.	$\frac{11}{14} \div \frac{2}{14}$	
28.	$\frac{11}{14} \div \frac{1}{7} = \frac{11}{14} \div \frac{\quad}{14}$	
29.	$\frac{1}{7} \div \frac{6}{14} = \frac{\quad}{14} \div \frac{6}{14}$	
30.	$\frac{7}{18} \div \frac{3}{18}$	
31.	$\frac{7}{18} \div \frac{1}{6} = \frac{7}{18} \div \frac{\quad}{18}$	
32.	$\frac{1}{3} \div \frac{12}{18} = \frac{\quad}{18} \div \frac{12}{18}$	
33.	$\frac{1}{6} \div \frac{4}{18}$	
34.	$\frac{4}{12} \div \frac{8}{6}$	
35.	$\frac{1}{3} \div \frac{3}{15}$	
36.	$\frac{2}{6} \div \frac{1}{9} = \frac{\quad}{18} \div \frac{\quad}{18}$	
37.	$\frac{1}{6} \div \frac{4}{9}$	
38.	$\frac{2}{3} \div \frac{3}{4}$	
39.	$\frac{1}{3} \div \frac{3}{5}$	
40.	$\frac{1}{7} \div \frac{1}{2}$	
41.	$\frac{5}{6} \div \frac{2}{9}$	
42.	$\frac{5}{9} \div \frac{2}{6}$	
43.	$\frac{5}{6} \div \frac{4}{9}$	
44.	$\frac{1}{2} \div \frac{4}{5}$	

Lesson 21: Writing and Evaluating Expressions—Multiplication and Addition

Lesson Video

Classwork

Mathematical Modeling Exercise

The Italian Villa Restaurant has square tables that the servers can push together to accommodate the customers. Only one chair fits along the side of the square table. Make a model of each situation to determine how many seats will fit around various rectangular tables.

Number of Square Tables	Number of Seats at the Table
1	
2	
3	
4	
5	
50	
200	
T	

Are there any other ways to think about solutions to this problem?

It is impractical to make a model of pushing 50 tables together to make a long rectangle. If we did have a rectangle that long, how many chairs would fit on the long sides of the table?

How many chairs fit on the ends of the long table?

How many chairs fit in all? Record it on your table.

Work with your group to determine how many chairs would fit around a very long rectangular table if 200 square tables were pushed together.

If we let T represent the number of square tables that make one long rectangular table, what is the expression for the number of chairs that will fit around it?

Example

Look at Example 1 with your group. Determine the cost for various numbers of pizzas, and also determine the expression that describes the cost of having P pizzas delivered.

a. Pizza Queen has a special offer on lunch pizzas: $\$4.00$ each. They charge $\$2.00$ to deliver, regardless of how many pizzas are ordered. Determine the cost for various numbers of pizzas, and also determine the expression that describes the cost of having P pizzas delivered.

Number of Pizzas Delivered	Total Cost in Dollars
1	
2	
3	
4	
10	
50	
P	

What mathematical operations did you need to perform to find the total cost?

Suppose our principal wanted to buy a pizza for everyone in our class. Determine how much this would cost.

b. If the booster club had $\$400$ to spend on pizza, what is the greatest number of pizzas they could order?

c. If the pizza price was raised to $\$5.00$ and the delivery price was raised to $\$3.00$, create a table that shows the total cost (pizza plus delivery) of 1, 2, 3, 4, and 5 pizzas. Include the expression that describes the new cost of ordering P pizzas.

Number of Pizzas Delivered	Total Cost in Dollars
1	
2	
3	
4	
5	
P	

Lesson 22: Writing and Evaluating Expressions—Exponents

Classwork

Lesson Video

Example 1: Folding Paper

Exercises

1. Predict how many times you can fold a piece of paper in half.
   My prediction: _____

2. Before any folding (zero folds), there is only one layer of paper. This is recorded in the first row of the table. Fold your paper in half. Record the number of layers of paper that result. Continue as long as possible.

Number of Folds	Number of Paper Layers That Result	Number of Paper Layers Written as a Power of 2
0	1	2^0
1		
2		
3		
4		
5		
6		
7		
8		

   a. Are you able to continue folding the paper indefinitely? Why or why not?

   b. How could you use a calculator to find the next number in the series?

   c. What is the relationship between the number of folds and the number of layers?

   d. How is this relationship represented in exponential form of the numerical expression?

   e. If you fold a paper f times, write an expression to show the number of paper layers.

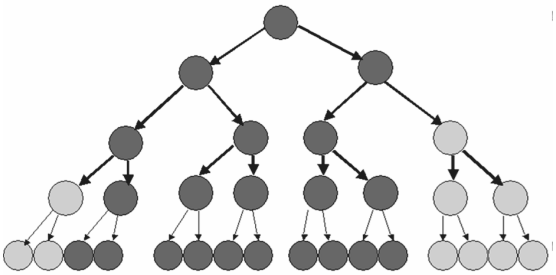
3. If the paper were to be cut instead of folded, the height of the stack would double at each successive stage, and it would be possible to continue.

   a. Write an expression that describes how many layers of paper result from 16 cuts.

   b. Evaluate this expression by writing it in standard form.

Example 2: Bacterial Infection

Bacteria are microscopic single-celled organisms that reproduce in a couple of different ways, one of which is called *binary fission*. In binary fission, a bacterium increases its size until it is large enough to split into two parts that are identical. These two grow until they are both large enough to split into two individual bacteria. This continues as long as growing conditions are favorable.



a. Record the number of bacteria that result from each generation.

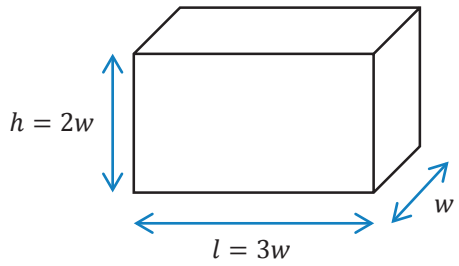
Generation	Number of Bacteria	Number of Bacteria Written as a Power of 2
1	2	2^1
2	4	2^2
3	8	2^3
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		

b. How many generations would it take until there were over one million bacteria present?

c. Under the right growing conditions, many bacteria can reproduce every 15 minutes. Under these conditions, how long would it take for one bacterium to reproduce itself into more than one million bacteria?

d. Write an expression for how many bacteria would be present after g generations.

Example 3: Volume of a Rectangular Solid



This box has a width, w. The height of the box, h, is twice the width. The length of the box, l, is three times the width. That is, the width, height, and length of a rectangular prism are in the ratio of $1:2:3$.

For rectangular solids like this, the volume is calculated by multiplying length times width times height.

$$V = l \cdot w \cdot h$$
$$V = 3w \cdot w \cdot 2w$$
$$V = 3 \cdot 2 \cdot w \cdot w \cdot w$$
$$V = 6\,w^3$$

Follow the above example to calculate the volume of these rectangular solids, given the width, w.

Width in Centimeters (cm)	Volume in Cubic Centimeters (cm^3)
1	
2	
3	
4	
w	

Lesson 23: True and False Number Sentences

Lesson Video

Classwork

Opening Exercise

Determine what each symbol stands for, and provide an example.

Symbol	What the Symbol Stands For	Example
$=$		
$>$		
$<$		
$\leq$		
$\geq$		

Example 1

For each equation or inequality your teacher displays, write the equation or inequality, and then substitute 3 for every x. Determine if the equation or inequality results in a true number sentence or a false number sentence.

Exercises

Substitute the indicated value into the variable, and state (in a complete sentence) whether the resulting number sentence is true or false. If true, find a value that would result in a false number sentence. If false, find a value that would result in a true number sentence.

1. $4 + x = 12$. Substitute 8 for x.

2. $3g > 15$. Substitute $4\frac{1}{2}$ for g.

3. $\frac{f}{4} < 2$. Substitute 8 for f.

4. $14.2 \leq h - 10.3$. Substitute 25.8 for h.

5. $4 = \frac{8}{h}$. Substitute 6 for h.

6. $3 > k + \frac{1}{4}$. Substitute $1\frac{1}{2}$ for k.

7. $4.5 - d > 2.5$. Substitute 2.5 for d.

8. $8 \geq 32p$. Substitute $\frac{1}{2}$ for p.

9. $\frac{w}{2} < 32$. Substitute 16 for w.

10. $18 \leq 32 - b$. Substitute 14 for b.

Lesson 24: True and False Number Sentences

Lesson Video

Classwork

Opening Exercise

State whether each number sentence is true or false. If the number sentence is false, explain why.

a. $4 + 5 > 9$

b. $3 \cdot 6 = 18$

c. $32 > \frac{64}{4}$

d. $78 - 15 < 68$

e. $22 \geq 11 + 12$

Example 1

Write true or false if the number substituted for g results in a true or false number sentence.

Substitute g with	$4g = 32$	$g = 8$	$3g \geq 30$	$g \geq 10$	$\frac{g}{2} > 2$	$g > 4$	$30 \geq 38 - g$	$g \geq 8$
8								
4								
2								
0								
10								

Example 2

State when the following equations/inequalities will be true and when they will be false.

a. $r + 15 = 25$ b. $6 - d > 0$ c. $\frac{1}{2}f = 15$

d. $\frac{y}{3} < 10$ e. $7g \geq 42$ f. $a - 8 \leq 15$

Exercises

Complete the following problems in pairs. State when the following equations and inequalities will be true and when they will be false.

1. $15c > 45$
2. $25 = d - 10$
3. $56 \geq 2e$
4. $\frac{h}{5} \geq 12$
5. $45 > h + 29$
6. $4a \leq 16$
7. $3x = 24$

Identify all equality and inequality signs that can be placed into the blank to make a true number sentence.

8. $15 + 9$ _____ 24
9. $8 \cdot 7$ _____ 50
10. $\frac{15}{2}$ _____ 10
11. 34 _____ $17 \cdot 2$
12. 18 _____ $24.5 - 6$

Number Correct: _____

Division of Fractions—Round 1

Directions: Evaluate each expression and simplify.

1.	9 ones ÷ 3 ones	
2.	$9 \div 3$	
3.	9 tens ÷ 3 tens	
4.	$90 \div 30$	
5.	9 hundreds ÷ 3 hundreds	
6.	$900 \div 300$	
7.	9 halves ÷ 3 halves	
8.	$\frac{9}{2} \div \frac{3}{2}$	
9.	9 fourths ÷ 3 fourths	
10.	$\frac{9}{4} \div \frac{3}{4}$	
11.	$\frac{9}{8} \div \frac{3}{8}$	
12.	$\frac{2}{3} \div \frac{1}{3}$	
13.	$\frac{1}{3} \div \frac{2}{3}$	
14.	$\frac{6}{7} \div \frac{2}{7}$	
15.	$\frac{5}{7} \div \frac{2}{7}$	
16.	$\frac{3}{7} \div \frac{4}{7}$	
17.	$\frac{6}{10} \div \frac{2}{10}$	
18.	$\frac{6}{10} \div \frac{4}{10}$	
19.	$\frac{6}{10} \div \frac{8}{10}$	
20.	$\frac{7}{12} \div \frac{2}{12}$	
21.	$\frac{6}{12} \div \frac{9}{12}$	
22.	$\frac{4}{12} \div \frac{11}{12}$	

23.	$\frac{6}{10} \div \frac{4}{10}$	
24.	$\frac{6}{10} \div \frac{2}{5} = \frac{6}{10} \div \frac{\quad}{10}$	
25.	$\frac{10}{12} \div \frac{5}{12}$	
26.	$\frac{5}{6} \div \frac{5}{12} = \frac{\quad}{12} \div \frac{5}{12}$	
27.	$\frac{10}{12} \div \frac{3}{12}$	
28.	$\frac{10}{12} \div \frac{1}{4} = \frac{10}{12} \div \frac{\quad}{12}$	
29.	$\frac{5}{6} \div \frac{3}{12} = \frac{\quad}{12} \div \frac{3}{12}$	
30.	$\frac{5}{10} \div \frac{2}{10}$	
31.	$\frac{5}{10} \div \frac{1}{5} = \frac{5}{10} \div \frac{\quad}{10}$	
32.	$\frac{1}{2} \div \frac{2}{10} = \frac{\quad}{10} \div \frac{2}{10}$	
33.	$\frac{1}{2} \div \frac{2}{4}$	
34.	$\frac{3}{4} \div \frac{2}{8}$	
35.	$\frac{1}{2} \div \frac{3}{8}$	
36.	$\frac{1}{2} \div \frac{1}{5} = \frac{\quad}{10} \div \frac{\quad}{10}$	
37.	$\frac{2}{4} \div \frac{1}{3}$	
38.	$\frac{1}{4} \div \frac{4}{6}$	
39.	$\frac{3}{4} \div \frac{2}{6}$	
40.	$\frac{5}{6} \div \frac{1}{4}$	
41.	$\frac{2}{9} \div \frac{5}{6}$	
42.	$\frac{5}{9} \div \frac{1}{6}$	
43.	$\frac{1}{2} \div \frac{1}{7}$	
44.	$\frac{5}{7} \div \frac{1}{2}$	

Number Correct: _____

Improvement: _____

Division of Fractions—Round 2

Directions: Evaluate each expression and simplify.

1.	12 ones ÷ 2 ones	
2.	12 ÷ 2	
3.	12 tens ÷ 2 tens	
4.	120 ÷ 20	
5.	12 hundreds ÷ 2 hundreds	
6.	1,200 ÷ 200	
7.	12 halves ÷ 2 halves	
8.	$\frac{12}{2} \div \frac{2}{2}$	
9.	12 fourths ÷ 3 fourths	
10.	$\frac{12}{4} \div \frac{3}{4}$	
11.	$\frac{12}{8} \div \frac{3}{8}$	
12.	$\frac{2}{4} \div \frac{1}{4}$	
13.	$\frac{1}{4} \div \frac{2}{4}$	
14.	$\frac{4}{5} \div \frac{2}{5}$	
15.	$\frac{2}{5} \div \frac{4}{5}$	
16.	$\frac{3}{5} \div \frac{4}{5}$	
17.	$\frac{6}{8} \div \frac{2}{8}$	
18.	$\frac{6}{8} \div \frac{4}{8}$	
19.	$\frac{6}{8} \div \frac{5}{8}$	
20.	$\frac{6}{10} \div \frac{2}{10}$	
21.	$\frac{7}{10} \div \frac{8}{10}$	
22.	$\frac{4}{10} \div \frac{7}{10}$	

23.	$\frac{6}{12} \div \frac{4}{12}$	
24.	$\frac{6}{12} \div \frac{2}{6} = \frac{6}{12} \div \frac{\quad}{12}$	
25.	$\frac{8}{14} \div \frac{7}{14}$	
26.	$\frac{8}{14} \div \frac{1}{2} = \frac{8}{14} \div \frac{\quad}{14}$	
27.	$\frac{11}{14} \div \frac{2}{14}$	
28.	$\frac{11}{14} \div \frac{1}{7} = \frac{11}{14} \div \frac{\quad}{14}$	
29.	$\frac{1}{7} \div \frac{6}{14} = \frac{\quad}{14} \div \frac{6}{14}$	
30.	$\frac{7}{18} \div \frac{3}{18}$	
31.	$\frac{7}{18} \div \frac{1}{6} = \frac{7}{18} \div \frac{\quad}{18}$	
32.	$\frac{1}{3} \div \frac{12}{18} = \frac{\quad}{18} \div \frac{12}{18}$	
33.	$\frac{1}{6} \div \frac{4}{18}$	
34.	$\frac{4}{12} \div \frac{8}{6}$	
35.	$\frac{1}{3} \div \frac{3}{15}$	
36.	$\frac{2}{6} \div \frac{1}{9} = \frac{\quad}{18} \div \frac{\quad}{18}$	
37.	$\frac{1}{6} \div \frac{4}{9}$	
38.	$\frac{2}{3} \div \frac{3}{4}$	
39.	$\frac{1}{3} \div \frac{3}{5}$	
40.	$\frac{1}{7} \div \frac{1}{2}$	
41.	$\frac{5}{6} \div \frac{2}{9}$	
42.	$\frac{5}{9} \div \frac{2}{6}$	
43.	$\frac{5}{6} \div \frac{4}{9}$	
44.	$\frac{1}{2} \div \frac{4}{5}$	

Lección 21: Escribir y resolver expresiones—multiplicación y suma

Trabajo en clase

Ejercicio de representación matemática

El restaurante Italian Villa tiene mesas cuadradas que los camareros pueden juntar para acomodar a los clientes. Solo cabe una silla a lo largo del lado de la mesa cuadrada. Haz una representación de cada situación para determinar cuántas sillas cabrán alrededor de varias mesas rectangulares.

Número de mesas cuadradas	Número de sillas en la mesa
1	
2	
3	
4	
5	
50	
200	
T	

Lesson Video

¿Hay otras maneras de pensar en soluciones para este problema?

No es práctico hacer una representación de juntar 50 mesas para hacer un rectángulo largo. Si tuviéramos un rectángulo de ese largo, ¿cuántas sillas caben en los lados largos de la mesa?

¿Cuántas sillas caben en los extremos de la mesa larga?

¿Cuántas sillas cabrán en total? Escríbelo en tu tabla.

Trabaja con tu grupo para determinar cuántas sillas cabrán alrededor de una mesa rectangular muy larga si 200 mesas cuadradas se juntaran.

Si dejamos que T represente el número de mesas cuadradas que conforman una mesa rectangular larga, ¿cuál es la expresión para el número de sillas que caben a su alrededor?

Ejemplo

Observa el Ejemplo 1 con tu grupo. Determina el costo para diversos números de pizzas, y también determina la expresión que describe el costo de recibir P pizzas.

a. Pizza Queen tiene una oferta especial en las pizzas de almuerzo: $\$4.00$ cada una. Cobran $\$2.00$ por entregar, independientemente del número de pizzas ordenadas. Determina el costo para diversos números de pizzas, y también determina la expresión que describe el costo de recibir P pizzas.

Número de pizzas entregadas	Costo total en dólares
1	
2	
3	
4	
10	
50	
P	

¿Qué operaciones matemáticas tuvieron que hacer para encontrar el costo total?

Supongamos que nuestro director quisiera comprar una pizza para todos en nuestra clase. Determina cuánto costaría esto.

b. Si el club de aficionados tuviera $\$400$ para gastar en pizza, ¿cuál es el mayor número de pizzas que podrían ordenar?

c. Si el precio de la pizza aumentó a $\$5.00$ y el precio de entrega aumentó a $\$3.00$, crea una tabla que muestra el costo total (pizza más la entrega) de $1, 2, 3, 4$ y 5 pizzas. Incluye la expresión que describe el nuevo costo de ordenar P pizzas.

Número de pizzas entregadas	Costo total en dólares
1	
2	
3	
4	
5	
P	

Lección 22: Escribir y resolver expresiones—exponentes

Trabajo en clase

Lesson Video

Ejemplo 1: Plegado de papel

Ejercicios

1. Predice cuántas veces pueden doblar una hoja de papel por la mitad.

   Mi predicción: ___

2. Antes de cualquier pliegue (cero pliegues), solo hay una capa de papel. Esto se indica en la primera fila de la tabla. Dobla tu papel por la mitad. Escribe el número de capas de papel resultante. Continúa todas las veces que puedas.

Número de pliegues	Número de capas de papel resultantes	Número de capas de papel escrito como una potencia de 2
0	1	2^0
1		
2		
3		
4		
5		
6		
7		
8		

   a. ¿Puedes continuar doblando el papel de forma indefinida? ¿Por qué sí o por qué no?

   b. ¿Cómo podrías usar una calculadora para encontrar el siguiente número de la serie?

   c. ¿Cuál es la relación entre el número de pliegues y el número de capas?

   d. ¿Cómo se representa esta relación en forma exponencial de la expresión numérica?

   e. Si doblas un papel f veces, escribe una expresión para mostrar el número de capas de papel.

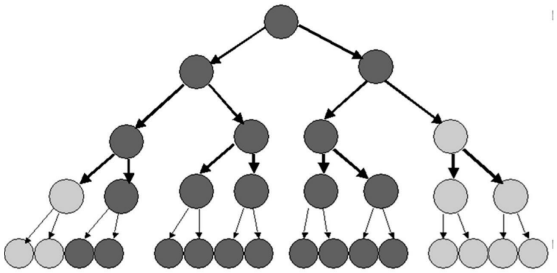
3. Si el papel se cortara en lugar de doblarse, la altura de la pila se duplicará en cada etapa sucesiva y sería posible continuar.

   a. Escribe una expresión que describa el número de capas de papel que resultan de 16 cortes.

   b. Resuelve esta expresión escribiéndola en la forma estándar.

Ejemplo 2: Infección bacteriana

Las bacterias son organismos unicelulares microscópicos que se reproducen de dos maneras diferentes, una de las cuales se llama fisión binaria. En la fisión binaria, una bacteria aumenta su tamaño hasta que es lo suficientemente grande para dividirse en dos partes que son idénticas. Estas dos crecen hasta que son a la vez lo suficientemente grandes como para dividirse en dos bacterias individuales. Esto continúa mientras las condiciones de crecimiento sean favorables.



a. Escribe el número de bacterias que resultan de cada generación.

Generación	Número de bacterias	Número de bacterias escrito como una potencia de 2
1	2	2^1
2	4	2^2
3	8	2^3
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		

Friday is here! Today is MARVEL DAY.

It's time to get in shape like an Avenger. We are going to get in shape like the **HULK**!

5 rounds of:

1. 30 seconds butt kickers
2. 80 punches (Punch the air. Make sure no one is around you.)
3. 10 knee jump tucks (Jump as high as you can and bring your knees to your chest)
4. 20 sit ups
5. 10 raised leg circle
6. 10 pushups. If you can't do a regular pushup, do modified on your knee pushups!
7. 40 jumping jacks

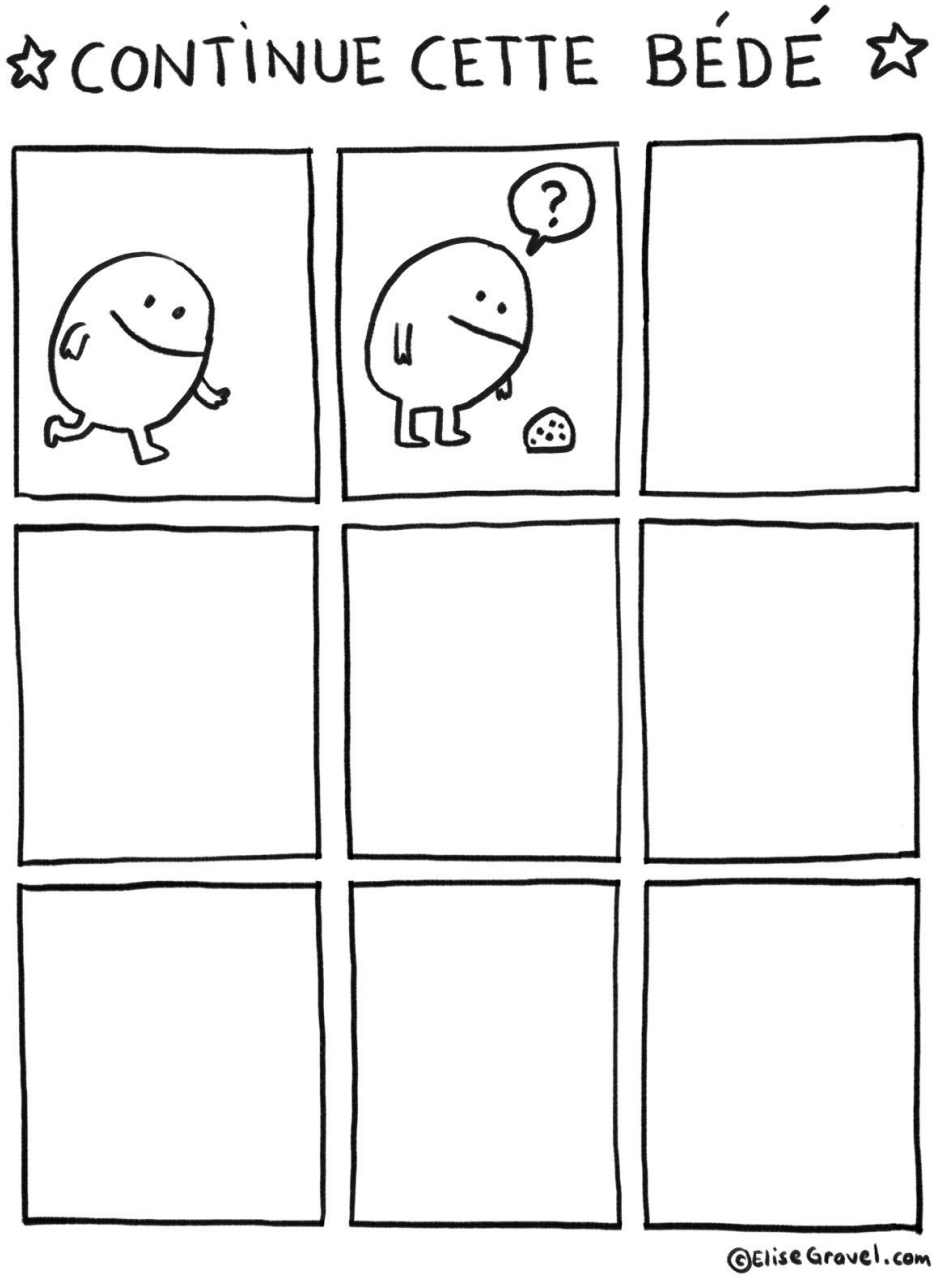
Now time to cool down from Hulk mode!
Do each one of these for 30 seconds. Feel free to repeat them more than once to get an even better stretch.

1. Stand up toe-touch
2. Quad Stretches
3. Forward fold
4. Butterfly Stretch
5. Sitting toe touch each leg

World Languages - At Home Activities

- Write as many words as you can think of in the language you are studying on cards. Create simple sentences with the words. Challenge yourself to make the sentences longer. Use this resource to help you.→
- Research a monument or tourist site in a country where the target language is spoken and create a postcard about an imaginary visit you had.
- In the language you are studying, explore resources on the topic of pets and make a poster in that language including things you should do and should not do to take the best care of your pet.
- Investigate the life and art of a famous artist from the target language culture. Create a visual presentation in the target language about the artist.

- Complete the comic below with speech bubbles in the language you are studying:



Television Programming Schedules

TPS20

	Daily
6:00-6:30 am	Recess
6:30 -7:00 am	Pre K - Math Pre K - Reading in English and Spanish.
7:00-8:00 am	Kindergarten - Math Kindergarten - Reading in English and Spanish
8:00-9:00 am	1st Grade - Math 1st Grade - Reading in English and Spanish
9:00- 10:00 am	2nd Grade - Math 2nd Grade - Reading in English and Spanish
10:00-11:00 am	3rd Grade - Math 3rd Grade - Reading in English and Spanish
11:00-11:30 am	Pre K - Math PreK - Reading in English and Spanish. *(repeat of 6:30 am program)*
11:30-12:00 pm	Recess
12:00-1:00 pm	4th Grade - Math 4th Grade - Reading in English and Spanish.
1:00-2:00 pm	5th Grade - Math 5th Grade - Reading in English and Spanish.
2:00-2:30 pm	Recess *(repeat of 6:00 am program)*
2:30-3:00 pm	Specials (Art, Music, SEL, or STEM)
3:00-4:00 pm	6th Grade - Math 6th Grade - English/Language Arts
4:00-5:00 pm	7th Grade - Math 7th Grade - English/Language Arts
5:00-6:00 pm	8th Grade - Math 8th Grade - English/Language Arts

Canal TPS20

	Diario
6:00-6:30 am	Recreo
6:30 - 7:00 am	Prekínder - Matemáticas Prekínder – Lectura en inglés y español.
7:00-8:00 am	Kínder - Matemáticas Kínder- Lectura en inglés y español.
8:00-9:00 am	Primer Grado - Matemáticas Primer Grado - Lectura en inglés y español.
9:00-10:00 am	Segundo Grado - Matemáticas Segundo Grado - Lectura en inglés y español.
10:00-11:00 am	Tercer Grado – Matemáticas Tercer Grado - Lectura en inglés y español.
11:00-11:30 am	Prekínder - Matemáticas Prekínder - Lectura en inglés y español. *(repitiendo el programa de las 6:30)*
11:30-12:00 pm	Recreo

12:00-1:00 pm	Cuarto Grado - Matemáticas Cuarto Grado - Lectura en inglés y español.
1:00-2:00 pm	Quinto Grado - Matemáticas Quinto Grado - Lectura en inglés y español.
2:00-2:30 pm	Recreo *(repitiendo el programa de las 6:00 am)*
2:30-3:00 pm	Especiales (Arte, Música, Socioemocional, o educación de ciencias, tecnología, ingeniería y matemáticas STEM)
3:00-4:00 pm	Sexto Grado - Matemáticas Sexto Grado - Ingles/Lengua y literatura
4:00-5:00 pm	Séptimo Grado - Matemáticas Séptimo Grado - Ingles/Lengua y literatura
5:00-6:00 pm	Octavo Grado - Matemáticas Octavo Grado - Ingles/Lengua y literatura

At Home Activities and Resources for Families (English Language Development)

Greetings dear parent/guardian. Thank you for supporting your child's learning at home. The resources provided in this packet will provide your child with additional opportunities to practice English language development skills through different vocabulary, grammar, and reading skills.

Each packet has stories to read in English with questions and vocabulary activities. You do not need to print any activities as responses can be written on a separate sheet of paper.

Thank you again for your enthusiasm and willingness to do activities with your child at home.

Actividades en el hogar y recursos para familias (Desarrollo del idioma inglés)

Saludos querido padre/tutor. Gracias por apoyar el aprendizaje de su hijo en casa. Los recursos en este paquete le brindarán a su hijo oportunidades para practicar su desarrollo del inglés a través de diferentes actividades de vocabulario, gramática y lectura.

Cada paquete tiene historias para leer en inglés con preguntas y actividades de vocabulario. No necesita imprimir ninguna actividad, ya que las respuestas pueden escribirse en una hoja de papel por separado.

Gracias nuevamente por su entusiasmo en completar las actividades con su hijo en casa.

Unit 1

Who Am I?

"Make sure to be passionate about whatever it is you get into . . ."

—Jack Andraka

Friends celebrating Holi, the Indian festival of colors

1. How would you describe the people in this photo? How do you think they might describe themselves?
2. Describe yourself in five or six words. Now think of five or six words that you would never use to describe yourself.
3. What are you passionate about? Why?

1 On the last page, you described yourself in five or six words. Would other people use those same words to describe you? Discuss. Then listen and read. **TR: 2**

For teenagers, life can seem exciting and confusing at the same time, can't it? As a teenager, you're on your way to becoming an adult. It's a time of important changes and important questions.

A lot of these questions are about **identity**, or who you are. You're an individual, but you're also a product of your family life, your social environment, and your culture. Your identity includes your beliefs, your values, and your actions. You learned your values from your family, but, as a teenager, you may become less interested in what your family thinks. You may choose to spend more time with other people whose values and personalities are like yours. That's natural.

Then there's **personality**, or the qualities that make you different from other people. If you love parties and are **enthusiastic** about meeting lots of new people, you're probably **outgoing** and **self-confident**. If you get excellent grades in school, chances are you're **organized** and **responsible**. If you're **energetic** or adventurous, you might like hiking, or getting together with friends to explore a cave! If you're **optimistic**, **generous**, and **patient**, you might enjoy helping by spending time with animals at a shelter, or by participating in a local clean-up event.

Personality is tricky. You might assume that everyone sees you the way you see yourself, but that isn't always true. Friends may laugh at your stories and think you have a great **sense of humor**, but your brother might think you're just odd. You may see yourself as **ambitious** because you're **determined** to get what you want, but others may feel you're stubborn, or unwilling to take advice. You may feel self-conscious and **shy**, while other people may think you're unfriendly. You may think you're fair, but you may still seem unreasonable or unkind to a friend.

Understanding yourself and how others see you can really be a puzzle!

2 Learn new words. Listen and repeat. **TR: 3**

3 Work in pairs. Make another list of five or six words that describe you, using the new vocabulary. Then make a list of five or six words that describe your partner. Compare your lists. Do you agree with your partner's description of you? Why or why not?

4 Read and write the words from the list.

ambitious	determined	enthusiastic	generous
optimistic	organized	outgoing	self-confident

By the time Jack Andraka was 14 years old, he was very _____ about science. Jack really wanted to focus on cancer research. He came up with a cheap, fast way to detect a type of cancer. When he first proposed his idea, some adults thought that Jack was being too _____, but he was _____ to prove them wrong. He stayed _____ and entered his idea into an international science fair. Jack won! Now he feels more _____. People have even asked him to be on TV because of his _____ personality and creative ideas.

5 Learn new words. Listen for the words. Write each trait next to the correct example. Are these words positive or negative? Decide. Then, listen and repeat. TR: 4 and 5

fair	odd	self-conscious	stubborn

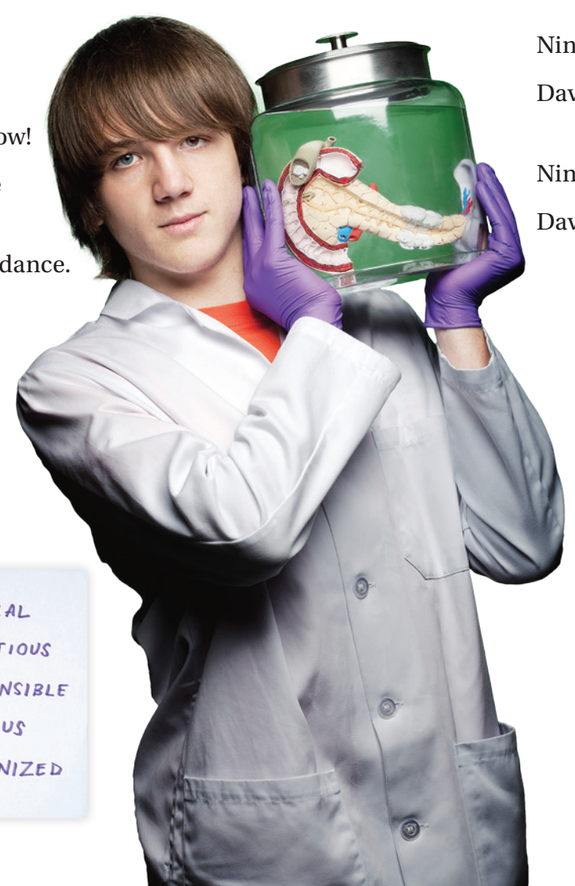
_____ 1. You never change! Just listen to me for once.

_____ 2. You put salt and pepper on your ice cream? Wow!

_____ 3. I like our music teacher. In her class, everyone gets a chance to play.

_____ 4. Oh, come on. Nobody is looking at you. Let's dance.

2014 Emerging Explorer, inventor Jack Andraka



6 Choose an activity. Work in pairs.

1. Together think of a famous person, such as a singer, actor, or Internet personality. Separately list as many descriptive words as you can about that person. Are any of your words the same? Do you agree with your partner's description?
2. As a student, you're an expert on teachers. Think about teachers you've had, and write words to describe them. Look at the positive qualities you both listed. Then work together to write a description of your ideal teacher.
3. Write the letters in your partner's name going down the side of a paper. Then write a word that describes your partner for each letter. When you're finished, compare your name poems. Do you agree with your partner's description?

SPEAKING STRATEGY TR: 6

Comparing	Contrasting
You're <u>outgoing</u>? So am I!	You're <u>shy</u>? Not me! I'm not <u>shy</u> at all.
Just like you, I'm <u>self-confident</u>.	Unlike you, I'm <u>optimistic</u>.
We're alike because we're both <u>patient</u>.	I'm <u>determined</u>, but you're just <u>stubborn</u>!

7 Listen. How do the speakers compare and contrast their little brothers? Write the words and phrases you hear. TR: 7

8 Read and complete the dialogue.

Dave: My aunt and uncle are visiting this week.

Nina: You don't seem very happy about it.

Dave: I'm not. My aunt is always saying, "You're _____ your uncle Jack!"

Nina: Well, are you and your uncle _____?

Dave: No, we're very different. _____ him, I'm active and outgoing. All he does is watch TV.

Nina: Is he funny? Optimistic? Generous, _____ you?

Dave: No way. _____! He never gives me anything, not even on my birthday.

9 Work in pairs. Take turns. Use a coin to move. (Heads = 1 space; tails = 2 spaces) Compare and contrast as instructed.

10 Work in groups. Compare and contrast your parents. Are you like or unlike your parents? Do your classmates' parents seem like or unlike your own parents?

Go to p. 153.

GRAMMAR TR: 8

Tag questions: Confirming information or seeking agreement

Alicia **is** friendly, **isn't she**?	Yes. She's outgoing. You'll like her.
You**'re** nervous about the competition, **aren't you**?	I am. I'm not sure I'm ready.
Rick **doesn't** live near here, **does he**?	No, he doesn't. He lives pretty far away.
Lin also **plays** the flute, **doesn't she**?	Yes, she does. She's really good!
Sue **couldn't** make herself do it, **could she**?	No. She's too shy.

11 **Listen.** Match the questions to logical answers. Write the letter. TR: 9

1. _____ a. Yes, it was. And we finally won!
2. _____ b. Yes, I have to be. I'm a teacher.
3. _____ c. No, she didn't. She said she was sick.
4. _____ d. He really is. He never stops!
5. _____ e. Yes, she can. And the guitar, too.

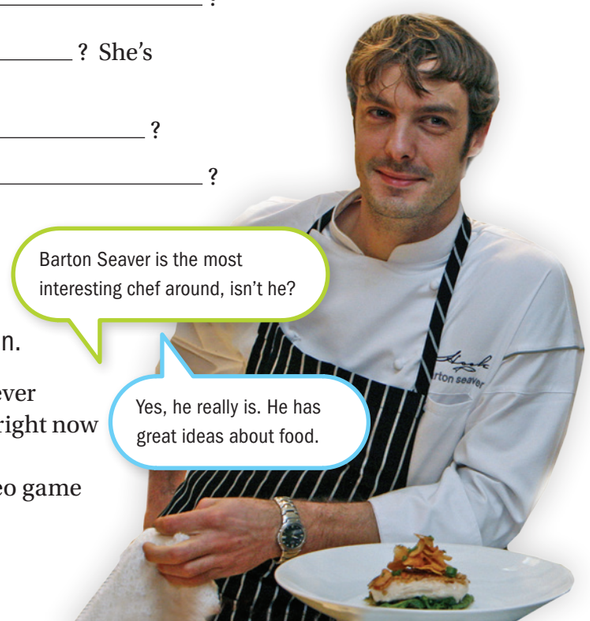
12 **Read.** Then complete the tag questions.

1. Carla and Lea want to join the team, don't they ?
2. You're not as enthusiastic about poetry as your sister, _____ ?
3. Greg's brothers won't be at the party, _____ ?
4. Maria has changed a lot, _____ ? She's so self-confident.
5. Your sisters didn't go shopping, _____ ?
6. You would help us if Ana can't come, _____ ?

13 **Work in pairs.** Take turns forming tag questions and answering them. Agree or disagree with your partner. Express your opinion.

1. (name of a place) / most beautiful / place / ever
2. (name of a singer) / most popular / singer / right now
3. (name of an actor) / talented / actor / on TV
4. (name of a video game) / your favorite / video game
5. (name of a movie) / exciting / movie / ever

National Geographic Fellow
Chef Barton Seaver



14 **Learn new words.** Read about young chefs, and listen to their conversations. Then listen and repeat. TR: 10 and 11

Everyone loves cooking shows! The chefs are usually self-confident and energetic, but they're not always patient or organized, are they? (That's part of the fun!) They're almost always very **competitive** as they cook against each other. They want to win by making the best food they can!

On some shows, teen chefs compete to see who's the best cook. These teen chefs can be surprisingly **cooperative**, even while they're competing. They've made friends, and they're interested in what one another is doing. Of course, one chef may be **jealous** of another chef, but in the end many of them are still **helpful** and kind to each other as they compete. They're **open-minded** enough to know that only one person can win, but all of them can be friends—and great chefs.

15 **Read.** Then use a tag question to comment.

1. Angela really is a talented cook. I want to be like her!
   You aren't feeling jealous, are you?
2. Pat and Tim refused to talk to Julia, or even listen to her ideas.
   _____
3. The Whitley twins have seventeen tennis trophies between them.
   _____
4. Sam won't join the group to help collect and recycle plastic bottles.
   _____
5. Here, let me help you clean up those dishes.
   _____

16 **Before you read, discuss in pairs.** Based on the title and the photo, what do you think the reading is about?

17 **Learn new words.** Find these words in the reading. What do you think they mean? Look for clues in the sentences. Then listen and repeat. TR: 12

bossy	to ignore	perfectionist	selfish	spoiled

18 **While you read, notice descriptive words you think apply to you personally.** TR: 13

Why Am I Me?

Have you ever wondered why you are the way you are? What makes you different from, say, your brothers and sisters?

People have asked these questions for centuries, and researchers are trying to answer them. One idea they're exploring is that birth order influences the person we become. In general the oldest child is described as confident, organized, dutiful, and determined to get what he or she wants. Oldest children are seen as born leaders, people-pleasers, and perfectionists. Because they're the oldest, their younger brothers and sisters sometimes see them as bossy, or too willing to tell other people what to do.

The middle child may be described as being competitive in order to get more attention. They sometimes feel that their family ignores them because they are in the middle. Because middle children tend to avoid conflict, they can be flexible and easygoing. They may also be seen as secretive by members of their family. They are usually more influenced by their friends than by their family, perhaps because they get more attention from their friends.

The youngest child is described as the baby of the family. They can be spoiled by their parents, who spend a lot of time with them and often give them what they want. For this reason, their brothers and sisters sometimes get jealous. Youngest children enjoy being the center of attention, and they are seen as outgoing, open-minded, and likely to take risks.

What if you're an only child? Many people think that a child with no brothers or sisters grows up wanting lots of attention. Some think they're selfish, or unwilling to share with others. But because they spend so much time around adults, they're also described as confident, determined, and responsible.

19 **After you read, discuss the questions in groups.**

1. What's the main idea of the reading?
2. Does birth order seem like a good way to describe personality? Why or why not?
3. Based on your personal experience, does the information in this reading seem correct? If not, why not?

20 **Work in pairs.** Separately go back through the reading and underline all the words you think describe you. Then read your list to your partner. Based on your list, can your partner guess your birth order? What is it?

21 **Work in groups.** What other factors might affect your personality? Write two or three ideas. Briefly explain how each factor on your list might affect you. Then discuss your ideas in groups.

GRAMMAR TR: 14

Using *it* to talk about weather, time, and distance, and for emphasis

It's raining again. Another bad hair day!
It's six o'clock already. Wake up!
It's a half-mile walk from here. We're late!
It's weird that we've had so much rain.
I hate **it** when the alarm goes off.
It drives me crazy when I have to hurry.

29 **Listen.** How is *it* used? Write the number. TR: 15

_____ to introduce weather
_____ to introduce distance
_____ to introduce time
_____ to introduce emphasis

30 **Work in pairs.** Write down three things that you don't like to happen. Use *it* in your sentences. Then share them with your partner.

1. It makes me a little angry when people interrupt me in a conversation.
2. _____
3. _____
4. _____

31 **Work in pairs.** Write down three things that you like to happen. Use *it* in your sentences. Then share them with your partner.

1. I like it when people give me compliments about my appearance.
2. _____
3. _____
4. _____

32 **Work in groups.** Make the cube. Take turns tossing the cube and completing the sentences.

Go to p. 155.

WRITING

When we compare and contrast two people or things, we use phrases such as the following:

Compare:	**alike**	**both**	**in the same way**	**too**
Contrast:	**although**	**but**	**on the other hand**	**unlike**

33 **Read the model.** Work in pairs to identify the parts of the writing. How does the writer compare and contrast? Underline the words or phrases.

I come from a large family, and I share personality traits with several family members. But it's clear to me that I'm most like my grandfather, although we're different in some ways, too.

My grandfather and I both like to spend time outdoors. We both enjoy riding our bikes and watching sports. We're adventurous, too. I really like to go fishing with my grandfather. We'll catch our dinner together, then cook and eat it at our campsite. We both love nature. We're alike in that way. We also enjoy working in his garden to grow fruits and vegetables.

It's a different story when winter comes. Unlike my grandfather, I love being outside in the snow. I like to have snowball fights with my friends, but he likes to sit by the fire and read. Sometimes he and I play cards, although I don't really enjoy that very much. I'm too energetic to sit for so long! On the other hand, when we play one of my video games, I have fun because I'm competitive. My grandfather isn't competitive at all. He's also sort of slow!

But it doesn't really matter to me what we do together. I like being with my grandfather and spending time with him. We're a good fit!

34 **Work in pairs.** How are the writer and his grandfather alike? How are they different? Do you think they're more alike than different? Explain.

35 **Write.** Compare and contrast your personality with that of a family member.

Unit 5

Why We Explore

Austrian BASE jumper Felix Baumgartner jumps from the edge of space, 39 km (24 mi.) above the surface of the Earth.

"We really need to show people the world in a different light, in a new format—something that they can engage with and be excited about."

—Corey Jaskolski

1. In the photo, we see a man jump from the edge of space and then free-fall, attached only to a helium balloon. Would you try this? Why or why not?
2. Why do you think people explore? What can be learned from exploring new places?
3. Where would you like to explore? Explain.

1 Why do we explore? Discuss. Then listen and read. **TR: 57**

Scientists working inside the Rising Star cave, where fossils of *Homo naledi* were discovered.

The desire for **knowledge** about our world pushes explorers into the smallest caves, the deepest oceans, and even outer space. People have been exploring for centuries. But any explorer will tell you that the more they **investigate**, the more they realize there's still so much to learn.

Explorer Sylvia Earle is a deep-ocean **pioneer** with a long list of achievements. She has engaged in 7,000 hours of underwater study and written nearly 200 scientific articles on her findings. In 1970, she and a team of women "aquanauts" were required to live underwater for weeks at a time to **research** marine life. The fact that so much of the ocean remains undiscovered **has driven** Sylvia's work. In fact, even though explorers have been studying the world's oceans for years, they've only seen about five percent of them! Sylvia's **purpose** in life has been to protect the sea, and she encourages others to do so as well.

Paleoanthropologist Lee Berger has been searching for ancient hominids in **remote** parts of Africa for over two decades. He is **curious** about the family of primates that evolved into *Homo sapiens*, or human beings. Lee has made some **exciting** discoveries over time, but his most important discovery came in 2014 when he led an expedition at the Rising Star cave system, near Johannesburg, South Africa. To explore one of the caves, researchers had to squeeze through an opening less than 25 cm (10 in.) wide. Lee wasn't small enough to do it himself, so he gathered an **expert** team of female researchers who made it inside. There they found over 1,550 bones, representing at least 15 individuals.

The bones were brought to the lab where skeletons were assembled. Lee used 3D scanning to identify an entirely new hominid species: *Homo naledi*. Creating the skeleton was just the first step in understanding the new species. "The discoveries we're now making show that in some ways, the age of exploration is still just beginning," says Lee.

Engineer and inventor Corey Jaskolski not only explores, but also creates **high-tech** tools that allow people to **look into** the past without harming its artifacts. Corey wants explorers to protect what they **encounter** so that future generations can learn from them, too. "When we discover things, we have a responsibility to preserve them as well," he says.

2 Learn new words. Listen and repeat. **TR: 58**

3 Work in pairs. Why do you think each explorer's contributions are important? How does an explorer's work matter to all of us?

4 **Read and write the words from the list.** Make any necessary changes.

curious	**drive**	**encounter**	**exciting**	**expert**
high-tech	**investigate**	**knowledge**	**purpose**	**remote**

Corey Jaskolski is an _____ engineer and inventor whose _____ inventions are helping explorers—and ordinary people—to see the world in a different way. For example, his underwater robotic cameras can get high-resolution photos of very _____ parts of the ocean. These devices were used to _____ and film the *Titanic* shipwreck. Corey has also developed 360-degree viewers for the _____ of allowing people to explore _____ places, such as King Tut's tomb, just by moving their mobile devices! Corey also has created night-vision cameras and 3D camera traps that help photographers capture images of animals without disturbing them. Conservation is what _____ much of Corey's work. His equipment can be used to gain _____ about places or animals without harming them at all. Corey wants to protect what's here on Earth so that future generations can enjoy exploring just like he does.


Corey Jaskolski

5 **Learn new words.** Listen for these words and match them to the definitions. Then listen and repeat. TR: 59 and 60

achievement	**to encourage**	**to engage in**	**to require**

_____ 1. to help or support someone

_____ 2. to make someone do something

_____ 3. to be involved in a cause

_____ 4. success

6 **Choose an activity.**

1. **Work independently.** How well do you know your community? Investigate your area. Explore both online and "in the field." Share your experience with the class.
2. **Work in pairs.** How might technology help in making new discoveries? Make a list of five ideas. Present your list to the class.
3. **Work in groups.** Investigate Corey's work. Which of his inventions would you like to own? What would you do with it?

SPEAKING STRATEGY TR: 61

Hesitating or buying time when answering questions

Where do you see yourself in 5 years?	Hmm . . . that's tough. I'd like to be studying in South America, but I might need to get a job.
What made you want to learn Cantonese?	Well, it's hard to explain. I guess I've just always wanted to travel to Guangzhou.
Why do you think humans explore?	That's a good question. Let me think about that one for a minute.

7 **Listen.** How does the speaker buy time before responding to the question? Write the phrases you hear. TR: 62

8 **Read and complete the dialogue.**

Caleb: So Kenji, how do you like living in Canada?

Kenji: _____ I guess I'm enjoying my experience over all, but there have been some challenges.

Caleb: What's been the biggest challenge?

Kenji: _____ . . . probably speaking English all the time and trying to make friends.

Caleb: But joining the baseball team has made you pretty popular. We're number one in the league for the first time! How'd you get so good at it?

Kenji: _____ In Japan, I'm just a normal player. We practice a lot. All year in fact. Don't you do the same with hockey?

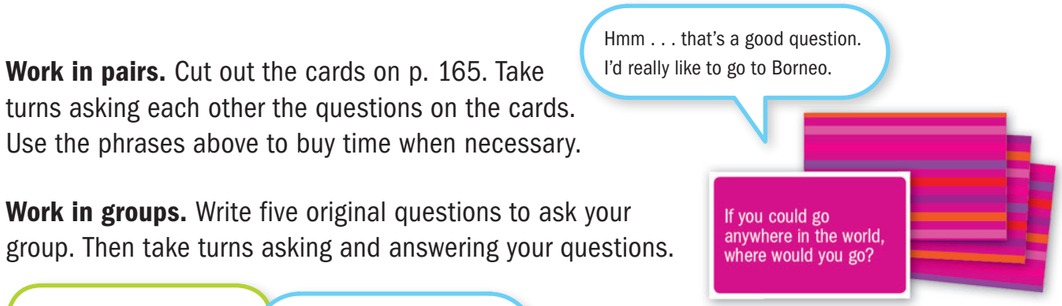
Caleb: Some people do, but I just play for fun. Besides I like playing baseball in spring.

Kenji: Would you like to visit Japan someday?

Caleb: _____ it'd be fun, but it sounds like I better get serious about baseball first!

9 **Work in pairs.** Cut out the cards on p. 165. Take turns asking each other the questions on the cards. Use the phrases above to buy time when necessary.

10 **Work in groups.** Write five original questions to ask your group. Then take turns asking and answering your questions.



Go to p. 165.

GRAMMAR TR: 63

Narrative tenses: Telling a story

Barrington Irving **had been preparing** to become a pilot since he was 15.

He **found** a manufacturer to build an airplane from donated parts that he **had received**.

On the day of the flight, he **was** ready, but he **was feeling** a little nervous.

Finally, Barrington **set off** on his historic flight. He **flew** around the world in 97 days and set a world record.

11 **Listen.** Answer the questions below using the narrative tenses. TR: 64

1. What happened when Barrington met a Jamaican pilot?

   _____

2. What career had Barrington been preparing for?

   _____

3. How did he start learning to fly?

   _____

4. What had he been offered? Did he accept the offer?

   _____

5. What was Barrington doing before his first solo flight?

   _____

6. How was his first solo flight?

   _____

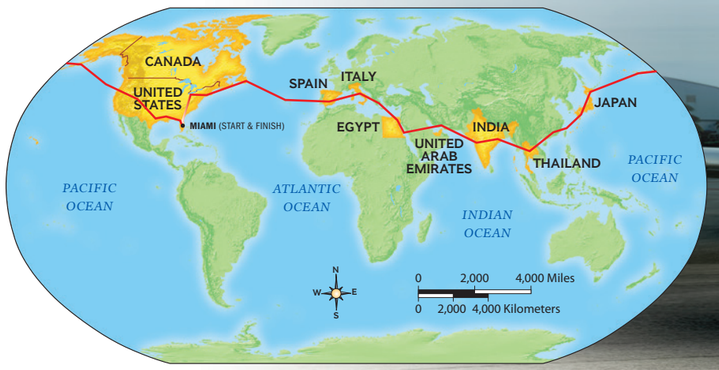
12 **Read.** Underline the narrative tenses in the paragraph.

13 **Write.** Reread the prompt from Activity 12. Write your own response using the narrative tenses. Then share your response in a group.

Prompt: *Tell about a time when you achieved something important. What did you achieve? How had you been preparing?*

Once I climbed a mountain that was over 3,000 m (10,000 ft.) tall. I had been training with my dad all spring to get ready. We had been practicing on smaller mountains. To climb the mountain, we were using special equipment like ice picks and thick ropes. After we had reached the top, it felt great to look down on the forest below us. I later climbed three other mountains with my dad, and we plan to do another next month.

14 **Learn new words.** Listen to the story of Barrington's first solo flight around the world. Then listen and repeat. TR: 65 and 66



This map shows the **route** that Barrington flew. His plane was in **motion** for most of his 97-day trip around the **globe**.

Barrington **set a record** as a pilot. Now he works to **educate** students in math and science.

15 **Work in pairs.** Read the interview questions and fill in the blanks with the correct words from the box. Then answer the questions as if you were Barrington. Use the narrative tenses.

globe	**motion**	**pilot**	**route**	**set a record**

1. Q: How had playing video games prepared you to become a _____ ?
   A: _____
2. Q: How were you able to get an airplane to fly around the _____ ?
   A: _____
3. Q: How many stops were on your _____ ?
   A: _____
4. Q: What were you doing to stay awake while in _____ for so many hours?
   A: _____
5. Q: How did you feel when you heard you had _____ ?
   A: _____

16 **Work independently.** Investigate another person who has explored new places. Write a narrative about the explorer's route, experiences, and accomplishments. Share what you learned with the class.

THE **Explorer** GENE

Are we born to explore?

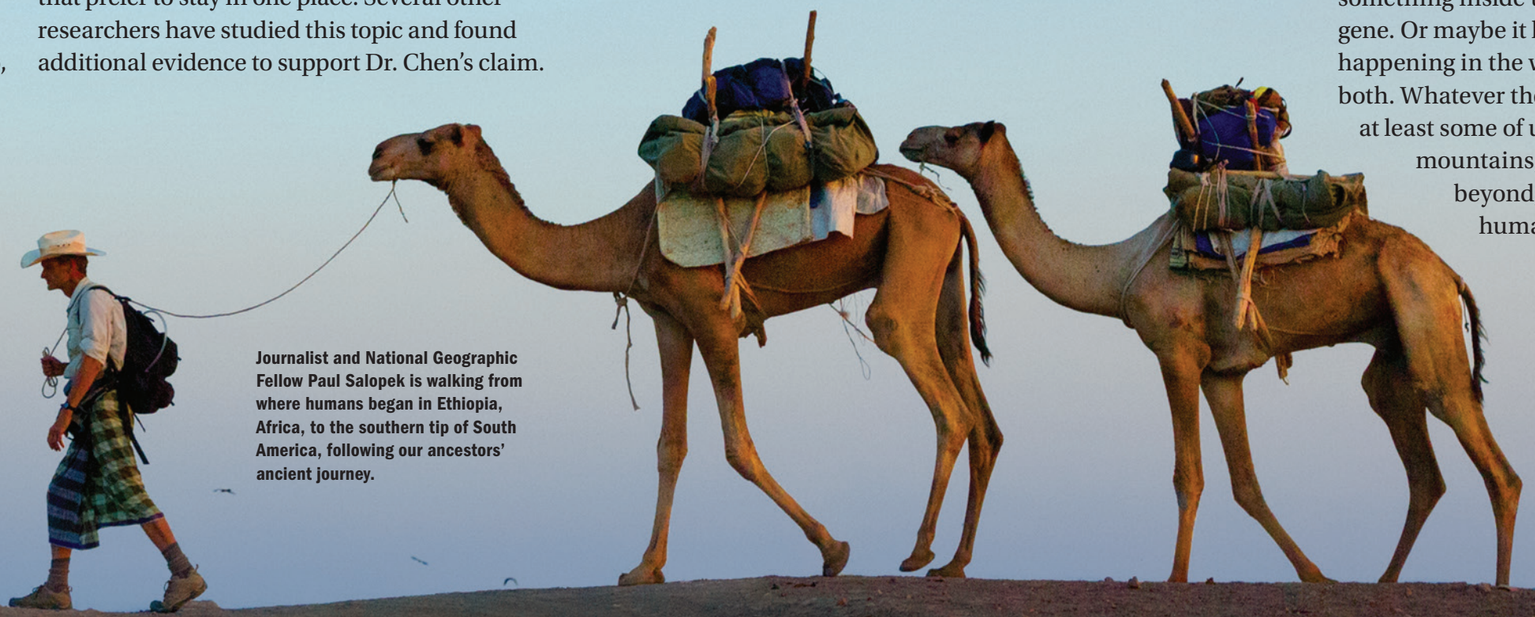
Of all the animals on Earth, none are so driven to explore as humans. Other animals will go in search of food or water. But humans can be motivated simply by the possibility of discovery. So what is it exactly that caused us to spread out across the globe 60,000 years ago, instead of just staying in Africa?

Perhaps it's in our DNA. In 1999, Dr. Chuansheng Chen led a team of scientists who were studying a gene known as *DRD4-7R*. This gene is found in about twenty percent of all humans. It's been associated with higher rates of risk-taking, exploration, and interest in new ideas. Dr. Chen found that *DRD4-7R* is more common in societies that move around a lot than those who don't. For example, studies in Africa show that the gene is much more common in nomadic tribes than in tribes that prefer to stay in one place. Several other researchers have studied this topic and found additional evidence to support Dr. Chen's claim.

But can a single gene be responsible for a trait as complex as the desire to explore? Dr. Kenneth Kidd doesn't think so. He thinks *DRD4-7R* might increase curiosity, but other equally important sets of genes give us intelligent minds and skilled hands. We then use our minds and hands to create things. He believes that not just one gene, but groups of genes work together to create complex behaviors like exploration.

The context we live in also plays a role in our desire to explore. For example, during the European Age of Exploration, explorers became rich and famous for their discoveries. This drove others to try to increase their wealth through exploration. In this case, their exploration was more likely motivated by money than by genes.

Maybe the desire to explore comes from something inside us, such as the *DRD4-7R* gene. Or maybe it has more to do with what's happening in the world around us. Maybe both. Whatever the reason, it seems we (or at least some of us) will keep exploring the mountains, the sea, the stars, and beyond, because that's just what humans do.



Journalist and National Geographic Fellow Paul Salopek is walking from where humans began in Ethiopia, Africa, to the southern tip of South America, following our ancestors' ancient journey.

17 **Before you read, discuss in pairs.** Based on the title and the photo, what do you think you'll learn in this reading?

18 **Learn new words.** Find these words in the reading. What do you think they mean? Look at how they're pronounced in a dictionary. Say them aloud. Then listen and repeat. TR: 67

associated	**gene**	**to motivate**	**trait**

19 **While you read, think about a person you know who might have the explorer gene.** TR: 68

20 **After you read, work in pairs to answer the questions.**

1. What makes humans explore? How are we different from other animals?
2. What traits is the *DRD4-7R* gene associated with?
3. What percent of humans have this gene?
4. What is Dr. Kenneth Kidd's opinion regarding *DRD4-7R*'s connection to exploration?
5. What else might cause humans to explore?

21 **Work in pairs.** Describe the person that you thought of in Activity 19. Give examples to explain why you think this person has the gene.

22 **Discuss in groups.**

1. Do you believe a gene causes humans to explore? Or do you think it has more to do with other factors? Explain.
2. Do you think you have the *DRD4-7R* gene? Explain with examples. What other beliefs and behaviors might be caused by something in your genes?
3. Are humans exploring more now than in the past? Will we ever stop exploring? Explain.

GRAMMAR TR: 69

Geographic use of *the*

I'm going to **the Himalayas** to climb **Mt. Everest**.

The Yangtze is the longest river in **Asia**. **Lake Baikal** is the largest lake in **Asia**.

The equator passes through **Isabella Island**, the largest of **the Galápagos Islands**.

Explorer Ferdinand Magellan was born in **Portugal**, but died in **the Philippines**.

Explorer Gertrude Bell wrote a book about **Syria** after her travels to **the Middle East**.

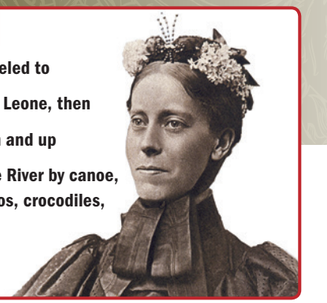
29 **Read.** Fill in the timeline of female explorers by adding *the* when necessary.

1805

Native American Sacagawea guided Lewis and Clark through _____ Oregon Territory of _____ United States.

1894

Mary Kingsley traveled to _____ Sierra Leone, then _____ Gabon and up _____ Ogowe River by canoe, encountering hippos, crocodiles, and gorillas.



1908

Mountaineer Annie Smith Peck was the first person to climb _____ Huascarán, a 6,768 m (22,204 ft.) mountain in _____ Peru.

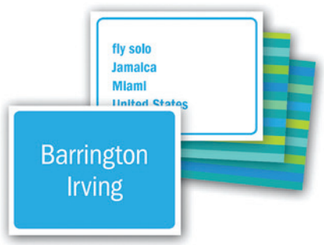
1932

Amelia Earhart flew solo across _____ Atlantic Ocean from _____ Canada to _____ Ireland.

1953

Eugenie Clark wrote a book about studying sharks in _____ South Pacific Ocean and _____ Sea of Cortez, near _____ Mexico.

30 **Work in pairs.** Cut out the cards and place them face-down. Take turns trying to match the information with the explorer. When you make a match, describe the explorer's work, using the places on the card.



Go to p. 167.

WRITING

When we compare and contrast two people, things, or ideas, we use phrases such as the following:

Compare:	**in the same way**	**likewise**	**similarly**
Contrast:	**by comparison**	**in contrast**	**on one hand . . . on the other hand**

31 **Read the model.** Work in pairs to identify the parts of the writing. How does the writer compare and contrast exploration past and present? Underline the phrases.

Exploration has changed a lot over time. In the past, only adventurers who were willing to take risks were considered explorers. In contrast, anyone can be an explorer today thanks to modern technology.

In the past, when explorers traveled the world, people back home had to wait for months to hear about their adventures. Explorers kept journals and wrote letters about their experiences. They would only be able to tell others what they saw after they returned. By the end of the nineteenth century, explorers were also able to take photos in the same way that they do today. However, they were unable to see the photos right away. It often took a long time for them to get photos printed.

By comparison, today's explorers can travel around the globe and can send back live, real-time images. Thanks to high-tech devices and the Internet, anyone can interact with them. When a discovery is made, we can see photos on social media and read blog posts the same day. We may not be there, but we still take part in the adventure. Similarly, thanks to high-tech cameras and 3D scanners, archeologists and other scientists can now study objects without ever touching or removing them from their sites. This way, people can learn about these things without the risk of harming or breaking them.

There are similarities between exploration in the past and the present. For example, explorers are driven by curiosity and the desire for knowledge about the world. Likewise, people want to share what they discover with others, both in writing and with photos. So, even though the methods may be different, our reasons for exploring have stayed the same over time.

32 **Work in pairs.** How is the way we explore different now compared to the past?

33 **Write.** Write an essay that compares and contrasts exploring out in the field with exploring virtually.

At Home Activities and Resources for Families (English Language Development)

Greetings dear parent/guardian. Thank you for supporting your child's learning at home. The resources provided in this packet will provide your child with additional opportunities to practice English language development skills through different vocabulary, grammar, and reading skills.

Each packet has stories to read in English with questions and vocabulary activities. You do not need to print any activities as responses can be written on a separate sheet of paper.

Thank you again for your enthusiasm and willingness to do activities with your child at home.

Actividades en el hogar y recursos para familias (Desarrollo del idioma inglés)

Saludos querido padre/tutor. Gracias por apoyar el aprendizaje de su hijo en casa. Los recursos en este paquete le brindarán a su hijo oportunidades para practicar su desarrollo del inglés a través de diferentes actividades de vocabulario, gramática y lectura.

Cada paquete tiene historias para leer en inglés con preguntas y actividades de vocabulario. No necesita imprimir ninguna actividad, ya que las respuestas pueden escribirse en una hoja de papel por separado.

Gracias nuevamente por su entusiasmo en completar las actividades con su hijo en casa.

Read on Your Own

FOCUS ON GENRE

Realistic Fiction Realistic fiction is a story that is not true, but could really happen. The characters act like real people. This story is about two girls who are practicing for a show at school.

FOCUS ON WORDS

Verb Ending: *-ed* When you read and come to a word you don't know, blend the sounds together to read it. You just learned about verbs that end in *-ed*.

hugged

High Frequency Words Say these words as whole words when you read.

saw	**was**
were	**their**
said	**began**
about	**dance**
thought	**again**

Eva's LESSON

Eva was mad. She tapped her foot. She looked at the clock above the stove.

"Veronica has ten more seconds to get here," she said. Eva waited and waited.

Veronica was always late.

They had planned to talk about their dance for the school show. Eva thought Veronica was not very good. She thought Veronica needed a lot of help.

While she waited, Eva played the CD for their dance. She clapped her hands and kicked to the beat. She began to sing. She kicked again. This time, she kicked too high. She slipped and landed on the rug! Just then, Veronica peeked in the kitchen window. She saw Eva and rushed to help her. Eva smiled and rubbed her leg. "I thought you were the one who needed help. Now I know I was the one," she joked.

Think About "Eva's Lesson"

CHECK YOUR UNDERSTANDING

Make a chart. Write what happened as a result of each cause. Use the finished chart to tell the story to a partner. Then listen as your partner tells the story.

Cause	Effect
Veronica and Eva wanted to dance in the school show.	They needed to practice.
Veronica was late.	
Eva kicked too high.	
Veronica helped Eva.	

The Monster Musician Presents:

No-Tech, No-Instrument Music: Activity Ideas that bring joy at home

Make Some Noise!

- Make a rhythm band with pots and pans
- Body percussion, Water Glasses- what makes good sounds?
- Create Instruments out of the recycling (Rubber bands, bottles, etc.)
- Put on a family show! Give your pets a concert!
- Take the show on the road- play or sing for a neighbor.

Shh, Listen.

- Make a paper playlist to share songs with friends
- Take a family nature walk- make note of the sounds around you.
- Deep listening to a song: Identify the instruments, identify the structure
- Vocal transcriptions- Listen to a melody in a song, memorize it, sing it.

Get curious.

- Call an older family member, ask them what their favorite songs were as children. Ask if they will teach you them.
- Ask someone in the house what their favorite song is and why. Listen Together
- Play musical bingo! (Google one, or make your own!

With love,
The Monster Musicians

@themonstermusician

www.themonstermusician.com

Rock n' Roll Conversations

Take the opportunity to have a conversation with a family member of another generation about the music of their generation. Please have this conversation either in person or by phone or Skype/Facetime. Please avoid a conversation by text or SnapChat as these platforms limit responses and expressions. Use a platform or media that allows real-time responses. The conversation can be with a mom, dad, an aunt, uncle, grandparent or even a neighbor. Just someone from another generation. You may even want record the conversation with your Chromebook or other devise to refer back to answer these question later.

The following are conversation starters. This is by no means all the questions you can ask or may not apply to the genres of music. Have a conversation.

QUESTIONS:

What type of music did you listen to in middle school?

Was the music you liked part of a Dance Decade era? (40's – Swing, 50's – Rock a'billy, 70's – Disco? 80's Pop?)

What was important in the music? (drum beats? Lyrics?)

Were the lyrics important? Were the lyrics poetic (meaningful? Study-worthy? Well-structured? Experience-based? Danceable? Are the lyrics awesome or mostly fluff – not of significant meaning? (i.e. Joni Mitchell vs. Taylor Swift).

Who were some of your favorite artists in middle school? What did you enjoy most about their music (in depth)? Did you attend any live performances? What was the venue? How was that experience?

Did your favorite artists write their own music? Is the music it more "mass produced" (voice doubled, auto-tuned) or more acoustic – regardless of the era?

What did your parents think of the music you liked at my age? What do you think of the music I listen to? (play a bit of your music if the person is not sure the type of music you listen to).

If time permits, listen to a song by each other's favorite artist. After listening, share what you like about the artist.

Question: Are there any common reactions between how your guest's parents thought about their music and how YOUR parents think about your music?

Any Final thoughts?