6th Grade FUESD Study Plan - Week of May 18th

Week 9 Monday/lunes	Tuesday/martes	Wednesday/miercoles	Thursday/thursday	Friday/viernes
ELA/ Science • Read 30 minutes independently (Reading Log Week 9) • 1 Lexia/Lexia PowerUp/ or Reading Plus Lesson • Daily Journal Entry • Read A Quick Note on Getting Better at Difficult Things **&** answer questions #1-2 • Complete: When Species Cannot Adapt • **Only One Way to Win Writing**: complete writing (all materials are posted under Week 8) • LIM Habit 5: Listen with Eyes, Ears, and Heart ELD Connection • ELD Monday Math • 1 Dreambox or ST Lesson • Monday's 5 Problems • Math Sprint: 410B Second Half # 1-15 • Watch:Dividing decimals with hundredths • Watch: Dividing decimals completely • Watch: Long division with decimals • Watch: Dividing by a multi-digit decimal • Practice: Lesson 14 - Exercises 4-7 all *****All math can be completed here for Monday**	ELA/ Science • Read 30 minutes independently (Reading Log Week 9) • Thrively for Daily Dose of SEL from the counselors • Read A Quick Note on Getting Better at Difficult Things **&** answer questions #3-4 • Complete: When Species Cannot Adapt ELD Connection • ELD Tuesday Math • 1 Dreambox or ST Lesson • Tuesday's 5 Problems • Math Sprint: 410B Second Half # 16-30 • Watch:Dividing decimals with hundredths • Watch: Dividing decimals completely • Watch: Long division with decimals • Watch: Dividing by a multi-digit decimal • Practice: Lesson 15 - Exit Ticket all *****All math can be completed here for Tuesday** PE • PE Activities Week 9	ELA • Read 30 minutes independently (Reading Log Week 9) • 1 Lexia/Lexia PowerUp/ or Reading Plus Lesson • Daily Journal Entry • Work on the Extension activities. They can be found after the P.E section. ELD Connection • ELD Wednesday Math • 1 Dreambox or ST Lesson • Wednesday's 5 Problems • Math Sprint: 411A First Half # 1-15 • Watch: Intro to even and odd numbers • Practice: Lesson 16 - Problem Set all *****All math can be completed here for Wednesday** PE • PE Activities Week 9	ELA/SS • Read 30 minutes independently (Reading Log Week 9) • Thrively for Daily Dose of SEL from the counselors • Read A Quick Note on Getting Better at Difficult Things **&** answer questions #5-6 • Read & Complete DE's: Rule of Law ELD Connection • ELD Thursday Math • 1 Dreambox or ST Lesson • Thursday's 5 Problems • Math Sprint: 411A First Half #16-30 • Watch: Divisibility tests for 2, 3, 4, 5, 6, 9, 10 • Watch: Recognizing divisibility • Watch: The why of the 3 divisibility rule • Watch: The why of the 9 divisibility rule • Practice: Lesson 17 - Exercises all *****All math can be completed here for Thursday** PE • PE Activities Week 9	ELA/SS • Read 30 minutes independently (Reading Log Week 9) • 1 Lexia/Lexia PowerUp/ or Reading Plus Lesson • Daily Journal Entry • Read A Quick Note on Getting Better at Difficult Things **&** answer questions #7-8 • Read & Complete DE's: The Republic, Then and Now • LIM Habit 7: Sharpen the Body ELD Connection • ELD Friday Math • 1 Dreambox or ST Lesson • Math Sprint: 411A Second Half #1-15 • Watch: Greatest common factor examples • Watch: Greatest common factor explained • Watch: Least common multiple • Watch: Least common multiple: repeating factors • Watch: GCF & LCM word problems • Practice: Lesson 18 - Station 1 # 2-4 all **&** Lesson 18 - Station 2 # 2-4 all *****All math can be completed here for Friday**

PE ● PE Activities Week 9 Extension Activities: ● How are you feeling? ● Managing Emotions Week ● Coping with Emotions Brochure ● Klutz Creative Kick Start Activities ● Soil Solution ● FUESD's SEL Resources				PE ● PE Activities Week 9

Sexto Grado FUESD Plan de estudios - Semana de 18 de mayo en Español

semana 9 lunes	martes	miércoles	jueves	viernes
ELA/ Ciencia • Leer 30 minutos independiente (registro de lectura) • 1 Lexia/Lexia PowerUp/ or Lección Reading Plus • Entrada de diario • *Leer:* Nota Rápida en ser mejor a Cosas Difíciles **&** contesta preguntas #1-2 • Completa:Cuando las Especies no se pueden adaptar • **Solamente hay una manera de ganar a la Escritura:**: complete writing (todo los materiales están citados en la Semana 8) • LIM Habito 5: Escucha con los ojos, oídos y corazón Coneccion ELD • Lunes ELD Matematicas • 1 Dreambox o Leccion ST • 5 problemas de Lunes • Carrera de matemáticas: 410B Segunda Mitad # 1-15 • Ve: Dividiendo decimales con centésimos • Ve: Dividiendo completamente decimales • Ve: Division larga con decimales • Ve: Dividiendo decimales	ELA/ Ciencia • Leer 30 minutos independiente (registro de lectura)) • Thrively para actividades de las consejeras SEL • *Leer:* Nota Rápida en ser mejor a Cosas Difíciles **&** contesta preguntas #3-4 • Completa: Cuando las Especies no se pueden adaptar Coneccion ELD • Martes ELD Matematicas • 1 Dreambox or ST Lesson • 5 problemas del marte • Carrera de matemáticas: 410B Segunda Mitad # 16-30 • Ve: Dividiendo decimales con centésimos • Ve: Dividiendo decimales completamente • Ve: Division larga con decimales • Ve: Dividiendo decimales con dígitos múltiples • Practica: Lección 15 - Extra boleto todos los problemas ******Toda la matemáticas puede ser hecha el martes***	ELA • Leer 30 minutos independiente (registro de lectura)) • 1 Lexia/Lexia PowerUp/ or Leccion Reading Plus • Entrada de diario • **Trabaja en las actividades de extensión**. Estas pueden encontrarse después de la sección de Educación Física Coneccion ELD • Miercoles ELD Matematicas • 1 Dreambox o Leccion ST • 5 problemas del miercoles • Carrera de matemáticas: 411A Primera Mitad # 1-15 • Ve: Introducción a números pares y números impares • Practica: Lección 16 - Grupo de problemas todos los problemas ******Toda la matemáticas puede ser hecha el Miércoles*** PE • Actividades de Educación Física semana 9	ELA/SS • Leer 30 minutos independiente (registro de lectura)) • Thrively para actividades de las consejeras SEL • *Leer:* Nota Rápida en ser mejor a Cosas Dificiles **&** contestar preguntas #5-6 • Leer y Completa DE's: Ley de la Regla Coneccion ELD • Jueves ELD Matematicas • 1 Dreambox o Leccion ST • 5 problemas del jueves • Carrera de matemáticas: 411A Primera Mitad # 16-30 • Ve: Prueba de divisibilidad entre 2, 3, 4, 5, 6, 9, 10 • Ve: Reconociendo divisibilidad • Ve: El porqué de las reglas de divisibilidad del 3 • Ve: El porqué de la regla de divisibilidad del 9 • Practica: Lección 17 - Ejercicio todos los problemas • ******Toda la matemáticas puede ser hecha el jueves*** PE	ELA/SS • Leer 30 minutos independiente (registro de lectura)) • 1 Lexia/Lexia PowerUp/ o Leccion Reading Plus • Entrada de diario • Leer: Nota Rápida en ser Mejor a Cosas Dificiles **&** answer questions #7-8 • Leer y Completa DE's: La Republica, en aquel Entonces y Ahora • LIM Habito 7: Afila el Cuerpo Coneccion ELD Viernes ELD Matematicas • 1 Dreambox o Leccion ST • Carrera de Matemáticas: 411A Segunda mitad:#1-15 • Ve: Ejemplos del maximo comun divisor • Ve: Explicación del máximo común divisor • Ve: Multiplo minimo comun • Ve: Multiple minimo comun; factores repetitivos • Ve: Problemas GCF & LCM • Practica Lección 18 - Estacion 1 # 2-4 todos **&** Leccion 18 - todos

entre dígitos múltiples • Practica: Lección 14 - Ejercicio 4-7 Todos los problemas ***Toda la matemáticas pueden ser hecha el lunes*** PE • Actividades de Educación Física semana 9 Actividades de Extensión: • Como te sientes? • Semana de Cómo Lidiar con las Emociones • Folleto Enfrentando las Emociones • Inicio de actividades Klutz Creative • Solución para la tierra o suelo • Recursos del distrito	PE • Actividades de Educación Física semana 9		• Actividades de Educación Física semana 9	***Toda la matemáticas puede ser hecha el viernes*** PE • Actividades de Educación Física semana 9

6th Grade Reading Log Week 9

Monday:

Book/Chapter(s) read:	
Minutes read:	
Write 3-5 sentences about the reading:	

Tuesday:

Book/Chapter(s) read:	
Minutes read:	
Write 3-5 sentences about the reading:	

Wednesday:

Book/Chapter(s) read:	
Minutes read:	
Write 3-5 sentences about the reading:	

Thursday:

Book/Chapter(s) read:	
Minutes read:	
Write 3-5 sentences about the reading:	

Friday:

Book/Chapter(s) read:	
Minutes read:	
Write 3-5 sentences about the reading:	

Parent Signature:_____Date: _____

Up in the Air

Writing Prompts Ideas

- From this high up, I could see…
- I was so excited, this was going to be my first time in a hot air balloon…
- As it floated away, the balloon became smaller and smaller….
- The balloon travelled slowly across…

Five Ws and One H

Who...

- Who is the character?

Where…

- Where is the character?

When…

- When did the event take place?

Why...

- Why is the character there?
- Why did this happen?
- Did something cause this to happen?

What...

- What is happening?
- Can you provide more detailed information?

How...

- How did the character get there?
- How did the character get out of their situation?
- How did this happen?
- Can you provide more information to prove this?

Monday: Write the beginning of the story using one of the given "**Writing Prompt Ideas**."

Wednesday: Write the middle of the story.

Friday: Write the end of the story.

COMMONLIT

Name: _____ Class: _____

A Quick Note on Getting Better at Difficult Things

By Ta-Nehisi Coates
2015

Ta-Nehisi Coates is an American writer, journalist, and educator. Coates is a correspondent for The Atlantic *who often writes about cultural, social, and political issues, especially as they relate to African Americans. In this text, Coates discusses how to get better at difficult things and shares his own struggles learning a new skill. As you read, take note of the obstacles that the author encounters and how he overcomes them.*

[1] I have been studying the French language, with some consistency, for three years. This field of study has been, all at once, the hardest and most rewarding of my life. I would put it above the study of writing simply because I started writing as a 6-year-old boy under my mother's tutelage.[1] I always "felt" I could write. I did not always "feel" I could effectively study a foreign language.

"Learn French" by Leo Reynolds is licensed under CC BY-NC-SA 2.0.

But here I am, right now, in a Montreal hotel. I spoke French at the border. I spoke French when I checked in. I spoke French when I went to get lunch. I don't really believe in fluency.[2] If there is such a thing, I don't have it. I mishear words. I confuse tenses. I can't really use the subjunctive. Yet.

Something has happened to me and the something is this — I have gotten better. I don't know when I first felt it. I didn't feel it this summer at Middlebury,[3] despite the difference in my entrance and exit scores. I didn't feel it when I first arrived in Paris in January. I felt, as I always feel, like I was stumbling around in the dark. I still feel like that. But I also feel like I am getting better at stumbling.

I am emphasizing how I "feel" because, when studying, it is as important as any objective[4] reality. Hopelessness feeds the fatigue[5] that leads the student to quit. It is not the study of language that is hard, so much as the "feeling" that your present level is who you are and who you will always be. I remember returning from France at the end of the summer of 2013, and being convinced that I had some kind of brain injury which prevented me from hearing French vowel sounds. But the real enemy was not any injury so much as the "feeling" of despair. That is why I ignore all the research about children and their language advantage. I don't want to hear it. I just don't care. As Carolyn Forché would say — "I'm going to have it."

1. support
2. **Fluency** ***(noun):*** the ability to speak or write a foreign language easily and accurately
3. Middlebury College is located in Vermont. They offer a 6-week summer graduate school program for students who want to learn French. Students who attend must pledge to speak only French for the entire time they're there.
4. **Objective** ***(adjective):*** neutral
5. **Fatigue** ***(noun):*** extreme tiredness

[5] To "have it," I must manage my emotional health. Part of that long-term management — beyond French — is giving myself an opportunity to get better at difficult things. There is absolutely nothing in this world like the feeling of sucking at something and then improving at it. Everyone should do it every ten years or so.

I don't know what comes after this. I have said this before, and will say it again: Studying French is like setting in a canoe from California to China. You arrive on the coast of Hawaii and think, "Wow that was really far." And then you realize that China is still so very far away. "Feelings" come and go. Likely, someone will say something — in the next hour or so — which I do not understand and I will feel a little hopeless again. But right now, I feel high. And one must savor those moments of feeling high, because they are not the norm. The lows are the norm. The Struggle is the norm. May it ever be thus.

Directions: Read the article "A Quick Note on Getting Better at Difficult Things" and answer the questions.

1. Explain what Ta-Nehisi Coates thinks is absolutely necessary in order to succeed at new skills, citing 2 pieces of direct evidence from the text. Also use the transition words one, and another to help organize your writing.

2. (**Part A**) Which of the following identifies the central idea of the text? (Highlight your answer.)
   A. It is important to accept and expect struggle when learning a new skill.
   B. It is likely you will never fully master a new skill, but it is the journey that is important.
   C. French is one of the hardest languages to learn, so people who attempt to learn it must be mentally tough.
   D. It is better to find something that you excel at, rather than struggle with something that doesn't come naturally.

   (**Part B**) Which section from the text best supports the answer to Part A?(Highlight your answer.)
   A. "I would put it above the study of writing simply because I started writing as a 6-year-old boy under my mother's tutelage. I always 'felt' I could write." (Paragraph 1)
   B. "I didn't feel it when I first arrived in Paris in January. I felt, as I always feel, like I was stumbling around in the dark. I still feel like that." (Paragraph 3)
   C. "To 'have it,' I must manage my emotional health. Part of that long-term management — beyond French — is giving myself an opportunity to get better at difficult things." (Paragraph 5)
   D. "Likely, someone will say something — in the next hour or so — which I do not understand and I will feel a little hopeless again. But right now, I feel high." (Paragraph 6)

3. (**Part A**) What is the author's purpose in the text? (Highlight your answer.)
   A. to give people an example of how failure is a good thing
   B. to encourage people to keep working hard, even if something is difficult
   C. to prove that nothing can be rewarding if it's not challenging
   D. to urge people to learn a foreign language since that's a necessary skill in the 21st century

(**Part B**) Which detail from the text best supports the answer to Part A? (Highlight your answer.)

A. "I spoke French at the border. I spoke French when I checked in. I spoke French when I went to get lunch." (Paragraph 2)
B. "If there is a such thing, I don't have it. I mishear words. I confuse tenses. I can't really use the subjunctive. Yet." (Paragraph 2)
C. "There is absolutely nothing in this world like the feeling of sucking at something and then improving at it." (Paragraph 5)
D. "I have said this before, and will say it again: Studying French is like setting in a canoe from California to China." (Paragraph 6)

4. Why do you think people set challenges for themselves? Why not just stay in the "safe zone" of life and do what is easy? Answer with your own reasons and use one example from your life or from a movie or book to support your idea.

5. New Endings

Using your own words, finish these sentences by the author based on your own life experience. Then read the paragraph aloud to see if it makes sense:

Something has happened to me and _____ _____. I don't know when I first felt it. I didn't feel it _____, despite _____. I didn't feel it when I first_____. I felt, as I always feel, like_____. I still feel like that. But I also feel like _____ _____.

6. Interview an adult in your family by phone, video chat or in person. Ask them 3 questions:
   a. Can you tell me a story about any challenge that you chose for yourself and how it turned out?
   b. Why did you choose that challenge; what made it worth it?
   c. What advice do you have for me?

Summarize in 2 sentences what you learned from your interview.

7. Open middle sentences
   Choose one word that you think would make these sentences sensible:

   a. Life is either a _____ or nothing at all.
   b. Our very survival depends on _____and to face the challenge of change.
   c. It's not that I'm so smart, it's just that _____ _____ longer.

8. Journaling: How is life different today than it was two weeks ago? What is better? What is worse? Be specific in your observations and word choice. Fill every line with what you notice and remember about the present and the past.

When Species Cannot Adapt

From CA EEI

Directions: Complete the below activities:

1. Make the correct match
2. Determine which five species are endangered
    a. "Species Background"
    b. "Human Imprint" map
    c. Chart and Questions

Make the Correct Match

Directions: Match the correct question to answer. (Note: You will need to click anywhere in the card area, and then go to the bottom left of the card area to click on "Edit".

Ecosystems never change. True? False?	False. Human activities can change environments and put some species at risk of extinction. Changes people have made to environments can also cause some populations to grow. For example, the number of coyotes and opossums in California has gone up in recent years, due in part to changes humans have made to ecosystems.
When a species cannot adapt to environmental changes, it becomes extinct. True? False?	False. Any kind of change can cause a species to become extinct. Both people and natural forces can cause extinctions. In the past, some species have become extinct when meteors hit Earth, while others have died out due to volcanic eruptions.
Human activities always cause animal populations to decrease. True? False?	True. If there are significant changes in an environment, species that cannot adapt will either move to another location that meets their needs or die.
Extinction has happened since the beginning of all life. True? False?	True. Extinction is a natural effect of naturally changing environments.
Adaptive species can survive in any ecosystem. True? False?	False. Ecosystems are always changing. For example, sands move in and out of coastal dunes, weather varies from season to season, diseases change population numbers. Change is a natural feature of ecosystems. But some kinds of change can affect the functioning of ecosystems.)
Ecosystems where species live are always changing. Species can always adjust to natural changes, but they often cannot survive the changes caused by people. True? False?	False. Species with adaptive characteristics are good at adjusting to change, but even these species cannot handle all kinds of change.

Determine which five species are endangered

Directions: Read **Species Background** and **Human Imprint** map to complete the chart and answer the questions.

Species Background

Salt Marsh Harvest Mouse

The salt marsh harvest mouse lives in the marshes in the southern part of the San Francisco Bay. This mouse has specific habitat needs. It lives in a salty environment among the leaves of pickleweed, which it eats. It needs a large area to survive. Not only does it live in the marsh, it also needs higher dry ground around the marsh as a place to escape rising water from high tides or storms. This higher ground must also provide plant cover, so the harvest mouse can hide from predators.

The mouse is endangered because of habitat loss. When marshland is developed, predators come in, including nonnative species, such as the red fox and house cats. Development also brings an increase of fresh water pumped into the marshes from wastewater treatment plants.

Coyote

Coyotes live throughout the state of California. The coyote has a digestive system that can process many different kinds of foods. The only thing this animal needs for its den is a warm and dry place. The coyote can learn to find new foods or avoid new dangers.

California Least Tern

The California least tern is a bird that lives along the coast of California. It nests in San Francisco Bay and from San Luis Obispo to northern Mexico. It has specific nesting needs and it only nests on open, flat beaches.

The California least tern is endangered because of habitat loss. Development has destroyed nesting areas and has allowed humans and predators, such as raccoons, cats, and dogs, to enter the nesting areas. The tern's feeding areas are also affected by development and pollution.

Raccoon

Raccoons live throughout the state of California. Raccoons can live in most areas as long as a source of water is nearby. It has a digestive system that can process practically anything, including insects, birds, eggs, fish, nuts, fruits, vegetables, and grains. The raccoon can also learn not to fear people; in fact, this animal now associates people with food.

Fresno Kangaroo Rat

The Fresno kangaroo rat lives in Fresno County and in other parts of the San Joaquin Valley, which stretches from south of Sacramento to Bakersfield. This animal lives in colonies in dry habitats. It cannot survive in places that are irrigated or cultivated.

The kangaroo rat is endangered because its habitat is now being farmed. Other threats to this animal include urban development, poisons used to kill rodents, and domestic predators, such as cats.

Human Imprint map

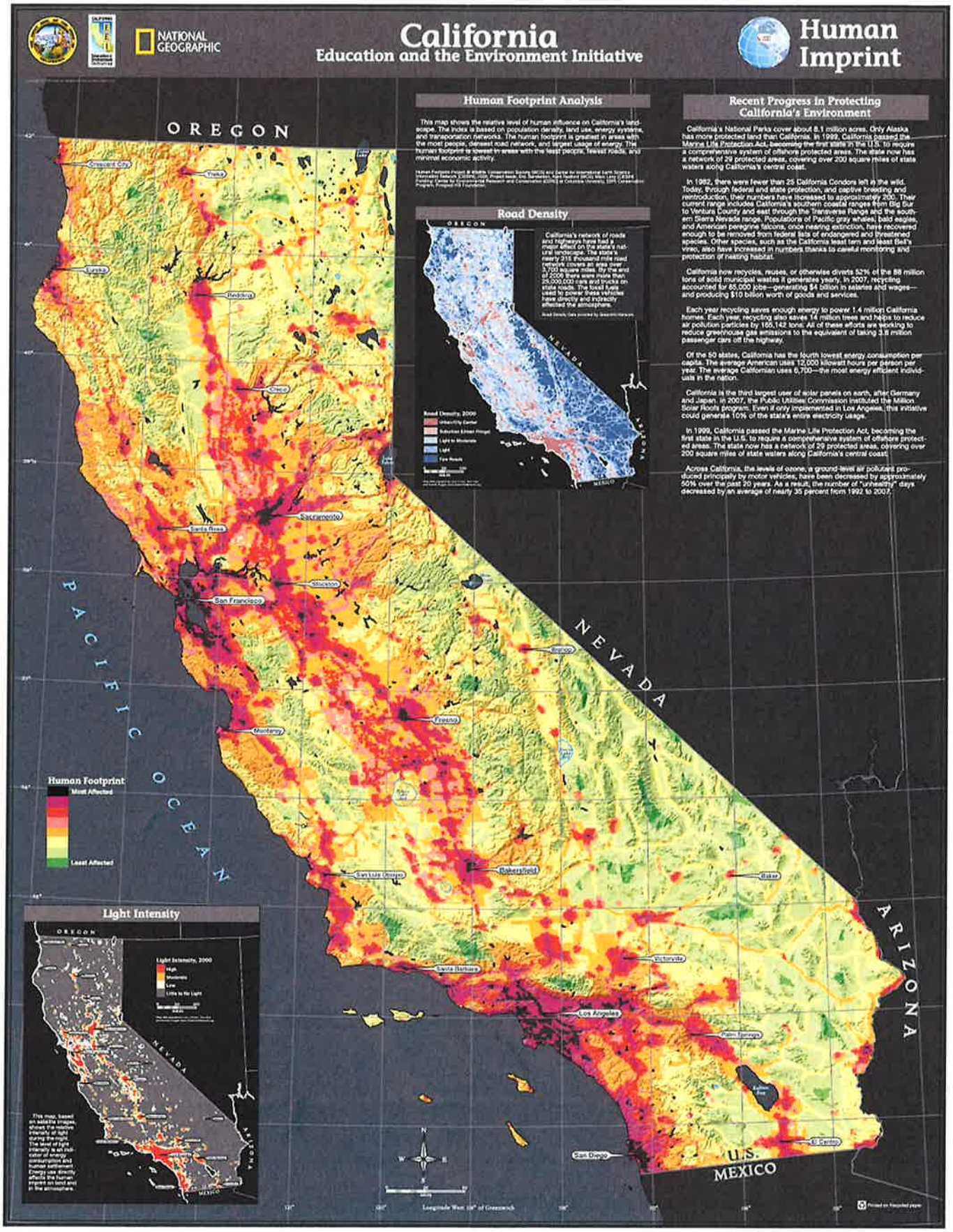


Chart and Questions

Directions: Read the "Species Background" to find out about each of the five species in California. Next. on the "Human Imprint" map, locate the areas where each species lives. Use the information you find there and in the reading to complete the chart and answer the questions.

Species	**Describe the level of human change to this animal's ecosystem** *(High, Medium, Low, or Varies)*	**Do you think this species can survive despite these changes?**	**Do you think this species is at high or low risk of extinction?** *(High risk means it is endangered)*
Salt marsh harvest mouse			
Coyote			
California least tern			
Racoon			
Fresno kangaroo rat			

1. Look at the species you described as being at high risk of extinction. Why are these species endangered?

2. Give one example of a species that you have learned about in this unit that is threatened or endangered. What kinds of environmental changes are happening to this species' ecosystem?

3. What prevents this species from responding to these changes?

4. If a species is at high risk of extinction, what actions can be taken to prevent this from happening?

Social Studies Reference

Twelve Tables

The Law of the Twelve Tables was the earliest written expression of Roman law, dating from 451 to 450 BCE. Since Roman law was unwritten at the time, plebs, or commoners, were concerned that they did not know their own rights. They realized that only the patricians, or aristocrats, who knew the laws well, could benefit from them. Thus the Twelve Tables were created. Once the law was put in writing, the plebs finally knew their rights. They also knew when the patricians were abusing power. In 450 the Twelve Tables were officially posted in the Roman Forum. This written code, however, did not actually change Roman law. The patrician class still had its traditional rights. Unpaid debt remained punishable by enslavement, and religious customs could be used to settle civil cases. The Twelve Tables were nonetheless important because they set standards by which all Romans, regardless of class, would be judged.

RELATED PLACES

Forum
Rome

RELATED GENERAL

citizen
code of law
constitution
patrician
plebian

RELATED EVENTS

Roman Empire
Roman Republic

Social Studies Reference

Rome

Rome, the famous capital city in Italy, was founded in 753 BCE. Its origins are not precisely known, but the myth is told of twin brothers Romulus and Remus fighting, and Romulus starting the city. Despite obscure beginnings, Rome rose to become the capital of an entire empire comprising almost all of current-day Europe. Adding to Rome's success are its geographical advantages, being near the Mediterranean Sea and protected by the Alps.

Legend says that at the beginning, Rome was ruled by a series of seven Etruscan kings: from Romulus to Tarquin the Proud. Details of the seven kings are few and are mostly considered fable. In 510 BCE the citizens revolted against King Tarquin, and the Roman Republic was born. Rome then began its conquests.

By 274 BCE all of Italy was under Rome's control. A series of wars, known as the Punic Wars, began with rival Carthage. By 146 BCE Rome took over Carthage, Corinth, and Greece. Around 46 BCE Julius Caesar had brought France under Roman control, married Cleopatra from Egypt, and named himself the Roman dictator. Dictators and emperors then ruled for centuries.

Despite the fall of the Roman Empire in 476 CE, Rome as a city continues to exist. It is simply no longer the "Eternal City," as it was named during the glory of the Roman Empire. Rome was rebuilt during the Italian Renaissance. Today you can visit many historical sites in Rome, including the Colosseum, the Arch of Constantine, the Pantheon, the Vatican, the Basilica of St. Peter, the Baths of Diocletian, Capitoline Hill, and Palatine Hill.

The Rule of Law

(From Discovery Ed)

Read the following passage. These laws come from the Law of the **Twelve Tables**, ancient **Rome**'s first set of written laws. They were first displayed in Rome in 451 BCE. These laws were intended to bring suspected criminals to justice by ensuring they make it to trial in court.

"Proceeding Preliminary to Trial

1. If he (the plaintiff) summon [the defendant] to court, he (the defendant) shall go. If he (the defendant) go not, he (the plaintiff) shall call a witness thereto. Then only he (the plaintiff) shall take [the defendant] by force.

2. If he (the defendant) attempt evasion or take flight, he (the plaintiff) shall lay hand [on the defendant].

3. If disease or [old] age shall be an impediment, he who shall summon [the defendant] to court shall grant [him] a conveyance."

Questions

1. In your own words, what do these laws mean?

2. Why do you think people wanted to have laws written down?

3. How do these laws compare to the laws of today?

The Republic Then + Now

Times

Back in the Day . . .

Although it may seem like ancient Rome ended long ago, an empire that large and lasting does not fall without leaving its mark on the world. Many of the ideals of the Roman Republic have been evident throughout European history, and when Europeans came to North America, they, too, looked to the ancient republic for guidance. The United States government today is still greatly influenced by ancient Rome's political system and philosophy.

While the United States is a democracy, it is a representative democracy—or a republic. There is another kind of democracy, a direct democracy, in which each citizen votes on laws. In the United States republic, Americans elect all sorts of officials, such as senators, congressmen, state legislators (lawmakers), mayors, and others. These elected representatives vote on the laws for their constituents, or the people they represent. This aspect of the Roman Republic forms a basis for U.S. government. There are other similarities between ancient Rome and the United States.

The United States Capitol in Washington, DC. Many of the building designs in the U.S. capital were inspired by Roman structures.

The Framers of the U.S. Constitution drew inspiration from many sources. They valued the democratic principles and emphasis on citizenship practiced in ancient Athens. They paid careful attention to the European philosophers, who valued "natural rights." They even drew inspiration from the power-sharing of the Native American Iroquois Confederacy. However, they called the government they created a *republic*—a name borrowed from ancient Rome.

Common Roots

Rome and the United States have a similar founding. At first, both were controlled by a monarch who was overthrown by frustrated citizens. The seven kings of Rome were elected by the people to rule for life, so they did not pass the throne and its power to their descendants like most monarchs. Wealthy men formed the Roman Senate, which advised the king. The Roman Senate did not have much power without the king's consent. The last king, Lucius Tarquinius Superbus, was overthrown in 509 BCE. Then, instead of a king, two consuls were chosen to serve as the leader for a year. The Roman Senate still acted as the main council and voted on decisions.

Similarly, early American colonists overthrew their monarch, King George III of England. After a long revolution, American leaders formed a government that gave overwhelming power to states under the Articles of Confederation. This form of government did not function very well, so leaders went back to the drawing board and wrote the United States Constitution. The Constitution formed a stronger national government and separated its powers of government into three distinct branches. The legislative branch, which makes laws, includes Congress—both the Senate and the House of Representatives. The executive branch, which carries out and enforces laws, includes the president, vice president, and many government agencies. The judicial branch, which interprets laws and determines innocence or guilt when crimes occur, includes a system of courts. The highest court in the United States is the Supreme Court.

Checks and Balances

Although the Romans never had a written constitution like the United States, they did have separate branches of government similar to the executive, legislative, and judicial branches of the American system. Have you ever heard of checks and balances? These are ways that each branch of government can limit or stop the other two branches. With checks and balances, no single branch of government can get too powerful.

Who used checks and balances first? You guessed it: the Roman Republic. When the Roman Republic was first set up, two men called consuls were in charge, and they controlled the army, passed laws, set tax rates, and decided if the republic should go to war. They were in power for just one year. Each consul could veto, or refuse, a decision by the other.

The consuls did not act alone. Each of the individual consuls was advised by senators, who were wealthy Roman men. The Roman Assembly, a group of male Roman citizens, elected senators and prefects, who ran daily events in the city. Tribunes were elected by the Roman Assembly and represented the interests of poor citizens. Though the Roman Republic did not have the same branches of government as the United States does today, the republic still had a system of checks and balances in place.

Who Has Power in a Republic?

The United States government, like the Roman system of representative government, also holds leaders accountable. Presidents and members of Congress can be removed in elections or, in the case of the president and federal judges, removed from office through impeachment. Because of this, citizens have the ultimate power in a republic.

In spite of the many good things about Roman and U.S. government, not everyone benefited from the system. For examples, slaves and women had few rights and limited power. For a long time in both cultures, only certain people— men—were given any form of power. The people have the power in a republic, but it can take effort for all people to gain equal influence.

What About the Vote?

Ancient Rome and the modern United States seem to share the same system of voting, but the differences become clear after learning about each culture. Initially, only patricians, or elite people, were allowed to vote or be in the Roman Senate. People could vote for leaders, but the system did not distribute votes fairly because rich Romans had more votes than other Romans. As time went on, however, more groups of Roman citizens were given the right to vote. Similarly to Rome, the authors of the United States Constitution said that government was for all men, but they really meant all educated, white, male landowners. That's quite a bit different than "all men," and certainly not "all people." Over the course of U.S. history, all adult citizens eventually won the right to vote and run for office.

The Roman Republic believed that jury trials should begin by presuming innocence, not guilt.

In the United States, each citizen over the age of 18 can cast one vote per election, no matter how rich or poor the person is. All eligible citizens can vote in local, state, and federal (national) elections, most of which are direct elections, which means that the candidate who gets the most votes from citizens wins.

Votes for president, however, are cast by members of the Electoral College. Each state has a certain number of electoral votes based on its population. State electors vote for president based on which candidate was chosen by most voters in the state. Because of this, it is possible for a candidate to win a nationwide majority of the popular vote—the total number of votes cast by all citizens—but not the majority of Electoral College votes. Americans have been upset on the occasions when this has occurred.

A main difference between ancient Rome and the United States today is that voting in the United States is based on citizenship and population, whereas in Rome it was partially based on wealth. Many Americans worry, however, that

allowing people to give large donations to support a political candidate gives rich Americans far more power than middle-class or poor Americans.

Justice in the Courts

Roman law has continued to influence justice in the United States. One key idea in American courts is that a person accused of a crime is innocent until proven guilty. The person does not have to prove he is innocent, as he would in many countries. Instead, a jury must have proof that a person is guilty. Romans also considered this presumption of innocence a basic principle of law, and they also held trials by jury.

Both governments stated that all citizens have the right to equal treatment. Both established that unreasonable laws can be rejected. And both required that a person accusing someone of a crime must have proof.

The system of government that runs a country helps form the basis and strength of that country. Ancient Roman culture and the culture of the United States today share some similarities, especially in terms of government: the strong governments of both were and are important in the lives of the citizens of each country. Republics are complicated, however, and they can be—like any democracy—inefficient. Still, in their desire to avoid their voices being silenced by a monarchy, the framers of the United States Constitution found inspiration and wisdom within ancient Rome's government.

Questions

Directions: After reading the passage, highlight your answers for questions 1-3 all, and answer question 4 with complete sentences.

1. A republic is a form of government without
   A. a legislature
   B. a monarch
   C. judges
   D. voters

2. Which role did consuls fill within the Roman government?
   A. They ran daily events in the city.
   B. They passed laws and decided on tax rates.
   C. They represented the interests of poor Roman citizens.
   D. They vetoed decisions made by the Roman Assembly.

3. The United States has a government similar to that of ancient Rome. Which of the following is true *only* under the current government of the United States?
   A. People accused of crimes are presumed innocent.
   B. Separate branches of government make, enforce, and interpret laws.
   C. Each citizen has one vote.
   D. Voters elect leaders to represent them in government.

4. In both ancient Rome and the United States, some groups of people were, at times, excluded from voting. How were those exclusions similar? Why do you think these rules changed over time? How would life in the United States be different today if these rules had never changed? Use information from the passage to support your answer.

HABIT 5

Listen with Eyes, Ears, and Heart

SEEK FIRST TO UNDERSTAND, THEN TO BE UNDERSTOOD

To listen with the intent to understand requires listening with your eyes, ears, and heart. Listening is a leadership skill that requires practice.

LISTENING:

Eyes: Observe body language.

Ears: Listen to words and tone of voice.

Heart: Listen with the intent to understand.

On the **Lotus Diagram**, write ways to know if someone is a great listener.

EXAMPLE: Look at person speaking.	Click here to type	Click here to type
Click here to type	GREAT LISTENERS	Click here to type
Click here to type	Click here to type	Click here to type

Think about
your listening skills.

Circle the number that reflects your current ability to listen.

1- Listening for me is difficult.

2- I need reminders to listen.

3- I'm usually okay but I can get distracted when I listen.

4- I'm a pretty good listener.

5- I am a model for listening.

Friends have a responsibility to listen.

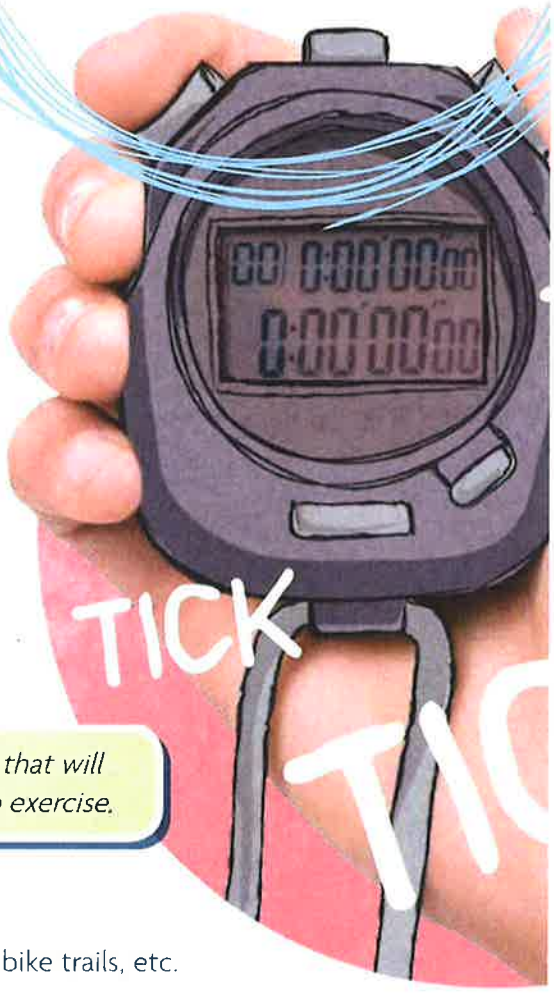
Do you agree or disagree? Circle one. AGREE DISAGREE

Why?

Click here to type

SHARPEN THE SAW

Sharpen the Body



HABIT 7 encourages you to keep your body "sharp" by exercising, eating healthy, and getting enough sleep.

ONE WAY TO TAKE CARE OF YOUR BODY IS TO MOVE IT.

You have been asked to suggest activities that will encourage students in your community to exercise.

What would you suggest?

EXAMPLE: Skateboard park, playground, bike trails, etc.

Click here to type

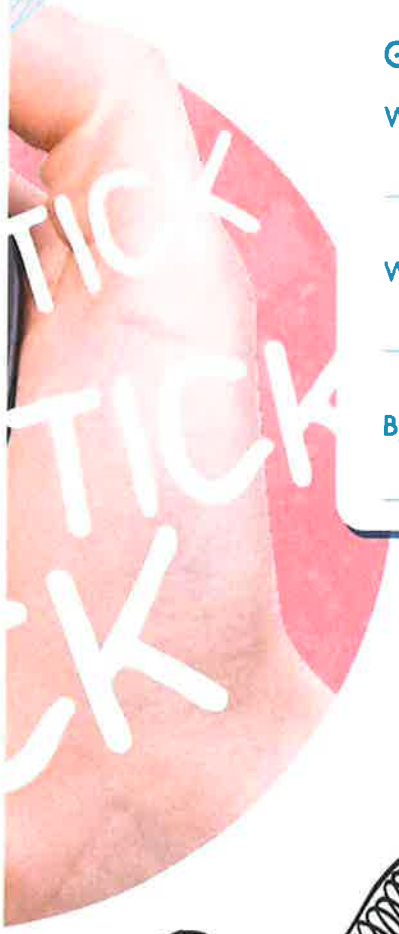
Why do you think your suggestion is worth pursuing? Write a persuasive argument.

Click here to type

As a leader, you may have more influence than you think.

Choose one thing you can do to influence others to exercise. Write a goal in an "X to Y by When" format.

EXAMPLE: My brother and I will go from running a 5K to running a 10K by June.



GOAL

Where I am now: X Click here to type

Where I want to be: Y Click here to type

By When

Click here to type

ACTION STEPS

EXAMPLE:

1. SCHEDULE TIME TO RUN.
2. DECIDE HOW FAR WE WILL RUN.
3. CREATE A SCOREBOARD.

1. Click here to type

2. Click here to type

3. Click here to type

ACCOUNTABILITY PARTNER CHECK

Find someone at home to be your accountability partner. Share with him or her your goal, and meet with him or her in one week to share your progress.

ESL at Home 6-8 Weeks 3-4

Use notebook paper to complete these activities. Do one each day!

Monday	Tuesday	Wednesday	Thursday	Friday
Pick a page from a book. Change all of the nouns to things you see right in front of you in your house, then read it aloud.	Make a T-chart. Make a list of things you like about learning at home versus at school. **Home** | **School**	Find food in your house, like crackers or water bottles. Write or draw a word problem. **Omar has 346 crackers. Neveah ate one hundred three. How many are left?**	Go outside and look up at the clouds. Draw what you see.	Choose two animals. Draw and label their food web. Create a Venn diagram to compare their ecosystems.

Monday	Tuesday	Wednesday	Thursday	Friday
Create a shadow puppet story on the wall. Write the title, characters, problem, solution, and ending to your story.	Use crackers or candy to build a castle. How tall can you make it? How many pieces did you use? List your materials.	Take a walk in your neighborhood and search for items in nature that form the shape of letters. Draw what you see. 	Think of someone you would like to interview. Write them a letter with at least three questions.	Use the food in your house to create a menu with prices. Use them to write word problems. **Example:** **Milk = $21.00** **Bananas = $33.00** **Ice cream = $12.00**

ESL en Casa 6-8 Semanas 3-4

Usar una hoja de libreta para completer las actividades. Hacer uno por dia.

Lunes	Martes	Miercoles	Jueves	Viernes
Escoge una pagina de un libro. Cambio todos los sustantivos a cosas que ves entre de tu casa y despues lee la pagina de nuevo en voz alta.	Crear una grafica T. Hacer una lista de cosas que te gusta aprender major que en casa que en la escuela. **Casa** | **Escuela**	Encontrar comida en tu casa, como galletas o botellas de agua. Escribe una historia de problema matematica. **Omar tiene 346 galletas. Neveah comio ciento-tres. Cuantos quedan?**	Ve afuera y voltea a ver las nubes. Dibuja lo que ves.	Escoge dos animals y agrega que es lo que comen. Crear un diagrama que compare sus ecosistemas.

Lunes	Martes	Miercoles	Jueves	Viernes
Crear un espectaculo de marioneta de sombras con tus manos y la pared. Escribe el titulo, personajes, problema, solucion y el fin de la historia.	Usar galletas o dulces para hacer un castiilo? Que tan alto lo hiciste? Cuantas piezas usaste? Hacer una lista de los materiales que usaste.	sal a caminar en tu vecindad y busca cosas que parezcan letras. Dibjua lo que ves. 	Piensa en alguien a quien te gustaria entrevistar. Escribeles una carta con almenos tres preguntas.	usa la comida que tienes en casa para crear un menu con precios. Usalos para escribir problemas. **Ejemplo:** **Leche = $21.00** **Platanos = $33.00** **Nieve = $12.00**

Monday's 5 Problems

Directions: Answer the below questions.

Trimester 1, Week 9
Monday: Show your work on separate paper. 1. $403 \times 49 =$ 2. $3{,}837 \div 92 =$ 3. $5\frac{5}{8} - 4\frac{1}{4} =$ 4. $2\frac{3}{4} \times \frac{2}{8} =$? Will the product be more or less than $\frac{2}{8}$? 5. $81 + 74.1 =$

Directions: Please submit your math answers here.
1.
2.
3.
4.
5.

Sprints 410B Second Half

Directions: Divide

1.	12 ÷ 3 =	
2.	16 ÷ 2 =	
3.	32 ÷ 2 =	
4.	12 ÷ 2 =	
5.	24 ÷ 2 =	
6.	48 ÷ 2 =	
7.	60 ÷ 2 =	
8.	36 ÷ 3 =	
9.	48 ÷ 2 =	
10.	72 ÷ 2 =	
11.	96 ÷ 2 =	
12.	104 ÷ 2 =	
13.	120 ÷ 3 =	
14.	160 ÷ 2 =	
15.	44 ÷ 4 =	

Lesson 14: THE DIVISION ALGORITHM—CONVERTING DECIMAL DIVISION INTO WHOLE NUMBER DIVISION USING FRACTIONS (from EngageNY)

Exercises

Use exercises 1-3 all to help you solve exercises 4-7 all.

1. Daryl spent $4.68 on each pound of trail mix. He spent a total of $14.04. How many pounds of trail mix did he purchase?

Steps	Answers
Step 1: Estimate.	$15 \div 5 = 3$
Step 2: Rewrite the problem using the same units.	$14.04 \div 4.68 \rightarrow$ 1,404 hundredths $\div$ 468 hundredths
Step 3: Solve.	$468\overline{)1404}$ -1404 0
Step 4: Justify the reasonableness of the answer.	The estimate of 3 shows that the answer of 3 is reasonable.

2. Kareem purchased several packs of gum to place in gift baskets for $1.26 each. He spent a total of $8.82. How many packs of gum did he buy?

Steps	Answers
Step 1: Estimate.	$9 \div 1 = 9$
Step 2: Rewrite the problem using the same units.	$8.82 \div 1.26 \rightarrow$ 882 hundredths $\div$ 126 hundredths
Step 3: Solve.	$126\overline{)882}$ -882 0
Step 4: Justify the reasonableness of the answer.	The estimate of 9 shows that the answer of 7 is reasonable.

3. Jerod is making candles from beeswax. He has 132.72 ounces of beeswax. If each candle uses 8.4 ounces of beeswax, how many candles can he make? Will there be any wax left over?

Steps	Answers
Step 1: Estimate.	$120 \div 8 = 15$
Step 2: Rewrite the problem using	$132.72 \div 8.4 \rightarrow$ 13,272 hundredths $\div$ 84 tenths

the same units.	→13,272 hundredths ÷ 840 hundredths
Step 3: Solve.	15.8 840 √13272 -840 4872 -4200 6720 -6720 0
Step 4: Justify the reasonableness of the answer.	The estimate of 15 shows that the answer of 15.8 is reasonable.

4. There are 20.5 cups of batter in the bowl. If each cupcake uses 0.4 cups of batter, how many cupcakes can be made?

Steps	Answers
Step 1: Estimate.	
Step 2: Rewrite the problem using the same units.	
Step 3: Solve.	√
Step 4: Justify the reasonableness of the answer.	

5. In Exercises 3 and 4, how were the remainders, or extra parts, interpreted?

6. 159.12 ÷ 6.8

Steps	Answers
Step 1: Estimate.	
Step 2: Rewrite the problem using the same units.	
Step 3: Solve.	√
Step 4: Justify the reasonableness of the answer.	

7. 167.67 ÷ 8.1

Steps	Answers

Step 1: Estimate.	
Step 2: Rewrite the problem using the same units.	
Step 3: Solve.	√
Step 4: Justify the reasonableness of the answer.	

Tuesday's 5 Problems

Directions: Answer the below questions.

Tuesday: Show your work on separate paper.

1. 2,261 × 21 =
2. At the carnival, forty-two friends bought five hundred six tickets. If they wanted to split all the tickets so each person got the same amount, how many more tickets would they need to buy?
3. While exercising Cody travelled $13\frac{3}{5}$ kilometers. If he walked $12\frac{6}{9}$ kilometers and jogged the rest, how many kilometers did he jog?
4. A large container of lemon juice used $\frac{5}{7}$ of a bag of lemons. If a small container used $\frac{6}{7}$ of the amount of a large container, how many bags does a small container use?
5. 14 - 10.2 =

Directions: Please submit your math answers here.
1.
2.
3.
4.
5.

Sprints 410B Second Half

Directions: Divide

16.	30 ÷ 2 =	
17.	40 ÷ 2 =	
18.	90 ÷ 3 =	
19.	105 ÷ 3 =	
20.	135 ÷ 3 =	
21.	165 ÷ 3 =	
22.	180 ÷ 3 =	
23.	195 ÷ 3 =	
24.	160 ÷ 4 =	
25.	96 ÷ 3 =	
26.	56 ÷ 2 =	
27.	96 ÷ 4 =	
28.	48 ÷ 3 =	
29.	48 ÷ 1 =	
30.	52 ÷ 4 =	

Lesson 15: THE DIVISION ALGORITHM—CONVERTING DECIMAL DIVISION TO WHOLE NUMBER DIVISION USING MENTAL MATH (from EngageNY)

Exit Ticket

1. $133.84 \div 5.6$

Steps	Answers
Step 1: Estimate.	
Step 2: Rewrite the problem using the same units.	
Step 3: Solve.	$\sqrt{}$
Step 4: Justify the reasonableness of the answer.	

2. $12.4 \div 1.036$

Steps	Answers
Step 1: Estimate.	
Step 2: Rewrite the problem using the same units.	
Step 3: Solve.	$\sqrt{}$
Step 4: Justify the reasonableness of the answer.	

3. $38.9 \div 2.91$

Steps	Answers
Step 1: Estimate.	
Step 2: Rewrite the problem using the same units.	
Step 3: Solve.	$\sqrt{}$
Step 4: Justify the reasonableness of the answer.	

4. $45 \div 1.5$

Steps	Answers
Step 1: Estimate.	
Step 2: Rewrite the problem using the same units.	
Step 3: Solve.	√
Step 4: Justify the reasonableness of the answer.	

Wednesday's 5 Problems

Directions: Answer the below questions.

Wednesday: Show your work on separate paper.

1. Adam was collecting cans for recycling. In 5 months he had collected 180 bags with 68 cans inside each bag. How many cans did he have total?
2. $4{,}163 \div 38 =$
3. $5\frac{1}{2} + \frac{11}{4} =$
4. $\frac{1}{8} \div 7 =$
5. $79.7 \times 6.0 =$

Directions: Please submit your math answers here.
1.
2.
3.
4.
5.

Sprints 411A First Half

Directions: Divide

1.	4 ÷ 2 =	
2.	6 ÷ 2 =	
3.	12 ÷ 2 =	
4.	24 ÷ 2 =	
5.	9 ÷ 3 =	
6.	15 ÷ 3 =	
7.	21 ÷ 3 =	
8.	24 ÷ 3 =	
9.	27 ÷ 3 =	
10.	33 ÷ 3 =	
11.	12 ÷ 4 =	
12.	20 ÷ 4 =	
13.	32 ÷ 4 =	
14.	36 ÷ 4 =	
15.	44 ÷ 4 =	

Lesson 16: EVEN AND ODD NUMBERS (from EngageNY)

Problem Set

Use the **Lesson Summary** to help you solve numbers 1-5 all.

Lesson Summary

Adding:

- The sum of two even numbers is even.
- The sum of two odd numbers is odd.
- The sum of an even number and an odd number is odd.

Multiplying:

- The product of two even numbers is even.
- The product of two odd numbers is odd.
- The product of an even number and an odd number is even.

Directions: Without solving, tell whether each sum or product is even or odd. Explain your reasoning.

1. 346 + 721

Even or Odd	Explain your reasoning.

2. 4,690 × 141

Even or Odd	Explain your reasoning.

3. 1,462,891 × 745,629

Even or Odd	Explain your reasoning.

4. 425,922+ 32,481,064

Even or Odd	Explain your reasoning.

5. 32 + 45+ 67 + 91 +34 + 56

Even or Odd	Explain your reasoning.

Thursday's 5 Problems

Directions: Answer the below questions.

Thursday: Show your work on separate paper.

1. A pallet of toggle bolts weighs 833 kilograms. If a warehouse has 579 pallets, what is their total weight?

2. A baker had twenty-one boxes for donuts. He ended up making one hundred sixty-one donuts and splitting them evenly between the boxes. How many extra donuts did he end up with?

3. Mike drew a line that was $5\frac{1}{3}$ inches long. If he drew a second line that was $4\frac{5}{7}$ inches long, what is the difference between the length of the two lines?

4. $\frac{4}{9} \times 6 = ?$ Will the product be more or less than 6 ?

5. $2.01 \div 0.2 =$

Directions: Please submit your math answers here.
1.
2.
3.
4.
5.

Sprints 411A First Half

Directions: Divide

16.	10 ÷ 5 =	
17.	20 ÷ 5 =	
18.	40 ÷ 5 =	
19.	60 ÷ 5 =	
20.	35 ÷ 5 =	
21.	45 ÷ 5 =	
22.	30 ÷ 3 =	
23.	40 ÷ 4 =	
24.	50 ÷ 5 =	
25.	33 ÷ 3 =	
26.	36 ÷ 3 =	
27.	39 ÷ 3 =	
28.	40 ÷ 4 =	
29.	48 ÷ 4 =	
30.	52 ÷ 4 =	

Lesson 17: DIVISIBILITY TESTS FOR 3 AND 9 (from EngageNY)

Use the divisibility rules and examples 1-2 to help you answer exercises 1-5 all.

Discussion

- Divisibility rule for 2: *If and only if its unit digit is 0, 2, 4, 6, or 8.*
- Divisibility rule for 4: *If and only if its last two digits are a number divisible by 4.*
- Divisibility rule for 5: *If and only if its unit digit is 0 or 5.*
- Divisibility rule for 8: *If and only if its last three digits are a number divisible by 8.*
- Divisibility rule for 10: *If and only if its unit digit is 0.*
- Decimal numbers with fraction parts do not follow the divisibility tests.

- Divisibility rule for 3: *If the sum of the digits is divisible by 3, then the number is divisible by 3.*
- Divisibility rule for 9: *If the sum of the digits is divisible by 9, then the number is divisible by 9.*

Examples

Example 1

This example will show you how to apply the two new divisibility rules we just discussed.

Is 378 divisible by 3 or 9? Why or why not?

a. **What are the three digits in the number 378?**

3, 7, and 8

b. **What is the sum of the three digits?**

$3 + 7 + 8 = 18$*; the sum of the three digits is 18.*

c. **Is 18 divisible by 9?**

Yes.

d. **Is the entire number 378 divisible by 9? Why or why not?**

The number 378 is divisible by 9 because the sum of the digits is divisible by 9.

e. **Is the number 378 divisible by 3? Why or why not?**

Three is a factor of 378 because if 9 is a factor of 378, then 3 will also be a factor. OR

The number 378 is divisible by 3 because the sum of the digits is divisible by 3.

Example 2

Is $3,822$ divisible by 3 or 9? Why or why not?

The number $3,822$ is divisible by 3, but not by 9 because the sum of the digits is $3+8+2+2=15$, and 15 is divisible by 3, but not by 9.

Lesson 17: DIVISIBILITY TESTS FOR 3 AND 9 (from EngageNY)

Exercises

Write ALL the numbers that are factors of the given number. Explain your reasoning for your choices.

1. Is 2,838 divisible by
   3
   9
   4

Numbers that are factors	Explain your reasoning

2. Is 34,515 divisible by
   3
   9
   5

Numbers that are factors	Explain your reasoning

3. Is 10,534,341 divisible by
   3
   9
   2

Numbers that are factors	Explain your reasoning

4. Is 4,320 divisible by
   3
   9
   10

Numbers that are factors	Explain your reasoning

5. Is 6,240 divisible by
   3
   9
   8

Numbers that are factors	Explain your reasoning

Friday

Sprints 411A Second Half

Directions: Divide

1.	6 ÷ 2 =	
2.	8 ÷ 2 =	
3.	14 ÷ 2 =	
4.	20 ÷ 2 =	
5.	6 ÷ 3 =	
6.	9 ÷ 3 =	
7.	12 ÷ 3 =	
8.	18 ÷ 3 =	
9.	21 ÷ 3 =	
10.	27 ÷ 3 =	
11.	8 ÷ 4 =	
12.	16 ÷ 4 =	
13.	24 ÷ 4 =	
14.	28 ÷ 4 =	
15.	32 ÷ 4 =	

Lesson 18: LEAST COMMON MULTIPLE AND GREATEST COMMON FACTOR (from EngageNY)

Use the definitions and examples 1-2 to help you answer stations 1-2 all.

The Greatest Common Factor of two whole numbers a and b, written $\mathrm{GCF}(a, b)$, is the greatest whole number, which is a factor of both a and b.

The Least Common Multiple of two nonzero numbers a and b, written $\mathrm{LCM}(a, b)$, is the least whole number (larger than zero), which is a multiple of both a and b.

Example 1: Greatest Common Factor

Find the greatest common factor of 12 and 18.

- **Listing the factor pairs in order will help you not miss any common factors. Start with one times the number.**
- **Circle all factors that appear on both lists.**
- **Place a triangle around the greatest of these common factors.**

GCF $(12, 18)$ 6

12

1	12
2	6
3	4

18

1	18
2	9
3	6

Example 2: Least Common Multiple

Find the least common multiple of 12 and 18.

LCM (12, 18)

Write the first 10 multiples of 12.

12, 24, 36, 48, 60, 72, 84, 96, 108, 120

Write the first 10 multiples of 18.

18, 36, 54, 72, 90, 108, 126, 144, 162, 180

Circle the multiples that appear on both lists.

12, 24, (36) 48, 60, (72) 84, 96, (108) 120

18, (36) 54, (72) 90, (108) 126, 144, 162, 180

Put a rectangle around the least of these common multiples.

12, 24, (36) 48, 60, (72) 84, 96, (108) 120

18, (36) 54, (72) 90, (108) 126, 144, 162, 180

Lesson 18: LEAST COMMON MULTIPLE AND GREATEST COMMON FACTOR (from EngageNY)

Station 1: Factors and GCF

Use number 1 to help you answer 2-4 all.

1. GCF (45, 60)

Factors of 45	1, 3, 5, 9, 15, 45
Factors of 60	1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
Common Factors	1, 3, 5, 15
Greatest Common Factor	15

2. GCF (30, 50)

Factors of 30	
Factors of 50	
Common Factors	
Greatest Common Factor	

3. There are 18 girls and 24 boys who want to participate in a Trivia Challenge. If each team must have the same number of girls and boys, what is the greatest number of teams that can enter? How many boys and girls will be on each team?

Factors of 18	
Factors of 24	
Common Factors	
Greatest Common Factor	
There will be _____ teams, each having ____ girls and _____ boys.	

4. The Ski Club members are preparing identical welcome kits for the new skiers. They have 60 hand warmer packets and 48 foot warmer packets. What is the greatest number of kits they can prepare using all of the hand and foot warmer packets? How many hand warmer packets and foot warmer packets will be in each welcome kit?

Factors of 48	
Factors of 60	
Common Factors	
Greatest Common Factor	
There will be _____ welcome kits, each having ____ hand warmer packets and _____ foot warmer packets.	

Lesson 18: LEAST COMMON MULTIPLE AND GREATEST COMMON FACTOR (from EngageNY)

Station 2: Multiples and LCM

Use number 1 to help you answer 2-4 all.

1. LCM (4, 30)

Multiples of 4	4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60
Multiples of 30	30, 60
Least Common Multiple	60

2. LCM (9, 12)

Multiples of 9	
Multiples of 12	
Least Common Multiple	

3. Hot dogs come packed 10 in a package. Hot dog buns come packed 8 in a package. If we want one hot dog for each bun for a picnic, with none left over, what is the least amount of each we need to buy? How many packages of each item would we have to buy?

Multiples of 8	
Multiples of 10	
Least Common Multiple	
_____ packages of hot dogs = _____ hot dogs.	
_____ packages of buns = _____ buns.	

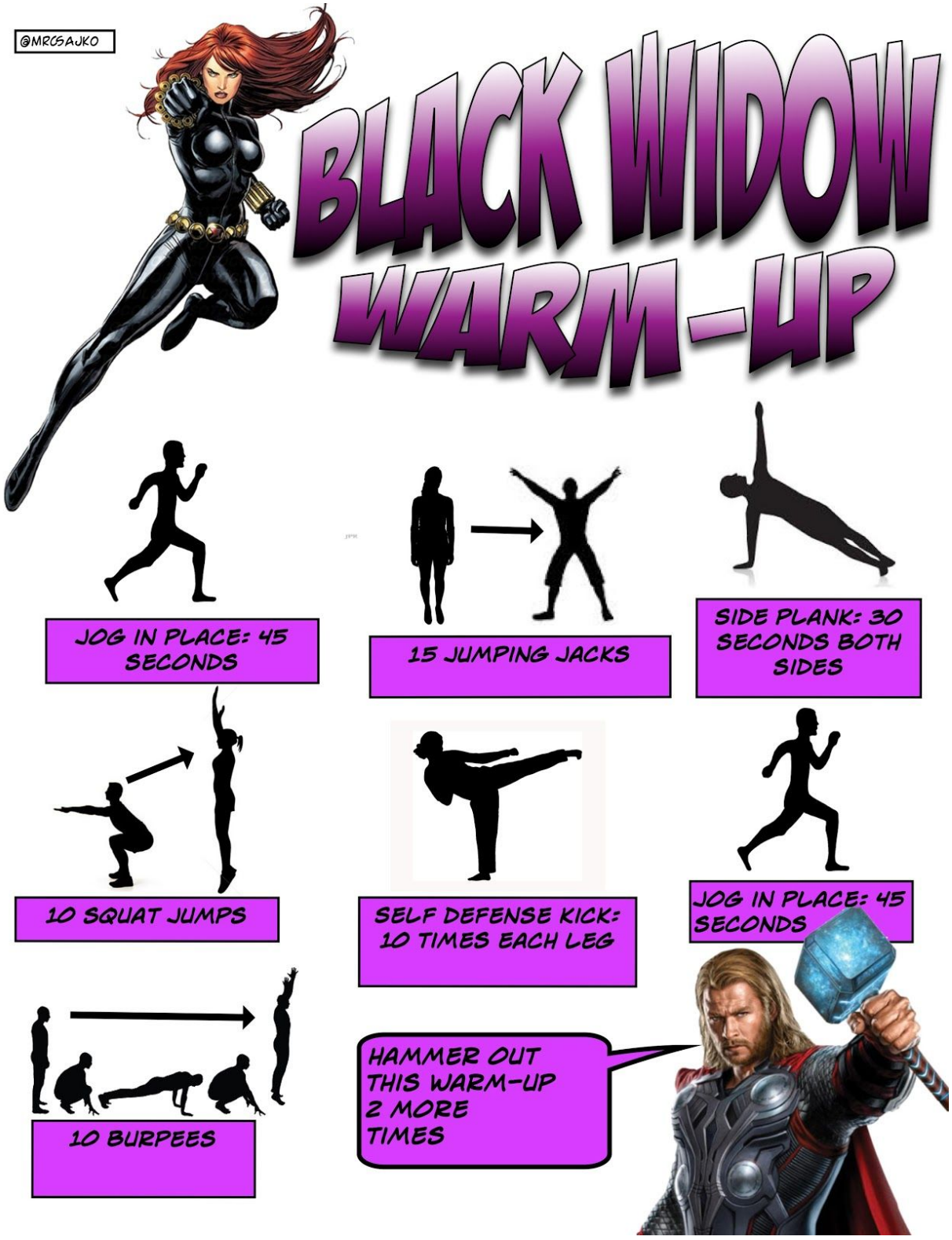
4. Starting at 6: 00a.m., a bus makes a stop at my street corner every 15 minutes. Also starting at 6: 00a.m., a taxi cab comes by every 12 minutes. What is the next time there will be a bus and a taxi at the corner at the same time?

Multiples of 12	
Multiples of 15	
Least Common Multiple	
Both a bus and taxi will arrive at the corner at _____, which is _____ minutes after 6:00am.	

BLACK WIDOW

WARM-UP

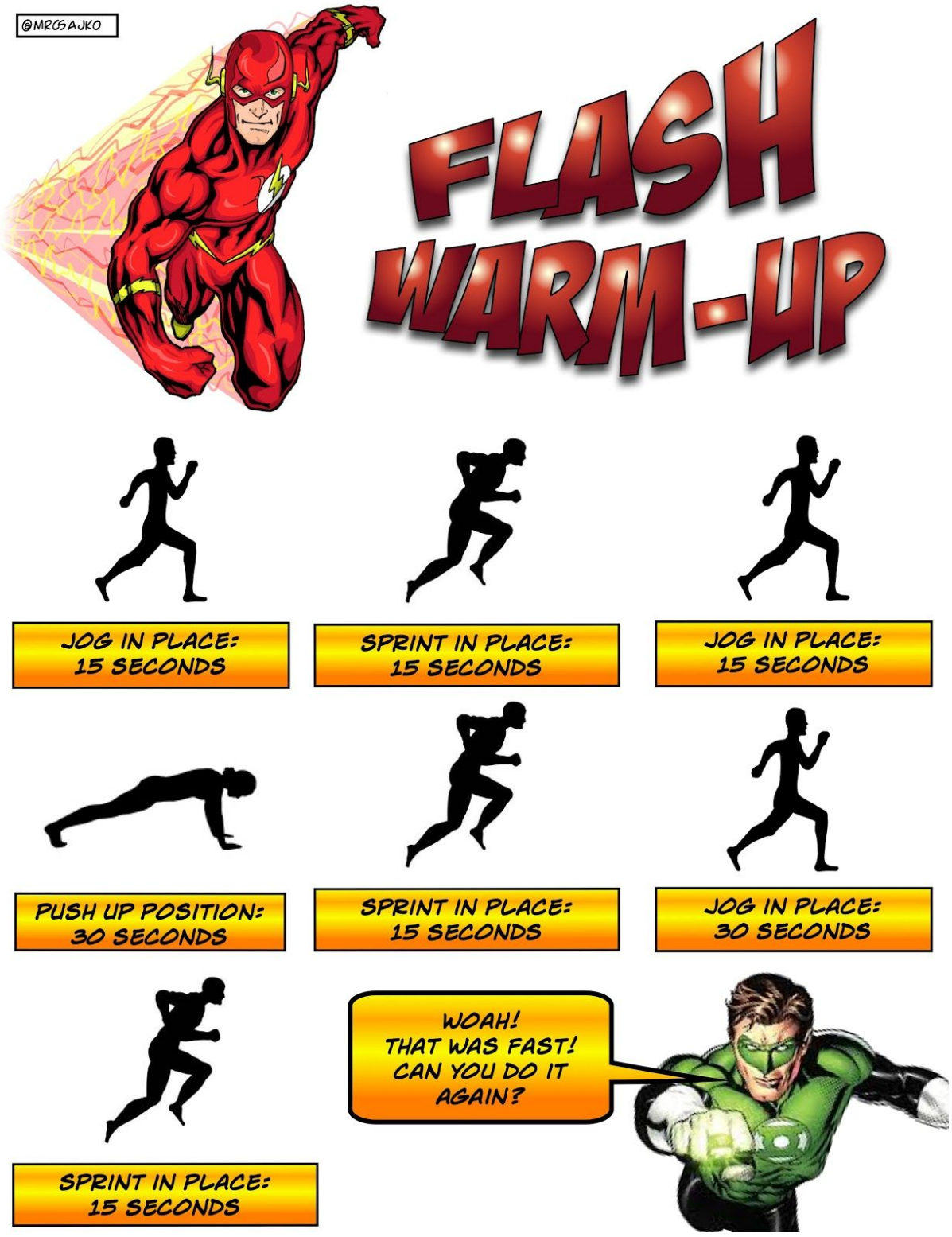
Complete three rounds of each exercise!



FLASH

WARM-UP

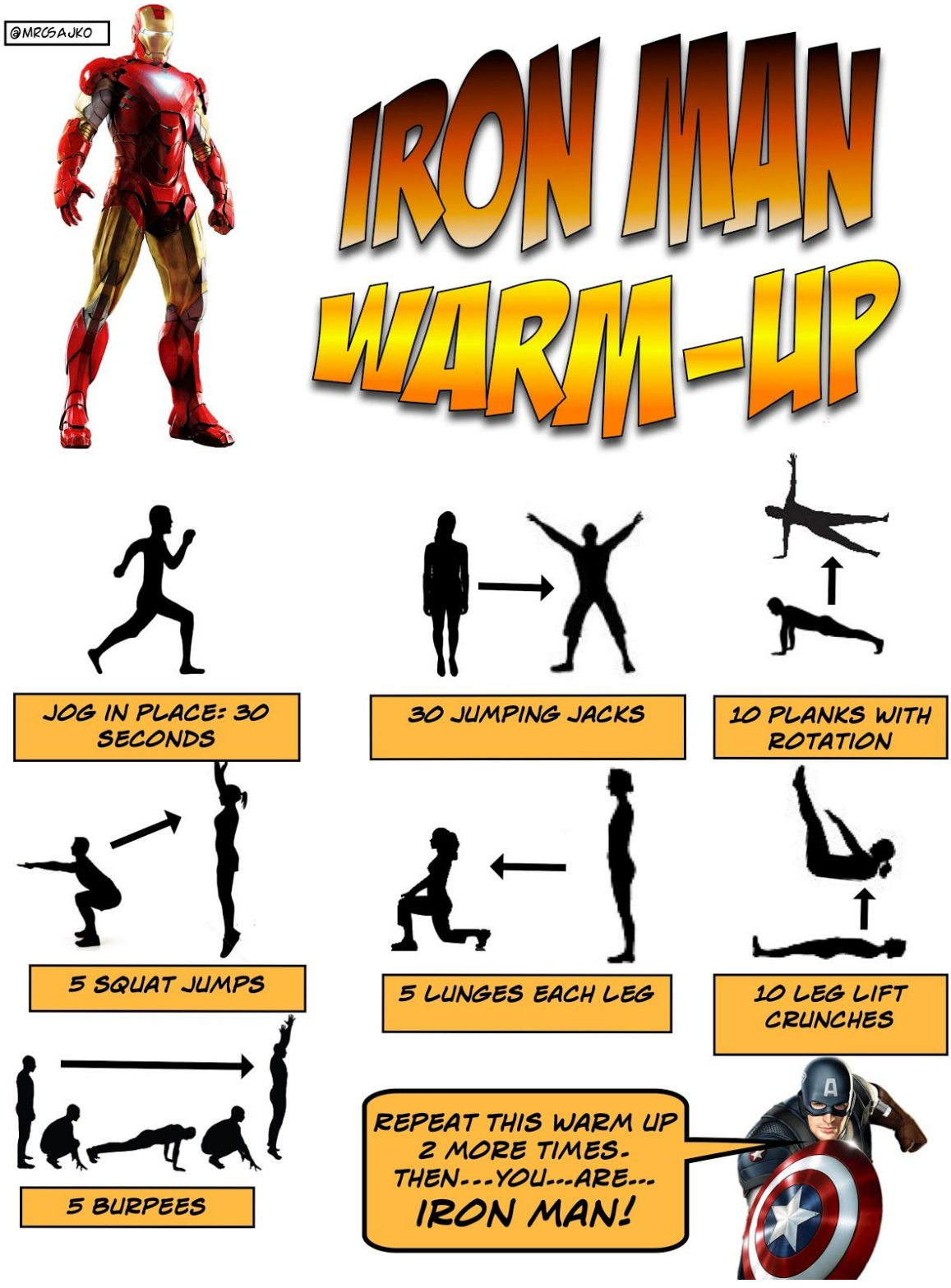
Complete three rounds of each exercise!

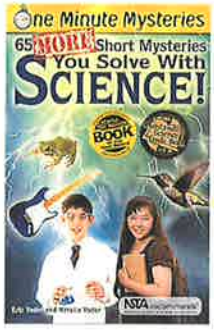


IRON MAN

WARM-UP

Complete three rounds of each exercise!





March 2020

Selected from: One Minute Mysteries: 65 MORE Short Mysteries You Solve With Science!

Soil Solution

Reese was helping her father clean up the leaves and twigs that had fallen over the winter. It was time to get the yard and garden in shape for spring. Later they would go to the garden store, but first they had to see what they would need.

At the side of the house where a rainspout emptied out, they noticed that the grass had died, leaving bare dirt.

"We're going to have a problem with erosion this summer if we don't do something about this," her father said. "Most of the rain we get is from those big thunderstorms, and the water runs off so fast that it'll wash away the soil if the grass isn't strong enough. The worst of it is, except for those big storms, many years it's so dry that we have water restrictions."

There was a spigot and hose next to the garden, but Reese remembered that the previous year there had been a ban against watering lawns or gardens. Their plants had not produced many vegetables.

"Maybe we can solve both problems at once," she said, as they walked down the steep bank to the garden.

"Do you mean we should extend the downspout to the garden? The storms would just wash away the garden soil. Wouldn't that make things worse?" her father asked?

"No, I have a better idea," Reese said.

"What's that?"