

# **Week 1**

# **Strength**

**NAME:** \_\_\_\_\_

# Day 1 Agenda

Topic	Activity
Warm-Up!	
English Language Arts	<ul style="list-style-type: none"><li>• Read letter from Frederick Douglass to Harriet Tubman</li><li>• Read a song about Harriet Tubman called "Stand Up"</li><li>• Respond to questions about the letter and song</li></ul>
Science	<ul style="list-style-type: none"><li>• Read about the different types of bridges and what is considered when designing them</li><li>• Answer questions about bridge designs</li><li>• Sketch a bridge that you believe would be strong</li></ul>
Mindfulness Moment!	
Math	<ul style="list-style-type: none"><li>• Read examples of how strong people adopt a growth mindset</li><li>• Complete a series of problems and exercises related to the growth mindset</li><li>• Create a poster or a 8"x11" staying strong using growth mindset flyer</li></ul>
Mindfulness Moment!	
Civics/Social Studies	<ul style="list-style-type: none"><li>• Read an article about the start of WWI</li><li>• Answer questions about the article</li></ul>

**Warm-up Activity:** Write a journal entry around the daily quote on strength.

“Strength grows in the moments when you think you can't go on but you keep going anyway.”

## Day 1: English Language Arts Strong Women

**What is this lesson about?:** Over the next three days, in honor of March being Women’s History Month, you will be reading about three women who showed strength, bravery, and courage during times of societal challenges and situations they could not control. Today, you will have the opportunity to learn about Harriet Tubman and how people view her actions and work during the civil war. You’ll reflect on Tubman’s actions and strength, and consider what strengths you bring to the table.

**Step 1:** Read the letter below.

In 1869, Sarah Hopkins Bradford published a biography called *Scenes in the Life of Harriet Tubman*. Harriet Tubman was an abolitionist who helped slaves escape through the Underground Railroad. She often worked with fellow abolitionist Frederick Douglass, a public speaker and author. When Harriet Tubman reached out to Frederick Douglass requesting he speak to her accomplishments and write a commendation letter to include in the biography, he responded with this letter. As you read, pay attention to how Frederick Douglass defines private and public accomplishments and how Douglass characterizes Tubman. (footnotes have been provided below for important vocabulary words)



Rochester, August 29, 1868

Dear Harriet:

I am glad to know that the story of your eventful life has been written by a kind lady, and that the same is soon to be published. You ask for what you do not need when you call upon me for a word of commendation.<sup>1</sup> I need such words from you far more than you can need them from me, especially where your superior labors and devotion to the cause of the lately enslaved of our land are known as I know them. The difference between us is very marked.<sup>2</sup> Most that I have done and suffered in the service of our cause has been in public, and I have received much encouragement at every step of the way. You, on the other hand, have labored in a private way. I have wrought<sup>3</sup> in the day - you in the night. I have had the applause of the

crowd and the satisfaction that comes of being approved by the multitude<sup>4</sup>, while the most that you have done has been witnessed by a few trembling, scarred, and foot-sore bondmen<sup>5</sup> and women, whom you have led out of the house of bondage, and whose heartfelt, "God bless you," has been your only reward. The midnight sky and the silent stars have been the witnesses of your devotion to freedom and of your heroism. Excepting John Brown<sup>6</sup> - of sacred memory - I know of no one who has willingly encountered more perils and hardships to serve our enslaved people than you have. Much that you have done would seem improbable to those who do not know you as I know you. It is to me a great pleasure and a great privilege to bear testimony for your character and your works, and to say to those to whom you may come, that I regard you in every way truthful and trustworthy.

Your friend,  
*Frederick Douglass*

#### Footnotes

1. Commendation (noun): praise
2. Marked (adjective): noticeable, visible, or evident
3. Wrought (verb, past tense): worked
4. Multitude (noun): a great number of people
5. A "Bondman" is an old term for "slave."
6. John Brown was an American abolitionist who Harriet Tubman was working with to start a liberation movement among enslaved African Americans in Virginia. The plan failed and Brown was hanged after being found guilty of treason, the murder of five men, and instigating a slave revolt.

#### **Step 2:** Answer the following questions.

Who wrote this letter, to whom was it written, and why was it written?

This letter was written from Frederick Douglass to Harriet Tubman. He wrote the letter in response to a request from Harriet asking him to write an opening/commendation for the new book coming out about her.

In the third sentence of the letter, the author states, "I need such words from you far more than you can need them from me, especially where your superior labors and devotion to the cause of the lately enslaved of our land are known as I know them." What is the writer saying in this sentence?

Douglass is saying that Tubman is more worthy of commendations than he is. He is saying that she has done more for the abolitionist cause than he has, such that it is he who looks up to her. He is telling her that she doesn't need his recognition, being recognized by her is far more meaningful.

The author uses this sentence: "The difference between us is very *marked*." This term means noticeable, visible, or evident. What does Douglass say are the marked differences between his and Tubman's actions and their rewards? Use the graph below to organize your answer.

	<b>Harriet Tubman</b>	<b>Frederick Douglass</b>
<b>Actions</b> ( <i>what type of work did this person do for the abolitionist movement?</i> )	She secretly moved people from the south to the north to freedom. She risked her life for others.	His work was more public. He wrote articles and gave speeches against slavery.
<b>Rewards</b> ( <i>How was this person rewarded or recognized for their efforts?</i> )	Her recognition was minimal. The people she helped told her "God bless you."	He was recognized publicly with awards and such.

Many people would describe Harriet Tubman as a strong person. Do you think Fredrick Douglass would agree with that statement? Do you agree? If so, what makes Tubman a strong person?

Douglass would have said Tubman was a strong person because she risked her life and showed bravery in helping others into freedom.

Harriet Tubman asked Frederick Douglass for a commendation letter to include in her biography, and this is the letter he wrote back to her. Who would you ask to write a letter of support for you?

What do you think that person would write about your strengths and accomplishments?

**Step 3:** Read the lyrics to the following song.

In November 2019, a movie was released about Harriet Tubman. Actress and Singer Cynthia Erivo plays Tubman in the movie and was nominated for an Oscar award for her performance. She also wrote and performed a song, "*Stand Up*", for the movie, which was nominated for an Oscar. Below are the lyrics to the song.

I been walkin' with my face turned to the sun  
Weight on my shoulders, bullet in my gun  
Oh, I got eyes in the back of my head just in case I have to run  
I do what I can when I can while I can for my people  
While the clouds roll back and the stars fill the night

That's when I'm gonna stand up  
Take my people with me  
Together we are going to a brand new home  
Far across the river  
Can you hear freedom calling?  
Calling me to answer  
Gonna keep on keepin' on  
I can feel it in my bones

Early in the mornin' before the sun begins to shine  
Gonna start movin' towards that separating line  
I'm wading through muddy waters, you know I got a made-up mind  
And I don't mind if I lose any blood on the way to salvation  
**And I'll fight with the strength that I got until I die**

So I'm gonna stand up  
Take my people with me  
Together we are going to a brand new home  
Far across the river  
Can you hear freedom calling?  
Calling me to answer  
Gonna keep on keepin' on

And I know what's around the bend  
Might be hard to face 'cause I'm alone  
And I just might fail, but Lord knows I tried  
Sure as stars fill up the sky

Stand up  
Take my people with me  
Together we are going to a brand new home  
Far across the river  
Can you hear freedom calling?  
Calling me to answer  
Gonna keep on keepin' on

I'm gonna stand up  
Take my people with me  
Together we are going to a brand new home  
Far across the river  
Do you hear freedom calling?  
Calling me to answer  
Gonna keep on keepin' on

I'm gonna stand up  
Take my people with me  
Together we are going to a brand new home  
Far across the river  
I hear freedom calling?  
Calling me to answer  
Gonna keep on keepin' on  
I can feel it in my bones  
**I go to prepare a place for you**

**Step 4:** Answer the following questions

Who is the narrator of this song (from whose point of view is the song written)?

The song is written in the point of view of Harriet Tubman, as if she was the person singing it.

What is the tone of this song? How does this song make you feel?

the tone of the song is positive and inspiring.

What do you think the songwriter wants you to feel after listening to or reading these lyrics?

The songwriter probably wants us listeners to feel inspired by Harriet Tubman's bravery and heroism. The songwriter likely wants us to feel strengthened to also be brave and fight for what we believe is right. To stay positive and focused on a goal.

At one point, the lyrics say “ **And I'll fight with the strength that I got until I die.**” List 3 examples that the songwriter includes to show the strength and bravery of Harriet Tubman?

1. She walks in the early morning before the sun is up, in the secret of night, so that she is undetected.
2. She carries a gun in case she has to protect herself from people who are trying to capture her
3. She says she may fail, but she's not going to give up.

Harriet Tubman was strong for other people. She inspired others to be strong and brave. How have you been strong for others or showed people to be brave?

The song ends with the line “I go to prepare a place for you,” which are the final words Tubman uttered when she died in 1913. Why do you think these words are important?

What did Tubman mean when she said those last words?

During slavery, Tubman traveled to the south and helped people get to the north through the underground railroad. In doing so, she was bringing people to a safe place. She was helping them create a better future. In her last words, Tubman is saying that she will do the same even after her death. She is saying she will go to heaven and prepare that place for all of her people to join her. In the ultimate place of safety, she will be waiting for them to join her.

If you could choose an artist to write and perform a song about you, who would you choose?

**Step 5:** Share your responses with a partner

With a classmate, discuss your answers to the following questions.

1. What did you both notice about the differences in the actions Tubman and Douglass took during the abolitionist movement?
2. Did the song make you feel the same way?
3. How do you both think Harriet Tubman showed her strength?
4. Who did you both want to write your commendation letter and song about you?

**Student Feedback:**

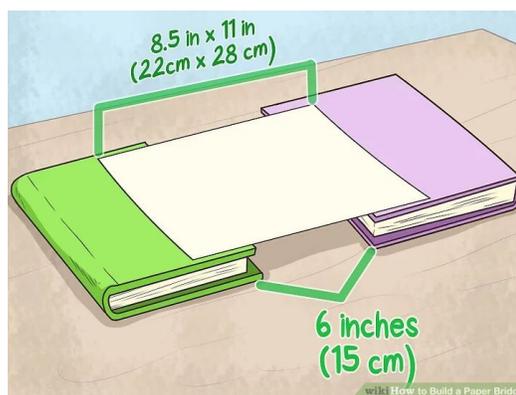
Circle the emojis that best represents how this activity made you feel.	
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## Day 1: Science Bridges

**What is this lesson about?:** Today you will begin to explore the different types of bridges that exist in today's world. You will hypothesize about how to make bridges stronger, which we will revisit in lessons later in the week.

**Step 1:** Consider the following photos and make some predictions.

The image shows a piece of paper sitting on top of two books. What do you think would happen if you put a pencil in the middle of the piece of paper?



What do you think would happen if you placed two pencils on the piece of paper? Would something different happen than before?

What if you placed 5 pennies on the piece of paper?

Is there anything you could do to the piece of paper to make it a stronger bridge, so that more weight could be placed on it, without it collapsing?

fold the paper, tape it down, layer the paper

# TYPES OF BRIDGES

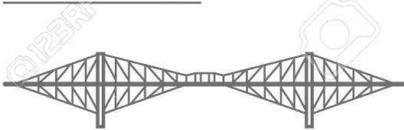
arch bridge



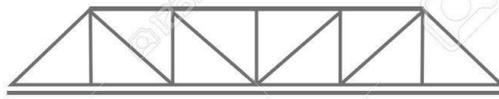
tied arch bridge



cantilever bridge



truss bridge



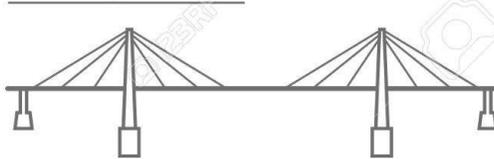
beam bridge



suspension bridge



cable-stayed bridge



Which type of bridge have you seen before?

Which of these bridges might be easier to build?

Which of these might be the strongest bridges? What makes you think so?

**Step 2:** Read about the different factors engineers consider when building a bridge.

### **Tension and Compression: Two Forces Every Bridge Knows Well**

**Tension:** What happens to a rope during a game of tug-of-war? Correct, it undergoes tension from the two sweaty opposing teams pulling on it. This force also acts on bridge structures, resulting in tensional stress.

**Compression:** What happens when you push down on a spring and collapse it? That's right, you compress it, and by squishing it, you shorten its length. Compressional stress, therefore, is the opposite of tensional stress.

Compression and tension are present in all bridges, and as illustrated, they are both capable of damaging part of the bridge as varying load weights and other forces act on the structure. It's the job of the bridge design to handle these forces without buckling or snapping.

**Buckling** occurs when compression overcomes an object's ability to endure that force. **Snapping** is what happens when tension surpasses an object's ability to handle the lengthening force.

How would you describe what tension is to a 5-year-old?

Example: Tension is when two forces are pulling on an object

Provide an example of when something snaps as a result of too much force?

when a pencil breaks, when a necklace chain breaks after being pulled...

If a bridge is able to withstand tension and compression of its traffic load, is the bridge strong or weak?

Strong

## **Building Bridges**

When building a bridge, engineers must consider a number of factors. Different bridge styles distribute stresses in different ways. Engineers must take the length and width of the bridge, local environmental conditions and building materials into account to decide what type of bridge to build. To know what kind of bridge is realistic for what environment, knowing about the 6 different types of bridges is important. Using the wrong type can result in disasters affecting travel and safety.

### **Arch as Simple Bridge**

Arch bridges use arches as the main structural component. The arches put the material that make up the bridge into compression. Most arch bridges are made of steel or concrete, which are good for compression. Arch bridges include those where the arch is underneath the bridge and above it. The Hell Gate Bridge in New York is an example of an arch bridge.

### **Basic Beam Bridge Construction**

Beam bridges are made of a flat piece, or beam, laid across two or more supports. In the beam – which is horizontal - part of the material is in tension and part of the material is in compression. Beam bridges work much like a log overlapping the two sides of a ravine. An example of a beam bridge is the Lake Pontchartrain Causeway in southern Louisiana.

### **Cable-Stayed Bridge Structures**

Cable-stayed bridges are one of two bridge types preferred for longer bridges (the other being suspension bridges). Columns are erected as support with cables to support the deck of the bridge. The design is similar to a suspension bridge but instead of the deck being curved, it is flat. In New York City, the East 153rd Street Bridge is a cable-stayed bridge.

### **Cantilevered Bridge Types**

Kinds of bridges also include cantilevered bridges which are built around horizontal structures supported on only one end. Some cantilevered bridges are very similar in appearance to arch bridges; however, they are supported by diagonal bracing rather than vertical bracing. These types of cantilevered bridges are known as spandrel braced. The other type of cantilevered bridge is the cantilever through truss formation, where trusses are either above the bridge or both above and below. An example of a cantilevered bridge is the Queensboro Bridge.

### **Suspension Design Bridges**

A suspension bridge is made of a platform that is held up by wires or ropes strung from the tops of piers. More recent suspension bridges use steel plates and steel cables that put material into tension. Steel is used for suspension bridges, because steel is strong in tension and concrete is not. With only the supports in the ground, suspension bridges respond to wind and traffic. Some of the most famous examples of suspension bridges are Golden Gate Bridge in San Francisco, Akashi Kaikyō Bridge in Japan and Brooklyn Bridge in New York City.

## Truss Bridge

A truss bridge has a structure composed of elements connected to form triangles. Usually made of steel bars, truss bridges use a combination of compression and tension forces. The truss bridge is a simple bridge design that includes most covered bridges. T New York's Kosciuszko Bridge is a truss bridge example.

### Step 3: Answer the following questions.

Why are different bridge designs used?

Different types of bridges are stronger or weaker for different purposes. Some bridges are best to go across water, some bridges are best when they have to carry heavy loads, and some are best for longer distances.

What bridge design is best? Why? Are different bridge designs better for different situations?

Label the type of bridge in the pictures below.



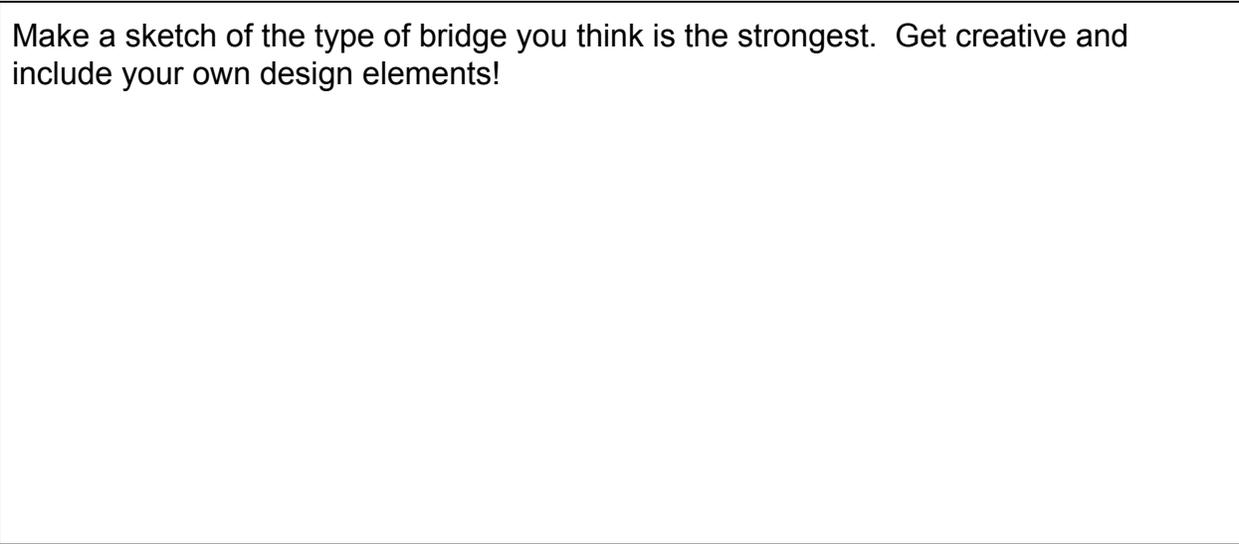
Type of bridge Cable-Stayed

Type of bridge Truss

Type of bridge Beam

**Step 4:** *Sketch the type of bridge you think is the strongest*

Make a sketch of the type of bridge you think is the strongest. Get creative and include your own design elements!



**Student Feedback:**

Circle the emojis that best represents how this activity made you feel.



# Mindfulness Moment!

## The Five Senses Worksheet

Use this Five Senses Exercise as a simple, versatile way to evoke a mindful state wherever you are. The goal of this exercise is to practice being aware in the present moment throughout the day whenever formal mindfulness practice such as meditation or a body scan might not be practical.

It is simply a guide to help you or your client become attuned to the **five senses**.

### Notice five things that you can see.

Cast your eyes around and bring your attention to five things you might not normally notice. Choose something you wouldn't ordinarily pay attention to, like a shadow or a small crack in the concrete.



### Notice four things that you can feel.

Bring your awareness to four things you are currently feeling, like the texture of your pants, the feeling of the breeze on your skin, or the smooth surface of a table you are resting your hands on.



### Notice three things that you can hear.

Try to tune in to the sounds of your surroundings. What can you hear in the background? This might be a bird singing, the low hum of the refrigerator, or the faint sounds of traffic from a nearby road.



### Notice two things that you can smell.

Tune your senses into smells you might usually gloss over, whether they're pleasant or unpleasant. Perhaps the breeze is carrying the scent of pine trees if you're outside, or the smell of cafe from the sidewalk.



### Notice one thing that you can taste.

Focus on one thing you can taste right now, in this moment. You can take a sip of coffee, savor some chocolate, eat something, notice the current taste in your mouth, or even open it to search the air for a taste.

## Day 1: Civics/Social Studies World War I

**What is this lesson about?:** In this lesson, you will read an article about the start of WWI. You will use this article to answer a question about whether or not you think this war could have been prevented. Then, you will write a letter from the perspective of a WWI soldier.

**Step 1:** Read the following article.

### **Time Machine (1914): Assassination of Archduke Ferdinand Starts WWI**

On June 28, the Archduke Franz Ferdinand of Austria-Hungary was assassinated. He was traveling by car through the streets of Sarajevo when a young man named Gabriel Prinzip shot and killed him.

#### **Europe Hurtles Toward War**

The assassination created a political crisis, and, as a result, war is now breaking out across Europe.

Prinzip was part of a group of Serbians fighting for greater independence from Austria-Hungary. Some Serbians see Austria-Hungary as an oppressive foreign power and believe that they deserve more political freedom. For Prinzip, killing the archduke was a political act meant to achieve freedom for Serbia.

The government of Austria-Hungary, however, was enraged by the assassination, and 25 days later, it sent a note of demands to the Serbian government. The note accused Serbia of helping Prinzip carry out the assassination.

#### **Meet These Demands Now!**

Austria-Hungary presented the Serbian government with several demands. The government had to publicly oppose the anti-Austria-Hungary movement and make it against the law to say or write things against Austria-Hungary.

Serbia was given just 48 hours to meet these demands. If Serbia was unwilling, Austria-Hungary would declare war.

Such a war could draw in all of Europe given the continent's delicate balance of power. The countries of Europe have entered into a complicated set of agreements. Germany has promised to defend Austria-Hungary, and Russia has pledged to protect Serbia. So, as Austria-Hungary and Serbia prepared to fight following the assassination of the archduke, so too did Germany and Russia. When Germany began gearing up for war, its rivals France and Great Britain did as well.

## **Serbia Pulls Russia In**

What started as a dispute over Serbian independence is now set to pull all of Europe into war. It is as if Europe had been resting on a pile of explosives, and Prinzlip lit a match.

On the night of July 23, a few weeks after the assassination, government workers in Russia received a message from Serbia.

"Help!" it said.

The Russians talked about the message for four hours. Russia was Serbia's **ally**, but taking their side in the conflict with Austria-Hungary meant risking war with Germany. The Russians reached a secret decision at 7 o'clock in the evening and dashed off in their automobiles to their various offices, each doing his part to prepare for what was coming.

## **Armies Move Toward Battle**

Meanwhile, the armies of Europe were already getting ready to fight.

Serbia's 48 hours were up on July 26 at 6 in the evening. By that time, the Russian army was moving toward Germany, and the German army was moving toward Russia, and in a dozen other different directions.

Prinzlip's bullet set all that in motion. It ignited the explosives under Europe, and the fire about to break loose will probably kill a million men. This war may create more destruction than anything else that has ever happened to human beings.

## **An Assassin's Screed**

Did Prinzlip know what he was doing when he pulled the trigger? We cannot know for sure. According to the Serbian government, following the assassination, Prinzlip said:

"I was not influenced by any other person or persons. The reading of anarchist literature made me believe that there could be nothing finer in the world than to be an assassin. When in Belgrade I read that the Archduke was going to Serajevo, and so I bought a revolver and went there."

## **Was War Unavoidable?**

What he said or thought matters little now, though. Europe is not fighting because Prinzlip is a murderer. The real reasons for the war have to do with the long and ancient quarrel for "a place in the sun," a place for each European nation to put its feet in the crowded land. This quarrel has suddenly been turned from a contest of words and into a war of nations.

Perhaps war was unavoidable. Some jolt would have set off the European explosion, at some time. It just happened that Prinzlip's bullet did it.

**Step 2:** Answer the questions below about the article.

Do you think the outbreak of World War I could have been avoided if Archduke Ferdinand had not been assassinated? Why or why not?

Maybe. If the assassination didn't happen the war wouldn't have started when it did because Austria-Hungary wouldn't have reacted the way it did. But many of Europe's countries were fighting over land and trying to get more land, so it likely would have begun at some point.

The article mentions that Russia was Serbia's "ally." What does it mean to be an ally? How might Russia be expected to act if it is Serbia's ally?

Being an ally is like being someone's friend; you support the person and back them up. If Russia was Serbia's ally, they would be expected to back up Serbia in conflicts and take Serbia's side.

How does creating an alliance make a country stronger?

Creating an alliance makes countries stronger because countries are agreeing to fight with each other. The power of two countries together is stronger than one country alone.

Do you have any alliances or friendships that make you stronger? How do they make you stronger?

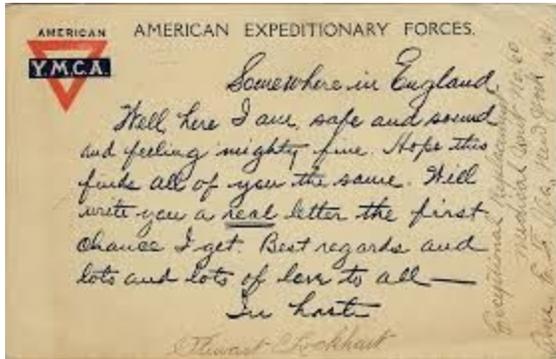
The article states "The real reasons for the war have to do with the long and ancient quarrel for "a place in the sun," a place for each European nation to put its feet in the crowded land." What do you think this means? What is it that the European countries wanted?

European countries wanted to grow their power by conquering more land and territory.

"Imperialism" is when a country wants to expand its power and influence through diplomacy or military actions. Do you think European countries had goals of imperialism during the time of WWI? Why?

Yes, they were all trying to grow their power and strength and conquer more land.

**Step 3:** Read this primary source letter from a soldier in WWI.



Somewhere in England. Well here I am, safe and sound and feeling mighty fine. Hope this finds all of you the same. Will write you a real letter the first chance I get. But regards and lots and lots of love to all-

What is the tone of this letter? Is it upbeat/happy? Or is it sad/scary?

the letter is upbeat and hopeful

Why do you think soldiers had to show strength in the letters they wrote home to their families?

They wanted to be strong for their families. They knew their families were worried and scared, and they didn't want to add to those fears and concerns, so soldiers wrote home with positive letters

**Step 4:** Write your own letter.

Imagine you are a soldier stationed in England during WWI. Write a letter to your family and give them the strength they need to get through this tough time.

## Student Feedback:

Circle the emojis that best represents how this activity made you feel.



## Creative Activities: Google Doodle

This year's Google Doodle theme is to show kindness by...Design your own Google Logo and participate in a school-wide contest. See some examples below.

Draw Your Art Here:

# Day 2 Agenda

Topic	Activity
Warm-Up!	
English Language Arts	<ul style="list-style-type: none"><li>• Read a short bio about Frances Harper as well as a short speech she gave</li><li>• Respond to questions about the readings</li><li>• Prepare a short story to share as a speech</li></ul>
Science	<ul style="list-style-type: none"><li>• Design your own bridge and test its strength</li></ul>
Mindfulness Moment!	
Math	<ul style="list-style-type: none"><li>• Understanding the difference between increase or decrease and percentage increase and decrease</li></ul>
Mindfulness Moment!	
Civics/Social Studies	<ul style="list-style-type: none"><li>• Read an article about the aftermath of WWI in Europe</li><li>• Answer questions about the article</li></ul>

**Warm-up Activity:** Write a journal entry around the daily quote on strength.

## Day 2: English Language Arts Strong Women

**What is this lesson about?:** Today you will continue our series on strong women, in line with Women’s History Month. You will learn about Frances Harper, a 19th-century black woman activist who struggled against segregation, you will learn about her work to encourage others to stand up to segregation, and you will analyze part of a speech she gave. You will then have an opportunity to write a speech to encourage people to take action around an issue you care about.

**Step 1:** Read the following text.

Born free in Baltimore in 1824, Frances Watkins taught at Wilberforce University, lectured for the Maine Anti-Slavery society before the Civil War and collaborated extensively with white suffragists and abolitionists. She married Fenton Harper in 1860 and, until her husband died in 1864, attempted to run a small farm in Ohio. His death left her with a young daughter and very few financial resources. She began a new lecture tour in the South, addressing audiences of freed slaves, and continued to speak at woman suffrage conventions, where her audience was primarily white. Already the best-known and loved African American poet of her time, Harper also began writing novels in 1869.

Harper’s first novel, *Minnie’s Sacrifice*, tells the story of a young woman from a wealthy family who leaves home to teach the children of former slaves. The heroine, Minnie, gets lynched by the Ku Klux Klan, sacrificing her life for her people. While Harper wrote this novel, she was teaching in the South and often threatened by former slave traders, “rebels” and the Klan. Although Harper, like Minnie, was in grave danger, she wrote letters to Northern friends repeatedly reassuring them that she was not afraid.

Like Rosa Parks who followed her, Harper rarely seemed afraid. In an April 23, 1858, letter she wrote to the *Liberator*, an anti-slavery newspaper, Harper described her reaction to segregation on public transportation:

I have been insulted on several railroad cars. The other day, in attempting to ride in one of the city cars, after I had entered, the conductor came to me, and wanted me to go out on the platform. Now, was not that brave and noble? As a matter of course, I did not. Some one interfered, and asked or requested that I might be permitted to sit in a corner. I did not move, but kept the same seat. When I was about to leave, he refused my money, and I threw it down on the car floor, and got out, after I had ridden as far as I wished. Such impudence!

**Step 2:** Answer the following questions

Below are two inferences from the text. Circle one of the inferences. Then cite two lines from the text that support that inference.

Inference	Frances Harper was a strong individual who fought for what she believed in.
	After the Civil War African Americans faced prejudice and discrimination but showed great perseverance.

Line 1:

Inference 1: “Although Harper, like Minnie, was in grave danger, she wrote letters to Northern friends repeatedly reassuring them that she was not afraid.”

Inference 2: “I have been insulted on several railroad cars...I did not move, but kept the same seat.”

Line 2:

Inference 1: “When I was about to leave, he refused my money, and I threw it down on the car floor, and got out, after I had ridden as far as I wished.”

Inference 2: “Like Rosa Parks who followed her, Harper rarely seemed afraid”

The passage notes that although Harper “was in grave danger, she wrote letters to Northern friends repeatedly reassuring them that she was not afraid.” Why do you think Harper did this?

She did this to keep people’s hopes up and to help them keep staying positive. She wanted to show others how to be strong and she led by example. She didn’t want people to worry about her because they already had enough to worry about.

In one of her poems, Harper writes:

*Let me make the songs for the weary,  
Amid life’s fever and fret,  
Till hearts shall relax their tension,  
And careworn brows forget.*

What is the message of this poem stanza?

She wants to write songs and poetry for the people who are worried during troubling times. She wants to provide them with songs and stories that will relax them and take away their concerns so that they feel no tension.

How is the message of this poem similar to the message of the letters she wrote to friends reassuring them that she was not afraid?

This makes sense given what we know about her writing letters to people that were very positive, even when she was facing threats to her life. In both cases (the letters and the poem) she want to reassure people.

Do you think Frances Harper was a strong woman? Why or why not?

What part of her life story do you identify or relate to most? How are you similar to Frances Harper?

**Step 3:** Read the following text.

*Excerpt from “We Are All Bound up Together: Proceedings of the Eleventh Women’s Rights Convention,” May 1866, pages 45-48. Below is an excerpt from Frances Harper’s speech at a women’s convention.*

Frances Watkins Harper — “You white women speak here of rights. I speak of wrongs. I, as a colored woman, have had in this country an education which has made me feel as if I were in the situation of Ishmael, my hand against every man, and every man’s hand against me. Let me go to-morrow morning and take my seat in one of your street cars — I do not know what they will do it in New York, but they will in Philadelphia — and the conductor will put up his hand and stop the car rather than let me ride.”

A Lady [from the audience] — “They will not do that here.”

Mrs. Harper — “They do in Philadelphia. Going from Washington to Baltimore this Spring, they put me in the smoking car.”

Loud Voices [from the audience] — “Shame.”

Mrs. Harper — “Aye, in the capital of the nation, where the black man consecrated himself to the nation’s defense, faithful when the white man was faithless, they put me in the smoking car! They did it once; but the next time they tried it, they failed; for I

would not go in. I felt the fight in me; but I don't want to have to fight all the time. To-day I am puzzled where to make my home. I would like to make it in Philadelphia, near my own friends and relations, but if I want to ride in the streets of Philadelphia, they send me to ride on the platform with the driver."

Cries [from the audience] — "Shame."

Mrs. Harper — "Have women nothing to do with this? Not long since, a colored woman took her seat in an Eleventh Street car in Philadelphia, and the conductor stopped the car, and told the rest of the passengers to get out, and left the car with her in it alone, when they took it back to the station. One day I took my seat in a car, and the conductor came to me and told me to take another seat. I just screamed "murder." The man said if I was black I ought to behave myself. I knew that if he was white he was not behaving himself. Are there not wrongs to be righted?"

**Step 4:** Answer the following questions.

According to Harper, black women had to endure social "wrongs" as well as demand "rights." What does her streetcar story tell us about the way white men and women saw black women?

Her story tells us that black women were viewed as "less than" by white people. That black women were not seen as being deserving and were treated poorly. It also shows us that when black women stood up for themselves, they were viewed as behaving badly, however, it is unlikely that the same behavior, when carried out by a white person, would have been viewed as "bad behavior."

Harper says "I felt the fight in me; but I don't want to have to fight all the time. Today I am puzzled where to make my home." What is Harper implying here? The way she is being treated is preventing her from doing what?

She wants to settle down and build a family, a place to live, but she doesn't know where to do that because she doesn't want to have to struggle each and every day to be treated properly. The treatment of black people is preventing her from settling down.

Why does the audience cry out, "Shame," while Harper speaks?

They are communicating to her that the people she is talking about (the people on the streetcars) did the wrong thing... that their behavior was shameful. The audience is showing their disgust and communicating that they believe Harper should have been treated better.

Who do you think the audience believes should be ashamed?

The people on the streetcar.

What do you think Harper wanted to accomplish by giving this speech?

She wanted to point out the “wrongs” that she deals with each day. She wanted to share her reality so that others could understand what African Americans were going through everyday. She wanted to encourage people to stand up against this intolerance and stand up against segregation.

**Step 4:** Prepare a short story to share as a speech.

Frances Harper shared personal experiences to shed light on injustices and encourage people to take action against wrongdoings. Each of us has personal experiences we can share to help others see why they should act in different or more positive ways. Think about something you have experienced (a time when somebody treated you wrongly or you witnessed another person being treated poorly) and write a short speech using that story to inspire people to take action. *(use the below outline when preparing your speech)*

### **My Speech to Inspire Action**

**Today I want to share a story with you...**

*(write your experience here-- think about how old you were, who was involved, what happened)*

**After this, I learned something...**

*(Write the lesson you learned from this experience. What is the message you want listeners to take away after hearing your story?)*

**Here's what I am asking of you....**

*(Make a plea to your audience, ask them to do something, tell them how you want them to act in similar situations to your story)*

**Student Feedback:**

Circle the emojis that best represents how this activity made you feel.	
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## Day 2: Science Bridges

**What is this lesson about?:** Today you will practice building your own bridge and test the strength of the bridge. You will be asked to incorporate concepts you learned previously about bridge designs in order to make the best possible bridge.

**Step 1:** Consider the following photos and make a prediction.

Think back to yesterday and the image of the piece of paper on the textbooks... Consider the image to the right.

Do you think folding the paper like this would make the paper bridge stronger? Why or why not?

**Step 2:** Design a bridge!

Using only two pieces of paper, you will design two different bridges. Construct the bridges by manipulating the pieces of paper in any way you want. You will then place the paper bridge between two objects (for example, two books) and test the strength of your bridge designs.

Design 1

Draw a sketch of how you manipulated the paper and shaped your bridge.

Design 2

Draw a sketch of how you manipulated the paper and shaped your bridge.

Before you go on, make a hypothesis: which of your bridge designs do you think will be the strongest?

### Step 3: Test the strength of your bridges

To test the strength of your designs, you will place objects on the bridges to see which one holds the weight better. Remember to place your bridge across two objects to create an actual bridge. You can use any object of your choosing to test your bridges' strength (for example, a pencil, eraser, coin, etc.).

### Step 4: Reflection

Was your design 1 or 2 stronger?

Did you select the correct bridge in your hypothesis of which design would be stronger? Why or Why not?

In what way, were your bridges successful?

What would you have done differently in designing your bridges?

### Student Feedback:

Circle the emojis that best represents how this activity made you feel.



## Mindfulness Moment!

STOP is an acronym that stands for:

**S: Stop.** Whatever you're doing, just pause momentarily.

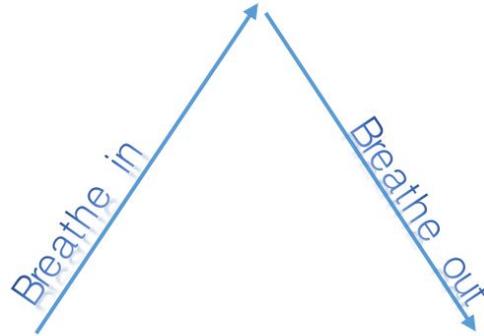
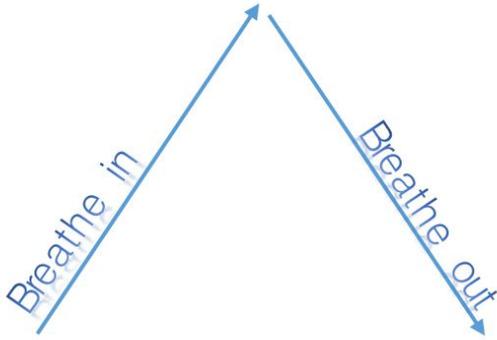
**T: Take a breath.** Reconnect with your breath. The breath is an anchor to the present moment.

**O: Observe.** Notice what is happening. What is happening inside you, and outside of you? Where has your mind gone? What do you feel? What are you doing?

**P: Proceed.** Continue doing what you were doing. Or don't: Use the information gained during this check-in to change course. Whatever you do, do it mindfully.

## Mindfulness Moment!

Use the diagrams below to help focus on and deepen your breathing. Using your finger, trace along the shape as you breathe in and breath out.



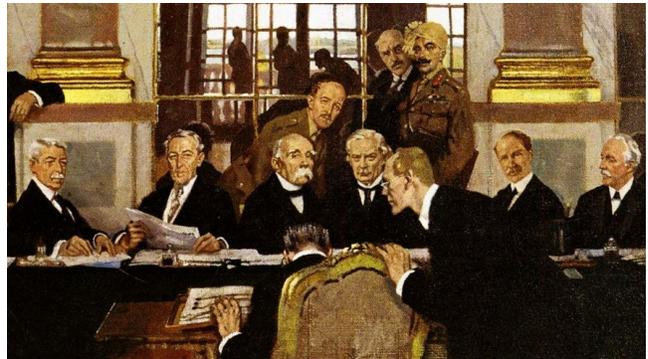
## Day 2: Civics/Social Studies World War I

**What is this lesson about?:** Today you will study the outcomes of WWI and what happened to Europe after the war ended. You identify and respond to questions about some of the key concepts of WWI. You will then have the opportunity to reflect on what life was like during and after WWI.

**Step 1:** Read the following article.

### After World War I, Nations Were Changed Forever

World War I was larger than any war that came before it. It was fought between two sides. The winners were Britain, France, Russia, Italy and the United States. The powers that lost were Germany, the Austro-Hungarian Empire and the Ottoman Empire. The Ottoman Empire was based in today's Turkey, while the Austro-Hungarian Empire occupied the center of Europe.



The war was fought 100 years ago and caused the deaths of millions of people. It left Europe and the world greatly changed. It also set the stage for World War II and many of the horrors that came with it.

#### **A new great power**

World War I changed the United States in two important ways. First, it turned the U.S. army into a large, modern fighting force. For the first time, the United States became a match for even the greatest European power.

Second, the war made the United States a much greater economic force, too. Many of the countries in Europe were broken and tired because of the war. This allowed the United States to control much more of the world's trade and business. The country quickly grew richer than it had ever been.

#### **The rise of communism and socialism**

World War I greatly weakened Russia. Before the war ended, communist revolutionaries took over the government, and Russia's king, the czar, was killed. This was called the Russian Revolution. Communists, led by Vladimir Lenin, did not want a few people to own all the factories and land as property. They had the government take over those lands instead.

Germany also formed a new government. It was called the Weimar Republic, and it

mixed democracy with socialism. Germans could now vote for their leaders in the government. Socialism was less extreme than communism because it did not get rid of private property. But Germany's new government soon came under great pressure. In the end, it was toppled by Adolf Hitler and his Nazi Party. With Hitler in power, the stage for World War II was set.

### **Nationalism transforms Europe**

The German, Russian, Ottoman and Austro- Hungarian Empires fell apart. New countries were formed in Europe, in part due to nationalism.

Nationalism is the idea that people with the same culture have the right to their own separate country. After the war, many people wanted to break from the old empires and form their own nations. But nationalism also caused many problems, especially in Eastern Europe. Many countries had more than one culture and race. Nationalism led to hatred and fighting between these various groups.

### **The myths of victory and failure**

At the end of World War I, the German General Erich Ludendorff wanted Germany to refuse the peace treaty. This treaty, or deal, was written by the winners of the war, and Germany saw it as very unfair. Ludendorff said the army could still fight on. But the new German government wanted peace, so it declared the war over.

This decision gave Ludendorff and other German military leaders someone to blame for Germany's defeat. This started the idea that the German army could have won, but was "stabbed in the back" by socialists and the government. This idea weakened the power of the Weimar Republic. In the end, it allowed Adolf Hitler to rise to power. Britain was also greatly changed by the war. Its suffering was so great that it wanted to avoid another war at all costs. That made it give in to Hitler when he wanted to grab new territories for Germany. This was called appeasement. But as this went on, World War II became more and more certain.

### **A "lost generation"**

Eight million people died during World War I. Many others were so badly hurt by the war that they took their own lives. In much of Europe, it was hard to find someone who had not lost a loved one to the war.

**Step 2:** Answer the following questions.

Give two reasons why WWI led to WWII.

1. Nationalism made people want to break away from the new countries that they found themselves living in.
2. Germany felt that the peace treaty was unfair to them, which then allowed Hitler to gain power because he wanted to show the strength of the German army

In what ways did WWI change the U.S.?

It grew the U.S. military into a very strong one and the U.S. economy became stronger

What new countries were created after WWI?

The text mentions the Weimar Republic created out of Germany

What is the definition of nationalism?

Having pride in one's nationality, often to the point where they look down on people of other nationalities.

How did nationalism create tensions in Europe after WWI?

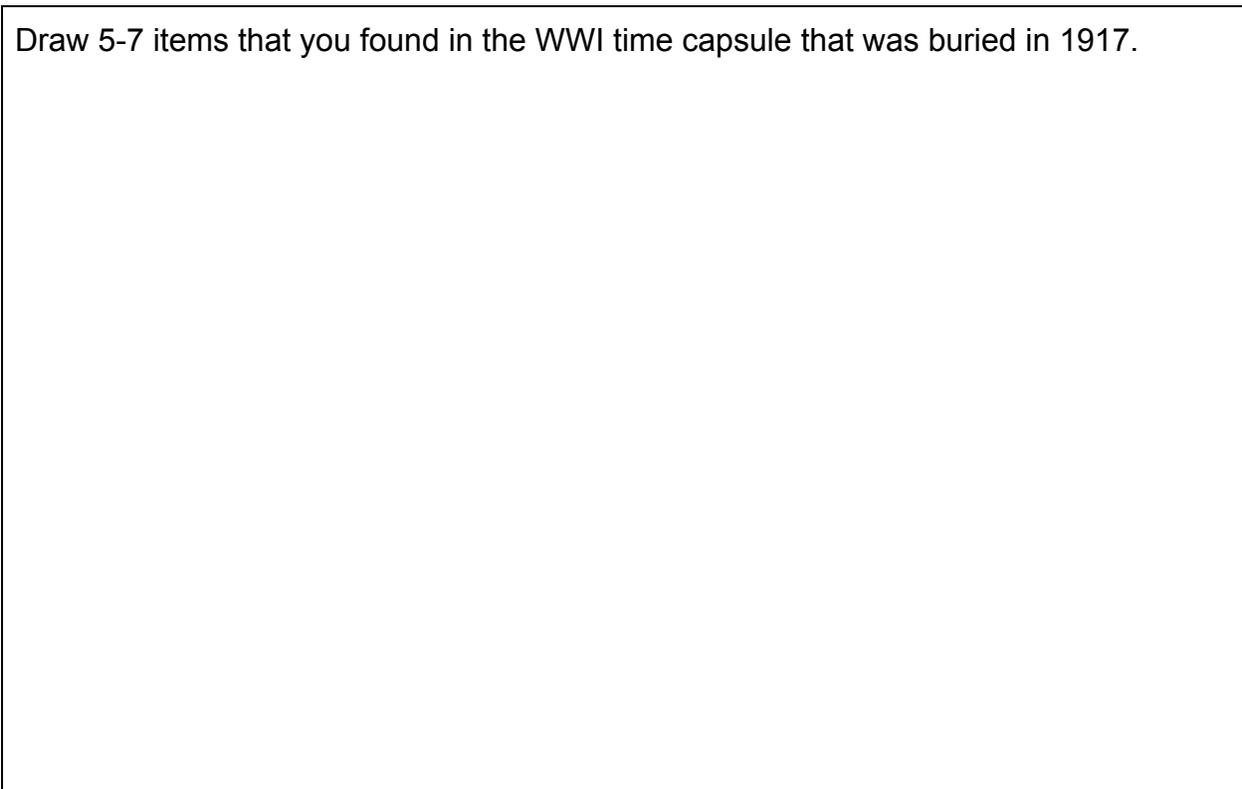
People that found themselves in new countries still had pride for their old ones and wanted to go back to how things were.

### Step 3: Time Capsule Activity

Imagine you are opening a time capsule that was made during WWI. You will uncover 5-7 artifacts from the war to help people understand what life was like in 1917. Draw 5-7 artifacts that you unearthed from the time capsule.



Draw 5-7 items that you found in the WWI time capsule that was buried in 1917.



### Student Feedback:

Circle the emojis that best represents how this activity made you feel.



## Creative Activities: Puzzles



A candy shop lets children exchange 3 chocolate wrappers for a brand new chocolate. Willy is walking around town collecting chocolate wrappers from people. How many wrappers must he collect in order to eat 10 chocolates?

## ANSWERS: Puzzles

### — SOLUTION

He needs only 21 wrappers. He uses them to get 7 chocolates. After he eats them, he is left with 7 wrappers, which uses to get 2 more chocolates. After he eats these, he is left with 3 wrappers, which are enough to get one more chocolate and make them 10 in total.

# Day 3 Agenda

Topic	Activity
Warm-Up!	
English Language Arts	<ul style="list-style-type: none"> <li>• Read an article about Victoria Woodhull and respond to questions about the reading</li> <li>• Write a short essay/paragraph about how people respond to challenging times and use evidence from your readings to support your claim</li> </ul>
Science	<ul style="list-style-type: none"> <li>• Check your understanding of bridge designs</li> <li>• Solve problems around bridge design</li> </ul>
Mindfulness Moment!	
Math	<ul style="list-style-type: none"> <li>• Understanding the power and strength of exponential growth--both for good and bad</li> </ul>
Mindfulness Moment!	
Civics/Social Studies	<ul style="list-style-type: none"> <li>• Review key vocabulary</li> <li>• Create a sketchnote about WWI and it's main themes, key players, and key terms</li> <li>• Make a meme using images from WWI</li> </ul>

**Warm-up Activity:** Write a journal entry around the daily quote on strength.



## Day 3: English Language Arts Strong Women

**What is this lesson about?:** Today you will finish our series on strong women for Women's History Month. You will learn about Victoria Woodhull, the first woman to run for president in the U.S.

**Step 1:** Read the following text.

In 2016, Hillary Clinton made history. She became the first woman to be the presidential nominee of a major political party. But she was not the first woman to run as a presidential candidate. That honor belongs to Victoria Claflin Woodhull.

In 1872, Woodhull became a third-party candidate, running against the Republican president, General Ulysses S. Grant, and his Democratic challenger, Horace Greeley. At the time, women in the United States did not even have the right to vote. They wouldn't have that right for another 50 years. But that did not stop Woodhull from making a historic bid for change.

### **"Women Are The Equals Of Men"**

Woodhull was an early feminist and supporter of women's rights. She first received national attention in 1871, when she was invited to Washington to speak before the house judiciary committee. Woodhull made a bold statement before the committee: "Women are the equals of men before the law, and are equal in all their rights."

Woodhull argued that women already had the right to vote. The 14th Amendment to the Constitution granted that right to all citizens born in the United States, she said. She also claimed that the 15th Amendment applied to women as well. The 15th Amendment had ended slavery in 1870. Women, Woodhull said, had long been treated in a similar way to enslaved people. Women needed to be freed from having to act as servants to their husbands and families.

If women were not given their political rights, Woodhull promised, they would have no choice but to revolt. They would rise up and govern themselves.

Not surprisingly, the committee did not agree with any of her positions.

### **A New Political Party Emerged**

For 25 years, suffragists had tried to get the leaders of the two major political parties to listen. Suffragists were people who fought for women's right to vote. Repeatedly, they

were ignored. Asking for their rights was getting them nowhere. Now, suffragist leaders decided it was time to act. On May 9, 1872, the National Woman Suffrage Association formed a new political party, The Equal Rights Party. Woodhull was selected to run as its candidate for the presidency of the United States.

Woodhull was far ahead of her time. She pushed for female suffrage, of course. But she also demanded equal pay for men and women. She believed in universal health care and changes had to be made to American prison systems.

Woodhull never had any real chance of being elected, and she was too young to be the president. However, her candidacy helped bring attention to issues that were otherwise ignored.

### **Political Downfall**

Along with her sister, Woodhull ran her own newspaper, Woodhull and Claflin's Weekly. The paper helped bring attention to Woodhull's views. In the end, though, the paper was her downfall. On November 2, 1872, three days before Election Day, Woodhull published two articles about two major critics of her campaign. One of the pieces accused New York preacher Henry Ward Beecher of having an affair with a married woman. The other claimed Wall Street trader Luther Challis had assaulted two girls.

Because the two articles discussed sexual matters, they were considered inappropriate, and against the law. Woodhull and her sister were quickly arrested and jailed.

Even though she was now in jail, Woodhull remained on the ballot. We will never know how many votes she received. This is partly because some polling stations probably threw away her votes. However, we do know she did not win any states. Grant easily won a second term.

### **Death And Legacy**

Woodhull and her sister were later cleared of charges and freed from jail. She continued to give public speeches and to publish her weekly paper, but her political career was over. She suffered from constant poor health and was always short of money. Woodhull eventually moved to England. There she started another newspaper, The Humanitarian, and threw her support behind the British suffragist movement. Woodhull died in 1927. A year later, British women won the right to vote.

Today, Woodhull has mostly been forgotten. When she is remembered, she is usually treated as an odd fact about U.S. history. But Woodhull deserves to be considered an important pioneer in the fight for women's rights.

Following Woodhull's presidential run, suffragists continued fighting for political change. The Equal Rights Party continued to nominate women for the presidency. Each voting day, it sent members to polling stations to insist on women's right to vote.

Progress was slow, but by 1918, women had won the right to vote in 40 states. In 1920, the Constitution was changed to give all women in the United States the right to vote. Since Woodhull's campaign, third parties have nominated 21 more female presidential

candidates. Jill Stein ran in 2016 for the Green Party. That same year, Hillary Clinton won the Democrat nomination, 136 years after Woodhull was arrested.

Back in 1872, Woodhull closed her campaign with a letter to the editor of the New York Herald. Woodhull's letter was written from her prison cell. It showed she knew very well what she had begun: "The public may succeed in crushing me, even to the loss of my life. But let me warn them and you that from the ashes of my body a thousand Victoria Woodhulls will spring. They will seize the work laid down by me and carry it forward to victory."

**Step 2:** Answer the following questions.

Circle what you think is the central idea to the text.

1. Suffragettes worked very hard to win the right to vote for women.
2. Victoria Woodhull was a strong leader in fighting for women's equality and other social justices.
3. Sometimes we have to fail in order to be successful and Victoria Woodhull did just that.
4. Women are equals to men and should, therefore, have the same freedoms and rights as men.

Explain why you chose your answer above. What in the text makes you think that is the central idea?

The text focuses on Woodull and her story as a suffragette leader. It speaks about her fight for women to vote, how she went to jail as a result of her fight, and how she ran to be the first woman president.

After reading about Victoria Woodhull, provide three examples from the text that show she was a strong, courageous, and/or brave woman.

1.
  1. She spoke out about women's equality and made statements that were not always popular
  2. She ran her own newspaper to share a different side of the story
2.
  3. She ran for president
  4. She went to jail as a result of her standing up for what she believed in and sacrificed herself in doing so.
- 3.

**Step 3:** Write a short essay.

Over the past three days, you have read about women who have had to overcome societal challenges beyond their control. Reflect on the methods that these women used to find strength within to overcome these challenges.

Choose and circle one of the following statements about how individuals handle societal challenges beyond their control. You will then brainstorm and write a paragraph expanding on the statement.

<b>Statements</b>	When faced with opposition, individuals can dig deep to find strength within to do what is right.
	Individuals who show strength in times of difficulty, inspire others to be strong as well.
	When we cannot control what is happening, our strength comes from controlling how we respond.

For your paragraph, you will need to support your statement of choice with clear reasons and relevant evidence from your readings on Harriet Tubman, Frances Harper, and Victoria Woodhull. Complete the graphic organizer below to help you brainstorm before writing your paragraph. You must provide 3 pieces of evidence from your readings to support the statement. *(the example provided is for statement 2 above)*

Evidence	Citation	Explanation of how this evidence supports your statement/argument
<i>The people that Harriet Tubman helped to freedom gave her hugs and told her "God bless you"</i>	<i>Letter to Tubman</i>	<i>Harriet Tubman's bravery and strength inspired the people she helped to be brave in the face of danger and they showed appreciation to her. (supports statement 2 above)</i>


Now that you have examples to help support your statement of choice, write your paragraph and argue that the statement you chose is true.

## Student Feedback:

Circle the emojis that best represents how this activity made you feel.	
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## Day 3: Science Bridges

**What is this lesson about?:** Today you will use your knowledge about bridges and designs to solve challenges involving picking the best bridge for a situation.

**Step 1:** Consider the following quote

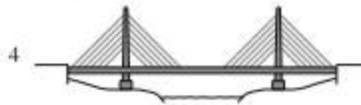
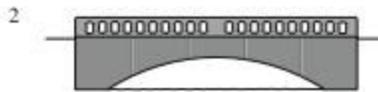
“A bridge has no allegiance to either side.”

What do you think is the meaning of this quote?

**Step 2:** Check your understanding

arch    beam    cable-stayed    cantilever    suspension    truss

Match the above names with the below pictures:

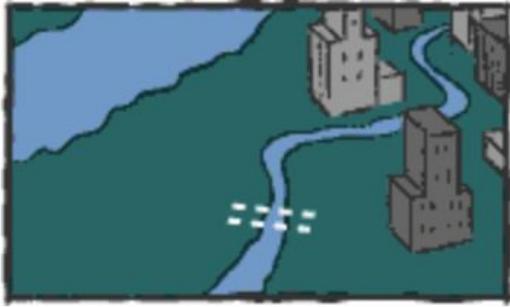


Write your answers here:

1. Trus \_\_\_\_\_
2. Arch \_\_\_\_\_
3. Beam \_\_\_\_\_
4. cable-stayed \_\_\_\_\_
5. Cantilever \_\_\_\_\_
6. Suspension \_\_\_\_\_

**Step 3:** Solves the following challenges.

**Why:**



### Location 2:

Build a bridge for rollerbladers and bikers

**Span:** 100 feet

**Crossing:** Stream

**Connects:** Two bike paths

### Special Notes:

"We're tired of getting bumped off the road by angry drivers! We want a simple bridge -- one that will connect the bike paths in East and West Craggy Rock over the city stream. We don't have much money, so we're not asking for much. We just want to get to work every day without risking our lives!"

-- Craggy Rock Bike-n-Blade Coalition

**What kind of bridge should you build?**

(Select one)



Beam



Suspension



Arch



Drawbridge

Why?

**Why?**

**Why?**

## Step 4: Reflection

What was the most interesting thing you learned about bridges?

What is something you think you would be able to teach someone else about bridges?

### Student Feedback:

Circle the emojis that best represents how this activity made you feel.



### **Mindfulness Moment!**

Mantras: Choose one below and say it over and over all day.

I can do more than I believe.

My dreams will come true.

I am great today, and I will be even greater tomorrow.

My heart is full of kindness and courage.

I am what I am.

Life is a daring adventure or nothing at all.

Yesterday is not today.

OR

Create your own mantra:

## Day 3: Civis/Social Studies World War I

**What is this lesson about?:** Today you will review what you have learned about WWI during the past couple days and create graphic notes on the key themes and issues of WWI. You will also use your creativity to make a meme with WWI images.

### Step 1: Review of key vocabulary

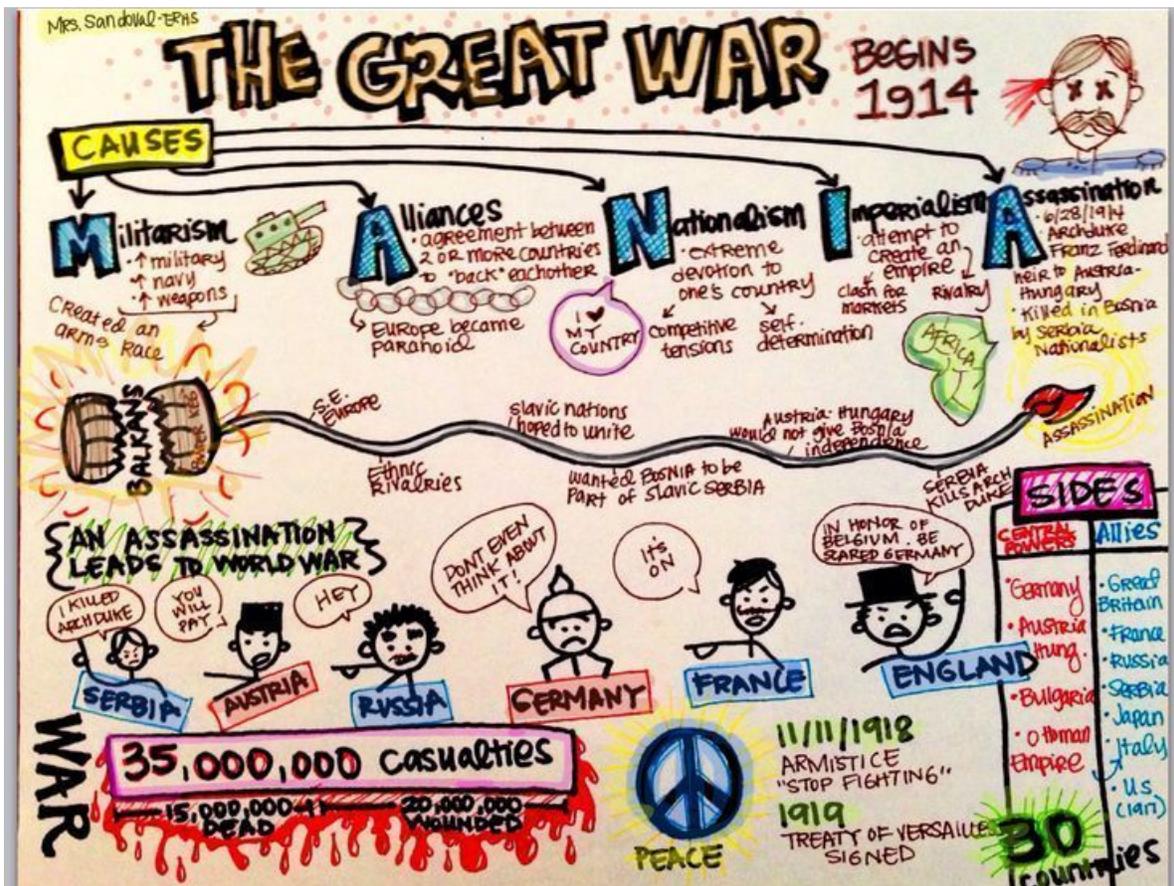
Match the correct definition with each key term (refer to your readings from Day 1 and 2, if necessary)

- |                |   |
|----------------|---|
| 1. Nationalism | C |
| 2. Imperialism | D |
| 3. Alliance    | A |
| 4. Militarism  | B |

- Forming friendships with other countries for protection
- To build up and use one's army
- Love for one's country and support for its interests, sometimes to the detriment of others
- Spreading a country's influence by conquering

### Step 2: What is a sketchnote?

Look at the image of the sketchnote below. What do you think a sketchnote is?



Sketchnoting is a form of note-taking, hence the “noting” part of it, but as you might guess it involves bringing more visuals into the process compared to typical note-taking, hence the “sketch” part. The whole idea behind adding sketches to your notes is that it taps into parts of your brain that would lie dormant if you only use words to explore ideas. It’s the combination of the two that’s most powerful – using both words and visuals while taking notes!

### Step 3: Your turn! Create a Sketchnote on WWI

You’ve spent the last two days learning about WWI, and now it’s time to take note of all you have learned. Your assignment is to create a sketchnote titled “World War I.”

Here’s what you need to include in your sketchnote:

- Causes of WWI
- Key countries that were involved
- Key vocabulary (nationalism, alliance, imperialism, militarism)
- Who won the war, who lost the war
- The results of the war

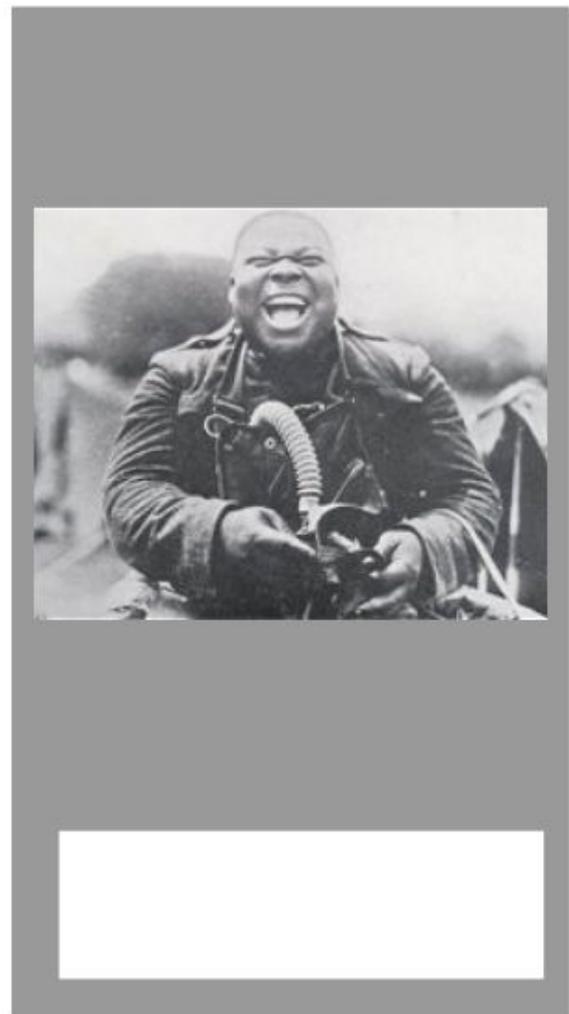
Have fun with this assignment! Get started in whatever way works best for you (start drawing images that capture themes of WWI or begin by writing words). You can use arrows and equation signs to help with the flow of your sketchnote, too.

*Use this page for your sketchnote*

**Step 4:** Create a WWI meme

Take a look at the example memes below.

Now, using the below templates, create your own memes with the WWI images.



**Step 4:** Share with a partner.

Review your sketchnote and memes with a classmate.

1. Did you include any of the same drawings in your sketchnote?
2. What do you like about your classmates Sketchnote that you want to add to yours?
3. Do you have any feedback on your classmate's memes? How might you make your meme stronger after seeing your classmates?

**Student Feedback:**

<p>Circle the emojis that best represents how this activity made you feel.</p>	
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**Creative Activities:** Can you invent a new sport?

List of Supplies

- 2 tennis balls
- a plastic bat
- one goal
- 10 players

Design a game that could use the above supplies.

Rules:

Describe or draw what it looks like:

Math Answer Sheet

Week 1

Days 1, 2 and 3

Day 1--

No 'right' or 'wrong' answers

Day 2--

Warm Up

**What's a better deal?**

\$20 off of a \$200 phone or \$50 off of a different \$500 phone?  
What do you think? Write it down.

There is no right answer here.... Things to consider:  
→ How much will each phone cost after the discounts?

\$180 vs \$450

- How much money do you have to spend?
- Which of the phones really meets your needs?
- which phone is actually better?

**What's a better deal?**

\$20 off of a \$200 phone at Best Buy vs \$50 off the exact same phone listed at \$220 at a different store?

\$180 vs \$170

**Discuss: Why is this second question so much easier to answer clearly?**

**Kenny's dad makes him a deal on his birthday: He tells Kenny that if instead of taking \$100 on his birthday, he will give him \$110 next year.**

- How much money will Kenny earn by letting his dad keep the \$100 for one year?
- \$10

**Sondra's dad makes her a deal on her birthday. He tells her that if instead of taking \$50 today, he will keep the \$50 and give her \$60 next year.**

- How much money will Sondra earn by letting her dad keep the \$50 for one year?
- \$10

**Marcus's dad makes him a deal on his birthday. He tells him that if instead of taking \$10 today, he will keep the \$10 and give him \$20 next year?**

- How much money will Marcus earn by letting his dad keep the \$10 for one year?
- \$10

**Who made more money by giving their birthday money to their dad for the year, Kenny, Sondra or Marcus?**

They all made the same amount.

**Who did 'better' over the year--Kenny, Sondra or Marcus? Who's money got stronger, comparatively?**

Marcus--he 'gave up' \$20 to make \$10

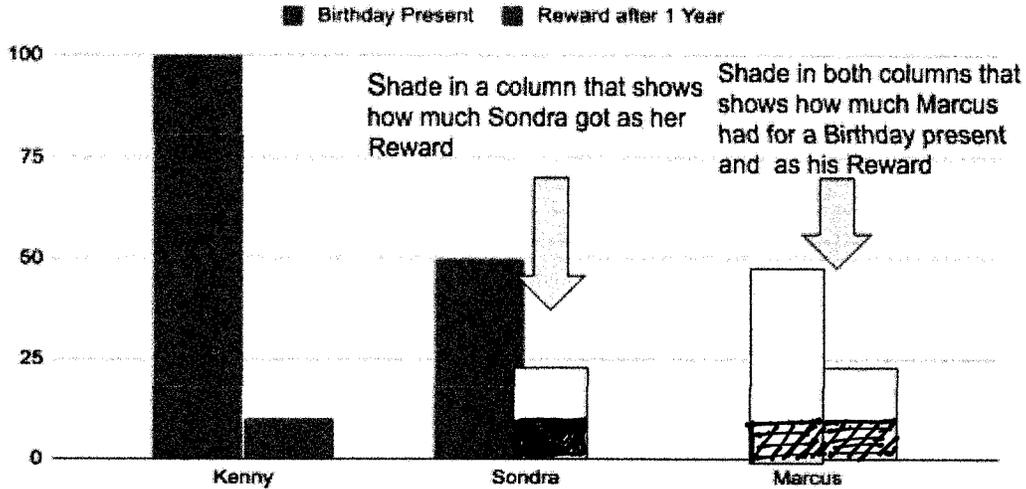
**Explain your answer below:**

See above --- made \$10 on \$20, not \$10 on \$100 or \$50

**Would you take any of those deals if they were offered to you by one of your parents? Why, why not?**

Complete the graph below to help illustrate this example.

Birthday Present and Reward after 1 Year



How much money did Kenny have to give up for a year in order to earn \$10?

\$100

How about Sondra?

\$50

And how about Marcus?

\$10

Day 3--  
Warm Up

Let's use information from Kenny, Sondra and Marcus--above--to help us think about percentages and percentage increases.

By what percent (%) did the \$100 that Kenny gave to his dad grow over one year?

Here is how you calculate % change:

Make a fraction: Change from year 1 to year 2/Original Investment.

So, for Kenny, this looks like:

→ \$10/\$100

→ reduce this to \$1/\$10.

→ 1 divided by 10 = .10 --- say that aloud as 10 hundredths.

→ 10 hundredths is equal to 10%

So, Kenny earned 10%...

Now, try this for Sondra:

For Sondra, this looks like:

- \$20/\$100 OR  $\frac{10}{50}$  OR  $\frac{1}{5}$
- reduce this to \$2/\$10 OR  $\frac{1}{5}$
- $\frac{1}{5}$  divided by 10 =  $\frac{10}{100}$  — say that aloud as 10 hundredths.
- 10 hundredths is equal to 10%

So, Sondra earned 10%

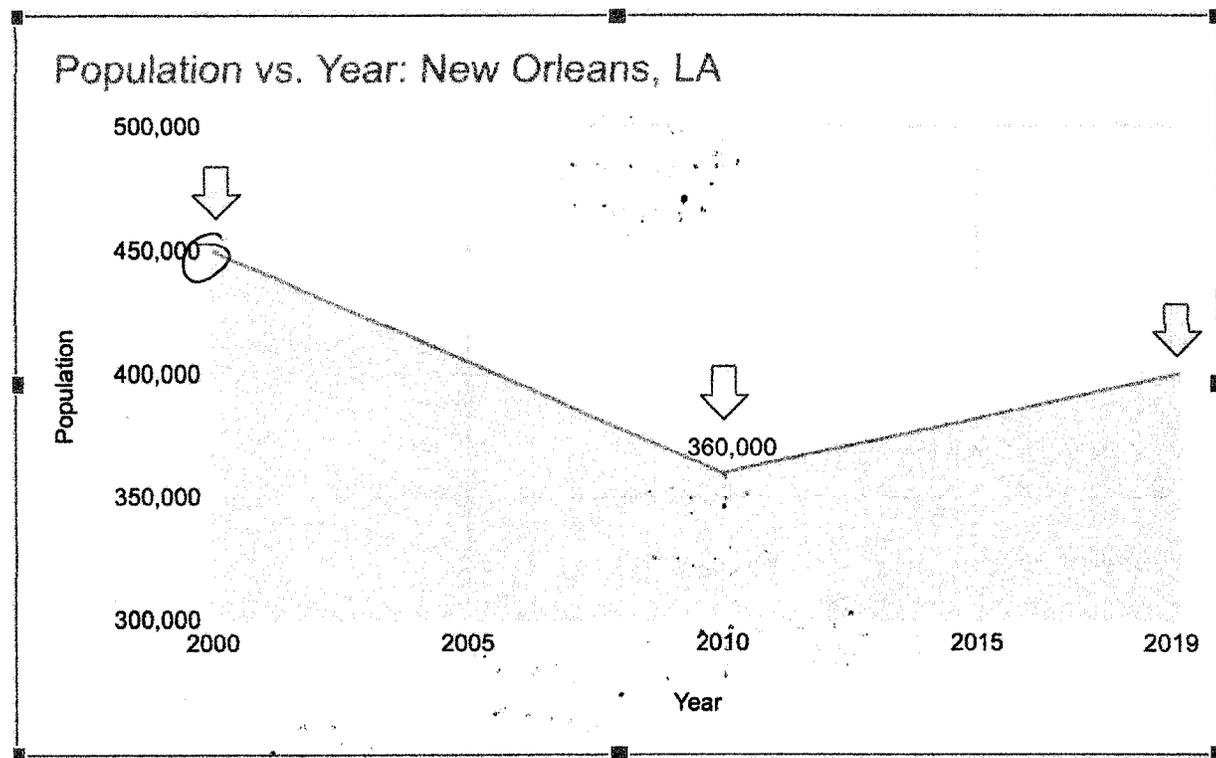
Now, try this for Marcus:

- For Marcus, this looks like:
- \$100/\$100 → OR  $\frac{1}{1}$
- reduce this to \$1/\$1
- $\frac{1}{1}$  divided by 1 = 1 → say that aloud as 1 whole!
- 1 whole is equal to 100%

So, Marcus earned 100% by giving his mom the money for one year!

Discuss your answers with your classmates, if permitted.

The chart below shows the population of New Orleans (rounded off) in over three time periods. Use the charts to answer each question below.



What was the total population of New Orleans in 2000? 450,000

What was the total population of New Orleans in 2010?

360,000

By how much did the population decrease?

By what percentage did the population decrease?

→ Use these steps to help you calculate this

→ Make a fraction: How much did the population decrease by dividing by the population in 2000.

→ Write the population decrease (as a negative) here:

$$\frac{-90,000}{450,000}$$

$$\frac{450,000 - 360,000}{360,000} = \frac{90,000}{360,000}$$

→ Write the population in 2000 here:

Reduce the fraction:

$$\frac{-1}{5}$$

Divide the top # by the bottom #, using a calculator if needed.

By what % did the population in New Orleans decrease between 2000 and 2010?

-20%

Note: In 2005, Hurricane Katrina struck New Orleans and many families had to leave the city, greatly speeding up a long decline in the population..

Now, let's see what has happened between 2010 and 2019?

What was the total population of New Orleans in 2010?

360,000

What was the total population of New Orleans in 2019?

400,000

By how much did the population decrease over this time?

40,000

By what percentage did the population increase?

Use these steps to help you calculate this

→ Make a fraction: How much did the population increase between 2010 and 2019 by divided by the population in 2010.

→ Write the population increase (between 2010 and 2019) here (look at the graph):

$$\frac{40,000}{360,000}$$

→ Write the population in 2010 here:

Reduce the fraction:

$$\frac{4}{36} = \frac{1}{9} = 11\bar{2}$$

Divide the top # by the bottom #, using a calculator if needed.

By what % did the population in New Orleans increase between 2010 and 2019?

112

Day 3  
Warm-Up

**Which would you choose?**  
 A friend of yours goes to work for Nike. After she has worked there for a couple of years, she tells you some pretty amazing news--that some Nike shoes are made in the exact same factory using the exact same supplies and the exact same machines as shoes that are sold at Target under the Champion brand.

- So you check out a pair of Nikes at Foot Locker. They cost \$110. You go to Target and look carefully at the shoes--and you are pretty sure that you have found the 'same' shoe, but it's a Champion brand. It costs \$45.

**Discuss: Which pair of shoes would you buy? Why?**  
 No correct answer....

Complete each of the problems below. Use the information provided to answer the questions.

**Complete the chart below:**  
 Assume that every year a mysterious new, cuddly Teddy Bear reproduces exactly one time and makes a baby all by itself. Each Teddy Bear only makes 1 baby, 1 time. The Teddy Bears do NOT die, ever.

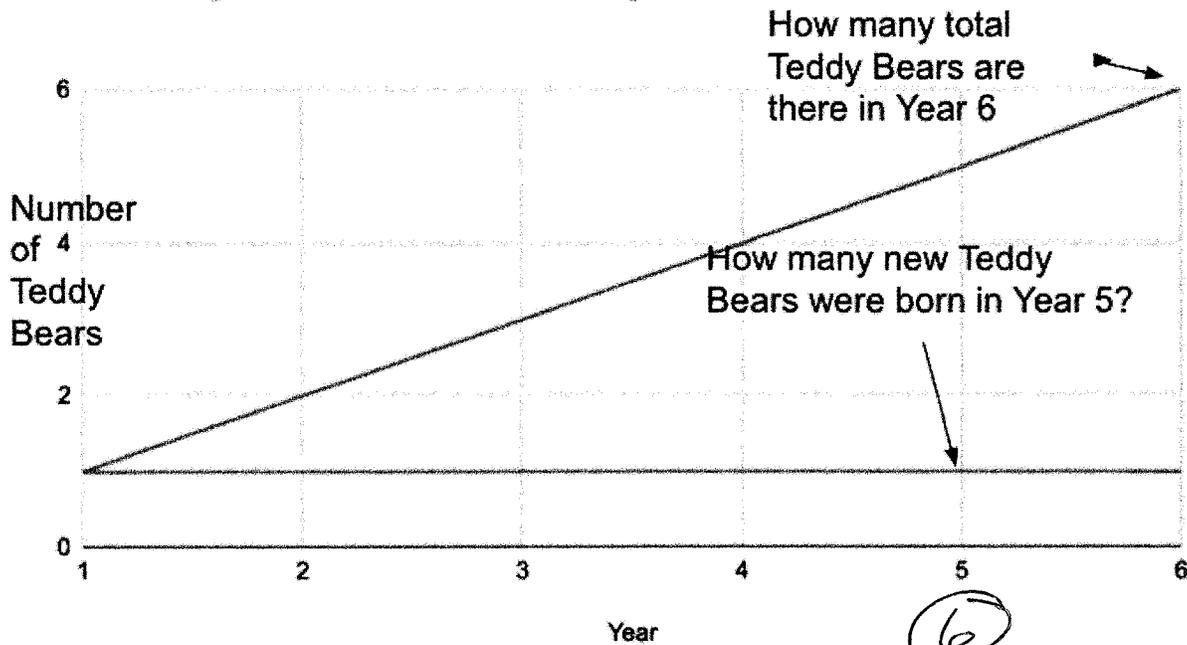
Question: After 6 years how many Teddy Bears will there be? Fill in the table below to help you answer the question-

Year	New Teddy Bears	Total Teddy Bears
1	1	1
2	1	2
3	1	3
4	1	④
5	①	5
6	1	⑤

Fill in the missing blanks-

Now, we converted this table to a graph. .

### New Teddy Bears and Total Teddy Bears



Looking at the graph, how many total Teddy Bears are there after 6 years? How many new babies were born in year 5?

1

### Step 2: Understanding Exponential Growth, Round 1

Complete each of the problems below. Use the information provided to answer the questions.

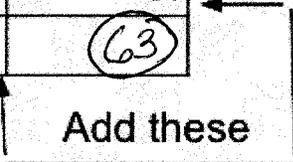
Complete the chart below:

Assume that every year a mysterious new cuddly Teddy Bear reproduces exactly one time and makes two babies all by itself. Each Teddy Bear only makes 2 babies, 1 time. But the creatures do NOT die, ever.

Questions:

How many new Teddy Bears are born in year 4? After 6 years how many Teddy Bears will there be all total? Fill in the table below.

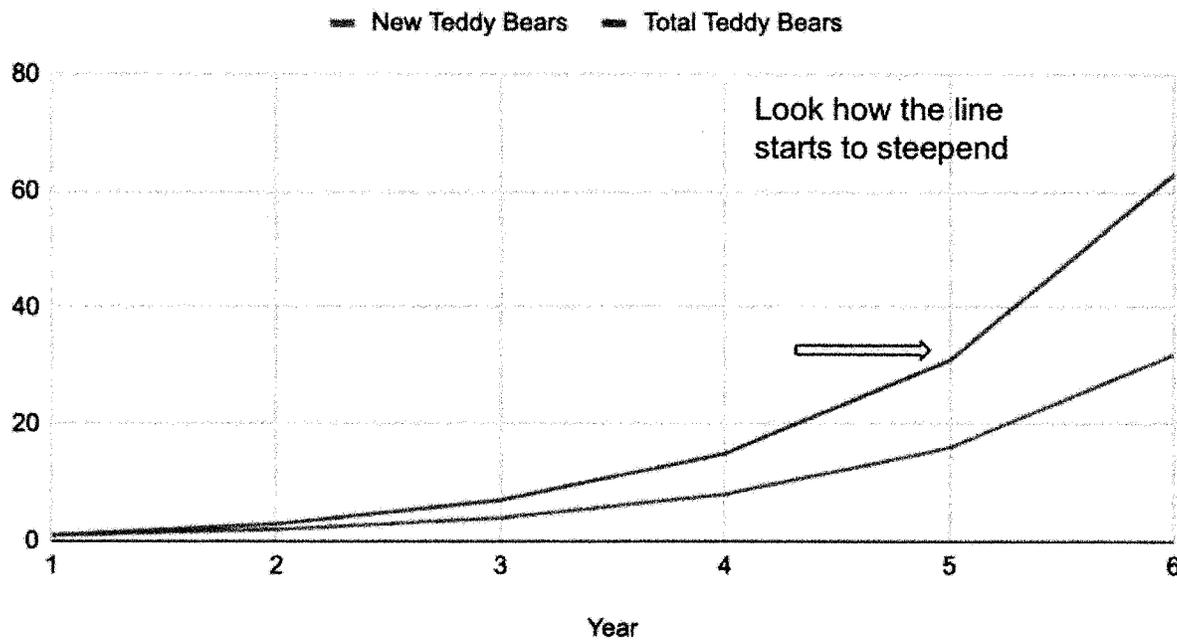
Year	New Teddy Bears	Total Teddy Bears
1	1	1
2	2	3
3	4	7
4	8	15
5	16	31
6	32	63



Below we converted this table to a graph.

- Looking at the graph, how many new Teddy Bears are born between year 5 and year 6?
- How many Teddy Bears are there after 6 years?

### New Teddy Bears and Total Teddy Bears



### Step 3: Understanding Exponential Growth, Round 2

Complete each of the problems below. Use the information provided to answer the questions.

Complete the chart below:

Assume that every year a mysterious new cuddly Teddy Bear reproduces exactly one time and makes three babies all by itself. Each Teddy Bear only makes 3 babies, 1 time. But the Babies do NOT die, ever.

Questions:

- How many new Teddy Bears will be born in year 5?
- How many total Teddy Bears will there be in year 6?

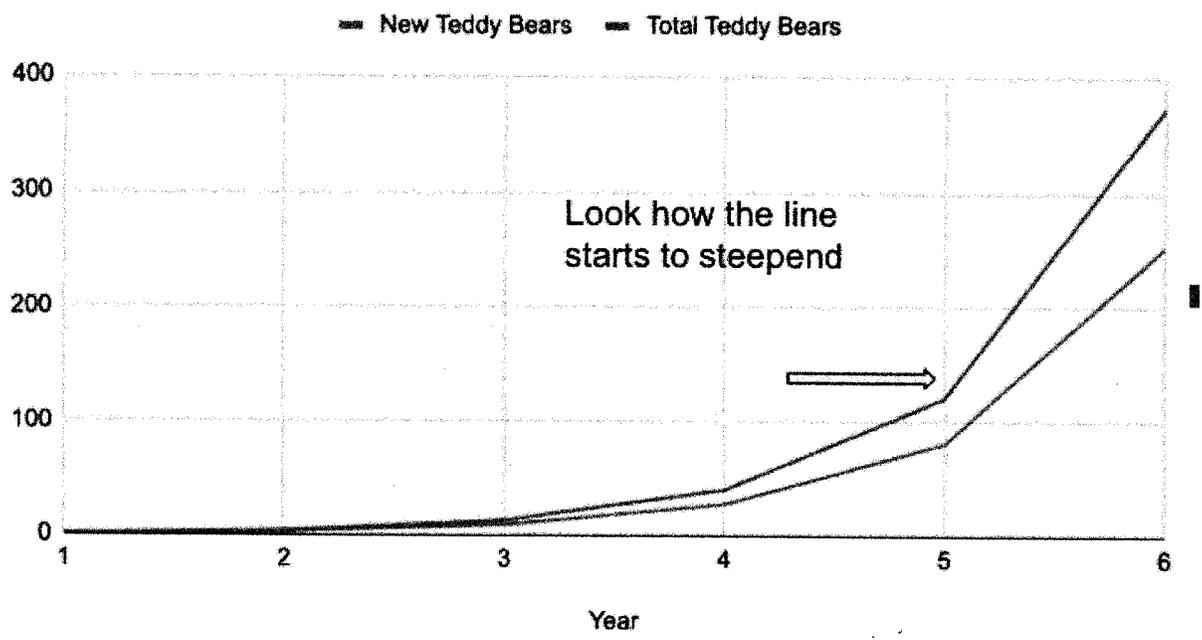
Fill in the table below.

Year	New Teddy Bears	Total Teddy Bears
1	1	1
2	3	4
3	9	13
4	27	40
5	81	121
6	253	374

Add these

Below we have converted this chart to a graph.

### New Teddy Bears and Total Teddy Bears



Looking at

the graph:

- How many mystery Teddy Bears are there after 6 years? **374**
- What will this graph start to look like by year 8 or 9? Will it flatten out or get steeper?

*It will be steeper & steeper!!*

### Step 4: Understanding Exponential Growth, Discussion Questions

**What would be something positive that could come from really strong, exponential growth?**

**What is something that you wish would grow faster and faster, really quickly?**

- Say every act of kindness resulted in two more acts of kindness and that went on and on?
- Or say that for every flower that blooms, bees can pollinate two more flowers during the spring, making the outdoors beautiful and fresh?
- **What would you like to grow exponentially?**

**What would be something negative that could come from really strong exponential growth?**

- Say every time an adult said something negative to a child, that child grew up and said two negative things to their child?
- **What would you like to make sure does not grow exponentially?**