

Grade Level: 4th

Week 2: of April 14, 2020

	Day 1	Day 2	Day 3	Day 4	Day 5
ELA	No School	Read <i>An Understanding</i> . Write a summary of what you read.	Read <i>An Understanding</i> again to increase fluency. Answer questions 1-5.	Read <i>An Understanding</i> again to increase fluency. Answer questions 6-10.	Read the Word Study sheet. Use the words to write your own sentences.
Math	No School	Danny's Data <i>See attached page</i> Please do page 1	Danny's Data <i>See attached page</i> Please do page 2	Splitting the Cost <i>See attached page</i> Please do page	Problem String: Equivalent Ratios (Part 1) Please do each problem in order. Think about what you know to work from problem to problem. What about each problem helped you with the next? 1.How much money would each person get if 10 people shared \$20? 2.What if 10 people share \$40? 3.What if 5 people share \$20? 4.What if 20 people share \$20? Do you see any patterns? What model would be good to use?
Science	No School	Act Out a Sound: Think: When you put your hand on your throat and talk, you can feel the vibrations. When you made your "phone" previously, the string vibrated to carry your voice to the listener. But what if there is no string? Could there be vibrations in the air? Plan and write your best answer: How could you find out if there are vibrations in the air when we talk to each other?	What Would Happen if You Screamed in Outer Space?: Think: Whales communicate under water by making sounds with their throats that create vibrations in the water. Using evidence from what you have learned by creating "phones" and detecting sound with your "sound detector", write your best answer to the following: Would you be able to hear it if someone screamed in space, or on	Seeing Sound: Activity: Find a plastic bowl or cup, plate, rubber band, plastic cling wrap, and salt or sprinkles. Use the rubber band to hold the plastic film in place around the opening of the bowl or cup. Place the bowl on a plate and place salt or sprinkles on the plastic wrap. Hum or talk with your head near the bowl, Watch the salt/sprinkles move with the sound. You are seeing sound!	Three Cheers for Ears! Read: "Three Cheers for Ears!" [3 pages]. If you need help with some words, it is ok to ask, but try to read as much on your own as you can. Write your best answers to the following: a) What is an eardrum? b) What do Jake and Sam learn about at the science museum? c) What happens when a sound wave

		<p>Need: balloon (“Sound Detector”) One person will be “Big Noise” and one will be “Hum Feeler”. Blow up the balloon as big as possible without popping and tie closed. Hum Feeler holds balloon close to Big Nose’s mouth, but does not touch. Big Noise says OHHH in a low voice toward balloon. Switch jobs.</p> <p>Write: What did you feel when you held the balloon? Can you explain what you felt? What are other sound experiments you could try with the balloon (e.g., different distances from mouth, different sounds, hold balloon up to speaker)?</p>	the moon? Why or why not? Support your argument with evidence from what you have learned.	<p>What are some other things you can put on the cling wrap and move with sound?</p> <p>Write: Using the bowl and sprinkles in your drawing, create a model of how sound was created in you and traveled to make the sprinkles dance. Label as many parts as you can. Write a brief explanation of what is happening in your model (drawing).</p>	hits the eardrum?
Social Studies	No School	Complete Activity 1-4 from the document titled, “Manifest Destiny.”	Complete Activity 5 from the document titled, “Manifest Destiny.”	Complete Activity 6, the Guiding Questions, from the document titled, “Manifest Destiny.”	Complete Activity 6, the Overarching Questions, from the document titled, “Manifest Destiny.”

An Understanding

by ReadWorks

The car bumped along the gravelly asphalt road, and Michaela's seat belt pressed into her stomach uncomfortably. Outside, the scenery had been green and leafy for hours. At first, it had been exciting and beautiful-Michaela had never seen so many trees and so much underbrush before. But after five hours stuck in a car with her younger twin brothers and nothing to look at but a bunch of plants, Michaela was ready to scream. Suddenly the idea of a whole entire week in the middle of a forest, hiking and looking at waterfalls with just her family, did not seem like a fun prospect. Why couldn't they just go to the beach like all of her friends' families?

"And all was well," the British voice from the *Harry Potter* book on tape said.

"I never knew Harry Potter was so *moral*," Michaela's mom said, turning around in her seat to smile at Michaela, Zack, and Steve. "Did you guys like it?"

"It was good," Michaela said, staring out the window.

Both Zack and Steve had (thankfully) fallen asleep, one head leaning on the other. The best part about being a twin, Michaela thought (and she would know, having watched her little brothers for five straight years), was that you always had a shoulder rest that was at the exact height you needed.

"Sadly, there are no more audiobooks," her mom said, turning back to the front.

"That's a tragedy," Michaela's dad said, as he pulled the car into a rest stop. "I have to stretch my legs. Michaela, do you want a chocolate bar?"

Michaela jumped out of the car and followed her dad to the gas station store. There was the only car at the rest stop. Stretching, Michaela leaned back to look up at the tops of the trees.

"Pretty, huh?" her dad said.

"Yeah, it's okay," Michaela shrugged.

Her dad smiled. "Ah, are we at that age yet?"

"What age?"

"When you stop talking to Mom and me. They warned me about this!" He picked her up by her armpits and swirled her around like he used to do when she was a kid.

"Dad, stop!" she shrieked.

"No one is around, I promise," he said, setting her down gently. He playfully punched her arm.

"Will that be a Reese's peanut butter cup for the lady?"

She smiled and nodded.

He went in to buy the candy, and Michaela leaned up against the brick gas station and stretched her legs. She looked back at the car: it seemed that Zack and Steve were awake and pulling each other's hair. Their mom had gotten out of the car, and she was trying to stop them from the open door.

"What hooligans," her dad said, letting the gas station door close behind him.

"They're so annoying," Michaela said.

"Yeah, but they're cute at least, right?" her dad said, throwing his arm around her shoulders and steering her back to the car.

"Kind of," Michaela grumbled, taking the candy out of the plastic shopping bag her dad was holding.

"I know they're hard to handle. But just try to ignore them... We'll let Mom deal with them on this trip, huh? Either way, you'll get used to them," he said, and laughed. "I got used to Mom!"

"What's that?" Michaela's mom asked.

"Nothing, honey!" her dad said, grinning. Michaela held back a giggle and climbed into the car, feeling a teeny bit better about this week-long trip to the middle of nowhere.

Name: _____ **Date:** _____

1. How long has Michaela been in the car with her family?

2. How does Michaela feel about spending a week in the forest with her family at the beginning of the story?

3. Read these sentences from the story.

"Her dad smiled. 'Ah, are we at that age yet?'

"What age?'

"When you stop talking to Mom and me. They warned me about this!' He picked her up by her armpits and swirled her around like he used to do when she was a kid.'

"Dad, stop!' she shrieked.

"No one is around, I promise,' he said, setting her down gently. He playfully punched her arm. 'Will that be a Reese's peanut butter cup for the lady?'"

Based on this evidence, how can Michaela's dad best be described?

4. Who makes Michaela feel "a tiny bit better" about the trip?

5. What is the main idea of this story?

6. Read the sentences and answer the question.

"Outside, the scenery had been green and leafy for hours. At first, it had been exciting and beautiful-Michaela had never seen so many trees and so much underbrush before."

What does the word "scenery" most nearly mean as used in this text?

7. What word or phrase best completes the sentence?

Michaela has been stuck in a car with her younger twin brothers for five hours with nothing to look at but a bunch of plants. _____, she is ready to scream.

8. Michaela's dad says he knows that the twins can be hard to handle. How does he tell Michaela to respond to the twins?

9. What causes Michaela to hold back a giggle at the end of the story?

10. Why does Michaela feel better about the family trip at the end of the story? Support your answer using evidence from the text.

Word Study Warm Up (1-2 minutes)

Homophones are words that sound alike but have different spellings and meanings.

wait	weight	miner
minor	heard	herd
sent	cent	scent

Fluency sentences (1-2 minutes)

1. I had to wait for the bus.
2. My cat is gaining weight quickly.
3. The miner found lots of gold!
4. It was just a minor error.
5. Tom heard the doorbell ring.
6. A herd of cows ate the grass.
7. She sent me an email today.
8. The candy cost just one cent.
9. That skunk has a strong scent!

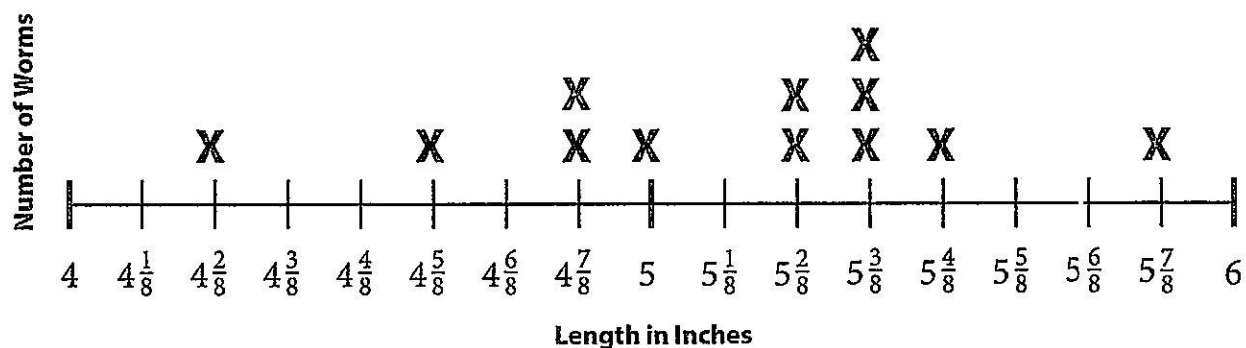
NAME _____

DATE _____



Danny's Data page 1 of 2

Danny collected data about the length of 12 worms he found while he was digging in his yard. Use the data shown on Danny's line plot to answer the questions.



- What is the range of the data? (The range is difference between the length of the longest and the shortest worm.) Show your work.
- What is the median (the middle value in the set of X's) of the data?
- What is the mode (the most common worm length) of the data?
- What fraction of the 12 worms were less than 5 inches long?
- What fraction of the worms were longer than $4\frac{7}{8}$ inches but shorter than $5\frac{5}{8}$ inches?
- What fraction of the worms were more than 5 inches long?
- If Danny laid the two shortest worms end to end, how long would they be together? Show your work.
- If Danny put the longest and shortest worm end to end, how long would they be together? Show your work.

(continued on next page)

NAME _____

DATE _____

Danny's Data page 2 of 2**9** Add or subtract these mixed numbers. Show your work.

a $2\frac{1}{3} + 4\frac{2}{3} =$

b $16\frac{5}{8} - 4\frac{3}{8} =$

c $8\frac{4}{7} - 3\frac{5}{7} =$

d $14\frac{5}{9} + 6\frac{7}{9} =$

e $20\frac{1}{8} - 19\frac{7}{8} =$

10 CHALLENGE Danny found one more worm and wanted to add the data to his line plot. He wondered how it would affect the original mode, median and range.**a** What is a length the worm could be that would *not* change the mode?**b** What is a length that would change the mode?**c** What is a length the worm could be that would *not* change the range?**d** What is a length that would change the range?**e** What is a length the worm could be that would *not* change the median?**f** What is a length that would change the median?

Three Cheers for Ears!



Jake pulled a portable CD player from his backpack and settled in for the long bus ride to the science museum. "You're lucky," Sam said as he plunked himself down on the seat beside him. "My mom won't let me listen to music with headphones. She says if it's too loud, it can make you go deaf."

"I sure hope not," said Jake. "My grandpa is losing his hearing. Now he has to wear a hearing aid."

At the museum, Jake and Sam decided to find out if Sam's mom was right. They headed over to the human body exhibit and stood in front of a gigantic model of an ear. A museum guide was explaining how ears help you hear. "That flap on the side of your head is only a part of your whole ear," she said. "Tiny, complicated structures inside your ear do the main job of hearing."

Jake and Sam moved closer to the model. "Hey, look, it says there's a drum," said Sam.

"And a hammer," added Jake.

"That's right," the guide explained. "The eardrum is a thin piece of skin that's stretched tight like a drum. It vibrates or moves very fast when sound waves hit it. These vibrations are carried to three tiny bones called the hammer, anvil, and stirrup. They conduct, or pass, the vibrations to your inner ear, where they are changed into nerve signals and sent to your brain. Your brain makes sense of the sounds you hear."

What Is Hearing Loss?

"What happens when you can't hear?" Jake asked.

"That depends," the guide replied. "If something like wax, for example, gets stuck in your ear canal, it can block sound waves from getting to your eardrum. This type of problem is called conductive hearing loss."

"Ew-w-w! Earwax is gross," said Sam.

"Actually, earwax protects your ears," the guide explained. "It contains special chemicals that fight infections and prevent dust and dirt from getting inside. Plug your ears with your fingers, and you'll know what conductive hearing loss is like."

"The sounds outside are soft, but my own voice sounds really loud," said Sam.

"Has anyone ever had an ear infection?" the guide asked.

Most of the kids nodded.

"Well, an infection can also make you lose your hearing for a while." The guide continued, "If the tube that goes from your middle ear to the back of your throat gets blocked, germs can get trapped inside. Your ear will hurt and feel like it's ready to burst. When the doctor looks with a special flashlight, the eardrum appears red and doesn't move in and out as it should. If you have an ear infection, you may have to take medicine for it. Sometimes doctors have to operate to open up blocked tubes or put in new tubes to keep the middle ear from getting infected."

"*Sensory* (SEN-suh-ree) hearing loss means part of the inner ear is not working. A person may hear some sounds but not others, or sounds may be muffled. Sensory hearing loss can be caused by a number of things. Sometimes the ears don't develop properly before a baby is born. There are also some serious infections that can cause sensory hearing loss in kids. Sensory hearing loss is usually permanent. Kids with sensory hearing loss may need to wear hearing aids."

Did You Know?

Your ears are amazing structures. Here are some fascinating facts about ears and hearing.

- The three bones in your ear that help you hear are the smallest bones in your body.
- The famous composer Ludwig van Beethoven (1770-1827) started to lose his hearing when he was just 26. He wrote some of his greatest music without being able to hear it.

- Hearing tests tell how well your ears work. To take the test, you wear headphones and sit in a special room so you don't hear any stray noise. A machine makes different tones. You listen first with one ear and then the other and raise your hand each time you hear a sound. The tones start loud and get softer and softer until you can't hear them anymore. That tells the doctor how well you can hear.
- Ever wonder why your ears feel funny in a tunnel or on an airplane? There is air both inside and outside your eardrum. To balance the air pressure, you need to let more air into the inside of your ear. Yawning, chewing, swallowing, or blowing your nose until your ears "pop" helps you hear normally again.

Now Hear This

"What about loud music?" Sam wanted to know. "Can that make you lose your hearing?"

"Any kind of loud noise can damage your hearing if it goes on for a while," the guide explained. "If the music is so loud that your ears start hurting or you have to yell to be heard over it, there's a good chance your ears could be injured."

"What if you listen with headphones?" asked Jake. "Sam's mom says they're bad for your ears."

"She's partly right. If someone standing near you can hear music coming through earphones you are wearing, the music is too loud." The guide went on, "Listening to loud noise can cause *tinnitus* (TIN-uh-tus), which is the term for ringing in your ears. If the noise isn't too loud and you don't listen too long, your hearing can return to normal. But you can damage your hearing permanently if the noise is too loud or you are exposed to it too long. That's why construction workers wear ear protection. Their equipment can be extremely loud.

"Using headphones can be dangerous if the volume is too high. Don't crank it up, and you should be fine as long as you give your ears a rest once in a while."

Manifest Destiny

Social Studies Home Learning Activities

Standard Benchmark	History 2b: Students will examine historical materials relating to a particular region, society, or thee; chronologically arrange them, and analyze change over time.
Grade	4
Vocabulary / Key Concepts	<p>Manifest Destiny – the idea that the United States had a God-given right to take over every part of North America. The phrase Manifest Destiny was created in 1845 by a newspaper writer named John L. O’Sullivan.</p> <p>Symbolized – is when one object or thing stands in the place of something else, such as an idea, another object, a person, or a place</p> <p>Louisiana Purchase – an 1803 land deal that involved France selling the Louisiana Territory to the United States. The Louisiana Territory was about 827,000 square feet, and it doubled the size of the United States.</p> <p>War with Mexico / Mexican American War / Invasion of Mexico – lasted just under 2 years from April 25, 1846-February 2, 1848. The War grew out of unresolved border disputes between the Republic of Texas and Mexico after the Texas Annexation by the United States.</p> <p>Annexation – one territory is being merged with another. The territory being annexed is usually the smaller or weaker one, which becomes an inseparable part of the bigger one.</p>

Lesson Title: Manifest Destiny

From SHEG (Part of the Delaware Recommended Curriculum) & Modified by CSD for Home

Materials Needed:

- Sheet of lined paper
- Painting “American Progress” (page 2 in this document)
- Map of the United States, 1872 (page 3 in this document)
- Contemporary Map of the 1816 United States (page 3 in this document)
- 1816 John Melish Map and Comments & Guiding Questions (page 4 in this document)
- “Manifest Destiny” and the Writing of John O’Sullivan (Modified) & Guiding Questions (page 4 & 5 in this document)

CENTRAL HISTORICAL QUESTION: How did Americans justify Westward Expansion?

ACTIVITY 1:

Observe the painting “American Progress” (page 2) and answer the following questions:

1. What do you see in the painting?
2. The floating white woman in the painting is heading West. What do you think she represents? How is this symbolized in the painting?

ACTIVITY 2:

Observe the “Map of United States in 1872” (page 3) – Notice the following:

- By 1872, the United States had already expanded to the Pacific Ocean.
- This is after the Louisiana Purchase and after the War with Mexico.
- So, this painting is basically celebrating *what had already happened*.

ACTIVITY 3:

Observe “Map of United States in 1816” (page 3) – Notice the following:

- But in 1816, the US hadn’t spread that far yet.
- This is before the annexation of Texas and before the Mexican War.

ACTIVITY 4:

Observe “Melish Map, 1816” and answer the question.

- John Melish could have drawn the map of the United States to just include American territory.
- Instead he drew the continent from sea to sea.
- Why do you think he choose to draw the map this way?

ACTIVITY 5:

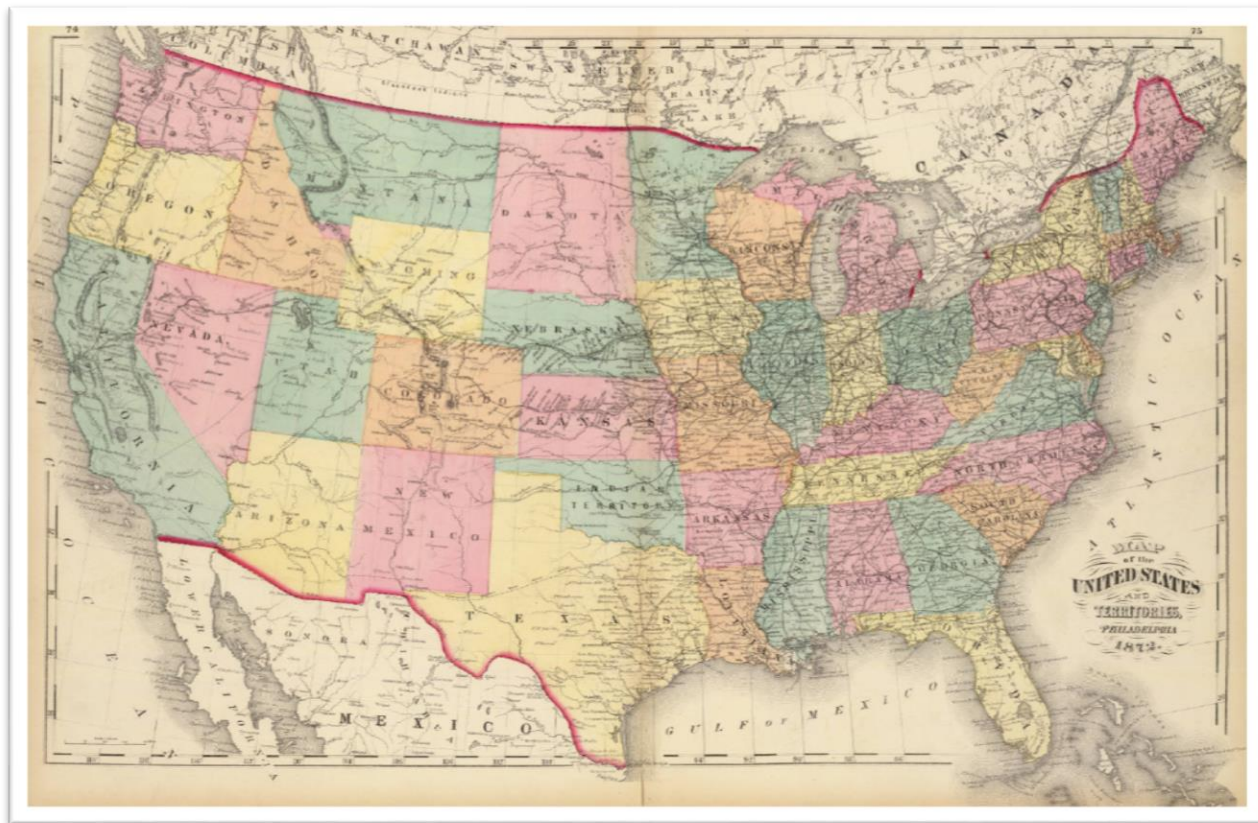
Read Melish’s explanation (page 4) for why he drew the map that way and answer the questions below Melish’s comments.

ACTIVITY 6:

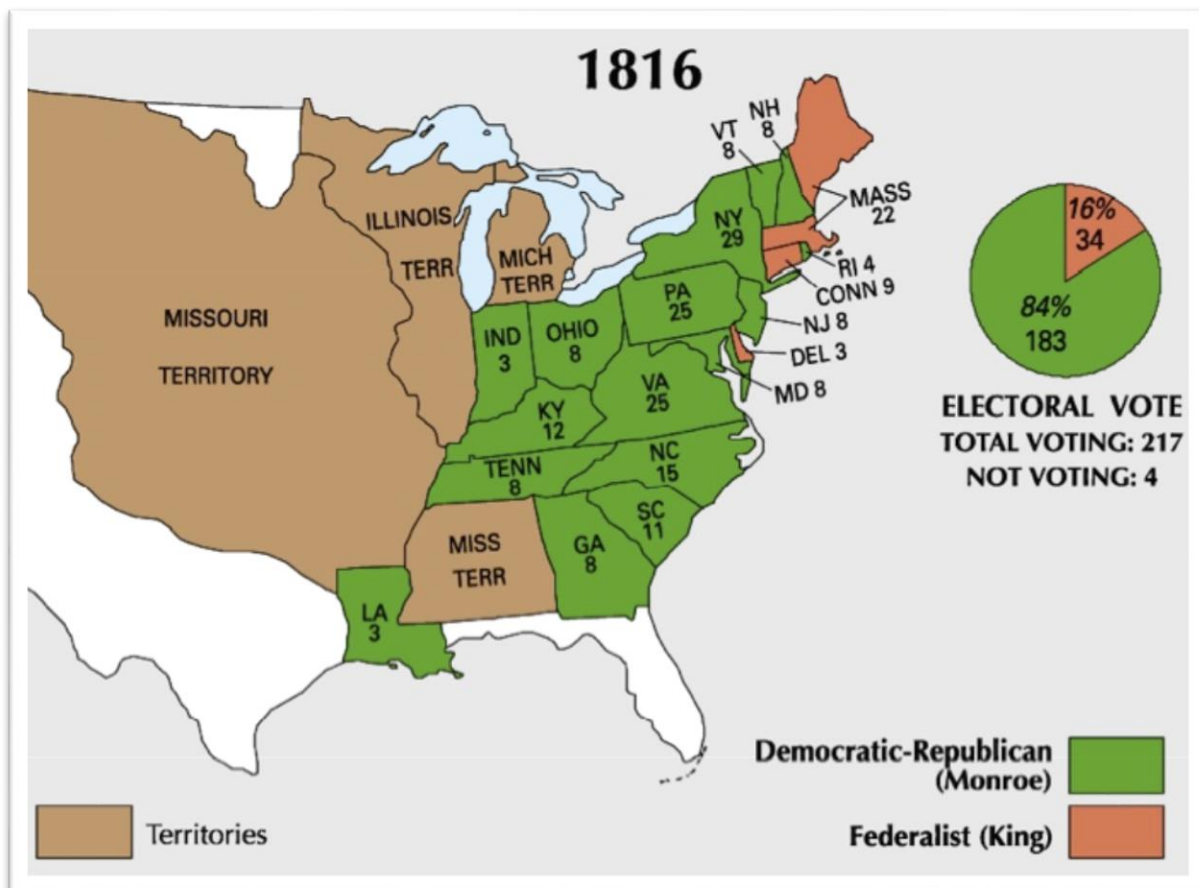
Read “Manifest Destiny and The Writing of John O’Sullivan” (page 4 & 5) and answer the Guiding Questions and the Overarching Questions.

John Gast, *American Progress*, 1872

Map of the United States, 1872



Contemporary Map of the 1816 United States:



1816 John Melish Map



"To present a picture of it was desirable in every point of view. The map so constructed, shows at a glance the whole extent of the United States territory from sea to sea; and in tracing the probable expansion of the human race from east to west, the mind finds an agreeable resting place on its western limits. The view is complete, and leaves nothing to be wished for. It also adds to the beauty and symmetry [balance] of the map; which will, it is confidently believed, be found one of the most useful and ornamental [decorative] works ever executed [created] in this country."

—John Melish, 1816

Guiding Questions for 1816 John Melish Map:

1. According to Melish, why did he decide to draw the map of the United States this way?
2. How does this relate to Manifest Destiny?
3. What do you think of Melish's explanation?
4. What does this say about the power of maps?
5. Do you think Melish would have said that his map is inaccurate?

"Manifest Destiny" and the Writing of John O'Sullivan (Modified)

John O'Sullivan, "The Great Nation of Futurity," 1839.

Our national birth (and the Declaration of Independence) was the beginning of a new history, which separates us from the past and connects us only with the future.

We are the nation of progress, of individual freedom, of universal enfranchisement. Our future history will be to establish on earth the moral dignity and salvation of man -- the undeniable truth and goodness of God. America has been chosen for this mission among all the nations of the world, which are shut out from the life-giving light of truth. Her high example shall put an end to the tyranny of kings, and carry the happy news of peace and good will to millions who now endure an existence hardly better than that of beasts of the field. Who, then, can doubt that our country is destined to be the great nation of the future?

John O'Sullivan, "Annexation," 1845.

It is time now for all opposition to annexation of Texas to stop. . . Texas is now ours. She is no longer to us a mere geographical space. She is no longer to us a mere country on the map....

The time has come for everyone to stop treating Texas as an alien, and to stop thwarting our policy and hampering our power, limiting our greatness and checking the fulfillment of our manifest destiny to overspread the continent allotted by Providence for the free development of our yearly multiplying millions.

Vocabulary

Enfranchisement: the right to vote

Tyranny: cruel and oppressive government

Endure: suffer

Thwarting: opposing

Hampering: slowing down

Allotted: given

Providence: God

Source: John O'Sullivan was a writer and editor of a well-known newspaper around the time of the Mexican-American war. Most people give him the credit for coining the term "Manifest Destiny."

Guiding Questions for "Manifest Destiny" and the Writing of John O'Sullivan (Modified)

John O'Sullivan, "The Great Nation of Futurity," 1839.

1. What does John O'Sullivan think America stands for?
2. What, according to John O'Sullivan, is America's mission?

John O'Sullivan, "Annexation," July 1845.

3. What do you think John O'Sullivan means by "our manifest destiny to overspread the continent allotted by Providence for the free development of our yearly multiplying millions"?
4. Based on these two documents, how did Americans feel about expanding westward?

Overarching Questions:

5. Why did Americans think they were so special?
6. Are you surprised by the reasons that O'Sullivan gives for expansion? Do you think he really believes that God wants Americans to expand?
7. This theory that Americans are special is called "American Exceptionalism." It's this idea that America has had such a unique history and has become so powerful that there's something really special about it.
8. What do you think about this theory?