

# **8<sup>th</sup> Grade, Lewis County Middle School NTI Day 20**

## **Contents:**

- Language Arts
- Math
- Science
- Social Studies

**School Phone: 606-796-6228**

## **Teams:**

**[William.maynard@lewis.kyschools.us](mailto:William.maynard@lewis.kyschools.us)**

**[Julee.howard@lewis.kyschools.us](mailto:Julee.howard@lewis.kyschools.us)**

**[Karen.jones@lewis.kyschools.us](mailto:Karen.jones@lewis.kyschools.us)**

**[John.liles@lewis.kyschools.us](mailto:John.liles@lewis.kyschools.us)**

**[Rick.robinette@lewis.kyschools.us](mailto:Rick.robinette@lewis.kyschools.us)**

**[Alexis.enix@lewis.kyschools.us](mailto:Alexis.enix@lewis.kyschools.us)**

**[Bj.thornsberry@lewis.kyschools.us](mailto:Bj.thornsberry@lewis.kyschools.us)**

**[Chris.bryan@lewis.kyschools.us](mailto:Chris.bryan@lewis.kyschools.us)**



## The Signs of Language -Day 20

By Simon Dario

Read the passage and answer the questions in the left column about each paragraph.

<p><u>In Nicaragua, deaf children made up a brand-new language--their very own sign language.</u> Their story began the early 1980s, when 500 deaf children enrolled in Nicaragua's first school for the deaf. The children came from hearing families scattered throughout Managua, Nicaragua's capital, and they had no language at all--they spoke neither Spanish nor used sign language.</p>	<p>Reread the underlined sentence. This is important to understand the text's central idea.</p> <p><b>Identify the topic</b> (2-3 words) of the passage introduced in the first paragraph.</p>
<p>People usually learn their first language when they are approximately two years old. Deaf children in the United States often learn American Sign Language (ASL) because they learn ASL from their parents. In Nicaragua, however, no one "spoke" sign language until recently. Instead, these children communicated by using mimicas, or gestures. Deaf people use mimicas the same way hearing people might use pantomimes to mimic getting a drink or picking up the telephone.</p>	<p>What are the most important ideas in paragraph 2? Underline facts and other details that help you understand those ideas.</p>
<p>Soon after the school opened, the children began to adopt very specific gestures to get across particular ideas. The new mimicas meant "Line up," "Time for lunch," and "Do you want to play?," for example. Before long, the teachers noticed that the children were communicating among themselves in an unusual way. These deaf schoolchildren were creating a new language, and the number and complexity of the signs were expanding with every passing day.</p>	<p>Each paragraph has an implied central idea that helps develop the central idea of the entire text. In your own words, <b>what is the central idea (1 sentence) of the third paragraph?</b></p>
<p>Over several years, the children developed rules on how to combine the signs. With new signs and rules for putting together sentences, the children made their mimicas into a new language. Today, Nicaraguan Sign Language is still developing and changing as do all languages. Other Nicaraguan schools for deaf children are teaching it, and it is even becoming a written language. Soon, Nicaragua's deaf children will be able to explain to the world how they created a new language!</p>	



**Answer the following questions by highlighting or circling the best answer. Use your hints and your close reading to help you choose the correct answer.**

1. Which sentence would be best to include in a summary of this report? (**Hint:** Which choice restates an important idea \*and\* does not express an opinion or judgement)
  - a. These students' amazing achievement has made life easier for deaf children all over the world.
  - b. Nicaraguan Sign Language has rules for how it is used.
  - c. Someone should have thought of a way to help these children communicate before the 1980s.
  - d. Deaf children in Nicaragua have transformed a simple system of gestures into a complex new language.
  
2. Which of the following choices best summarizes paragraph 2?
  - a. People usually learn their first language when they are children. For example, American deaf children learn to speak sign language. In Nicaragua, there was no language for children to learn.
  - b. By the time their children are about two years old, parents in the U.S. have usually taught them how to speak or sign. Nicaraguan parents did not teach their deaf children any language at all.
  - c. Children usually learn their first language from their parents around age two. Because no sign language existed in Nicaragua, deaf children communicated using gestures, or mimicas.
  - d. It was a challenge for Nicaraguan children to communicate because their parents didn't teach them. They struggled and had to use simple gestures instead of a real language.
  
3. Summarize the report. Include its **central idea** and **three (3) supporting details**. (**Hint:** What is the main point of the passage? Include details that you would need to explain what you read in the passage to a friend)

**Remember to fill the box!**

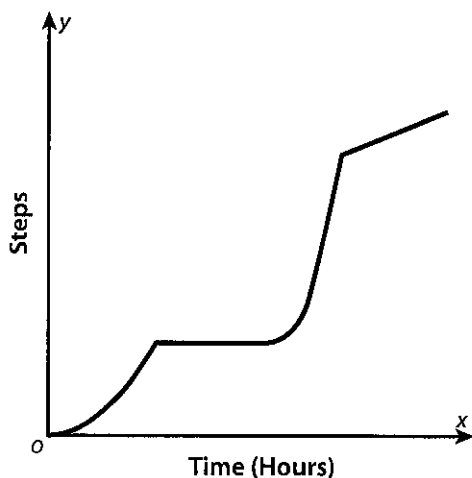
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---



# Using Graphs to Describe Functions Qualitatively

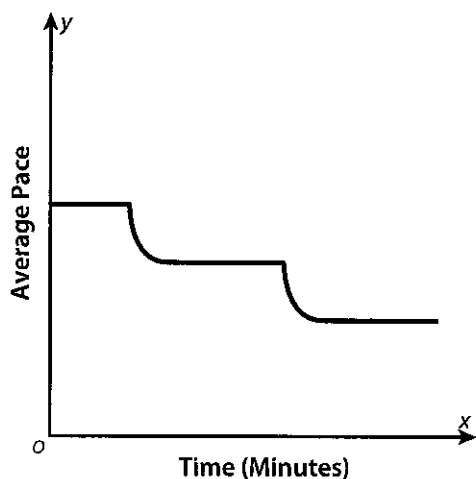
➤ Tell a story that could be represented by the graph shown. #1 is done for you.

1 The graph represents steps taken as a function of time.



A person begins walking, stops for a little while, then walks at a fast rate and finally, continue walking at a slower pace.

2 The graph represents average pace as a function of time.

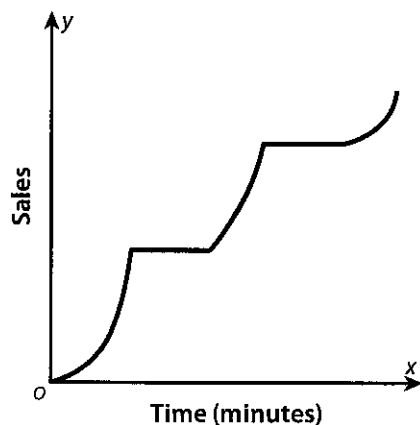




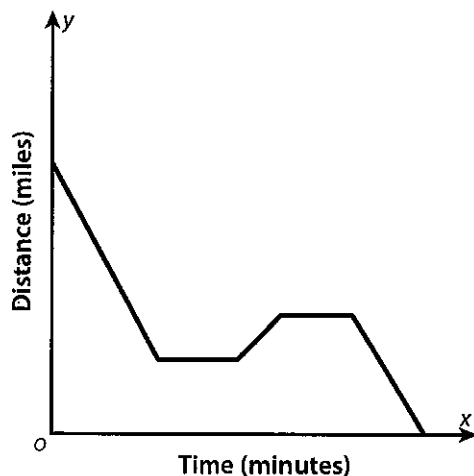


## Using Graphs to Describe Functions Qualitatively *continued*

- 3 The graph shows sales as a function of time.



- 4 The graph shows distance as a function of time.



- 5 For an interval on a graph that shows that a change is happening, explain how the shape of the graph on that interval tells you whether the change is happening gradually or quickly.



MTI 20

# 11.3 Other Patterns of Inheritance

Jones 8th grade

Perhaps it was luck for Mendel (and science) that he happened to use pea plants to discover the principles of heredity. Peas happen to have a number of traits that are determined by just two alleles. Also, for the traits he studied, one allele happened to be dominant and the other recessive. Mendel discovered an important pattern of inheritance and his laws are the foundation of genetics. Since plant and animals have *thousands* of genes, some have patterns of inheritance that are different from the ones Mendel discovered. In this section, you will learn about some of those patterns.

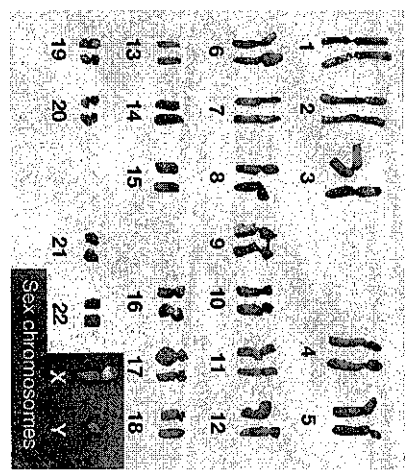
## Male or female?

**Sex chromosomes** Mendel worked with peas that had female and male parts on the same plant. Many organisms, like humans, have separate female and male individuals. In humans, sex is determined by the last pair of chromosomes, called sex chromosomes (Figure 11.13).

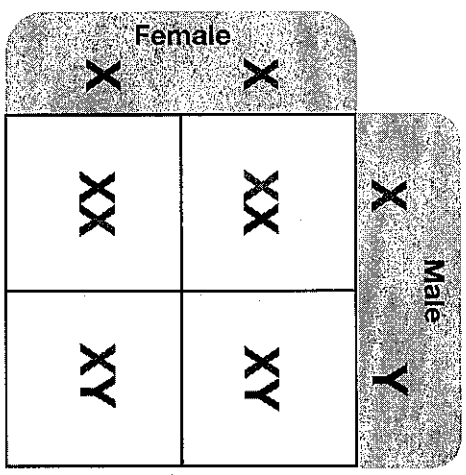
**Sex chromosomes** carry genes that determine whether an individual is female or male.

## Male and female genotypes

The female chromosome is symbolized with an X and the male with a Y. A female has two X chromosomes in her body cells. Her genotype is XX. A male has an X and a Y chromosome in his body cells. His genotype is XY. During meiosis, the sex chromosome pairs separate. Females produce eggs with an X chromosome. Males produce sperm with an X or a Y chromosome. Figure 11.14 shows a punnett square that crosses a male and a female. What are the chances of having a boy or a girl?



**Figure 11.13:** In humans, sex is determined by the last pair of chromosomes. What is the sex of this person?



**Figure 11.14:** A cross between a male and a female.



## Incomplete dominance and codominance

**Pink flowers from red and white!**

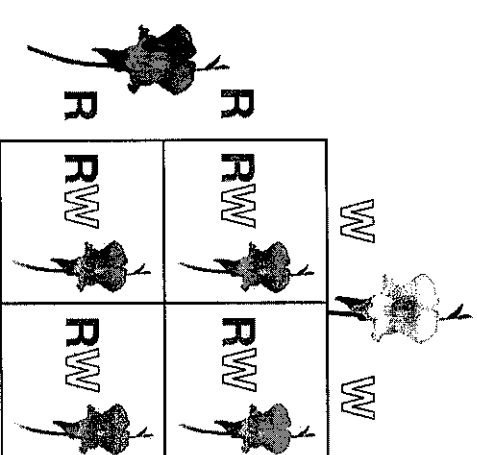
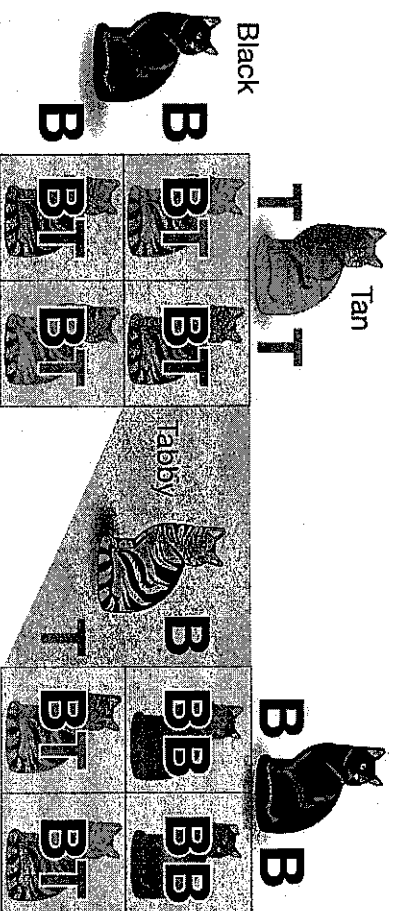
Sometimes one allele isn't completely dominant over the other. If you cross a true-breeding, red-flowered snapdragon ( $RR$ ) with a true-breeding, white-flowered snapdragon ( $WW$ ), you may expect the first generation to have all red flowers. In snapdragons, this does not happen. The first generation has *pink* flowers (Figure 11.15)! When you cross two pink-flowered snapdragons ( $RW$ ), the second generation of plants will have 25% red flowers, 50% pink flowers, and 25% white flowers.

### Incomplete dominance

Flower color in snapdragons is an example of incomplete dominance. In **incomplete dominance**, the phenotypes of the two alleles blend—just like mixing paints. Notice that in Figure 11.15, we use  $R$  for the red allele and  $W$  for white allele instead of upper and lower cases of the same letter.

### Codominance

In **codominance**, an organism that has both alleles of a gene displays *both* phenotypes at the same time. For example, a cross between a black cat ( $BB$ ) and a tan cat ( $TT$ ) results in a tabby cat (black and tan mixed together). Suppose a tabby cat ( $BT$ ) crossed with a black cat ( $BB$ ). What is the probability that one of their kittens would have tabby fur?



**Figure 11.15:** A cross between red-flowered snapdragons and white-flowered snapdragons produces pink-flowered snapdragons. The second generation has red, pink, and white flowers.

### VOCABULARY

**incomplete dominance** - when the phenotype of the two alleles blend.

**codominance** - when an organism that has both alleles of a gene displays both phenotypes at the same time.



## Other patterns of inheritance and environmental factors

### Multiple alleles

So far you have learned about genes that have just two alleles. *Multiple alleles* are also common in organisms. In humans for example, *three* alleles determine blood type (*A*, *B*, and *O*). Each person can have only two of the alleles at one time, but there are three alleles in the human population. If a person inherits a *B* allele from one parent and a *O* allele from the other parent, she will have type *B* blood. The diagram (right) shows the possible genotypes and phenotypes for human blood type.

Parent Alleles	A	B	O
A	AA (Type A)	AB (Type AB)	AO (Type A)
B	AB (Type AB)	BB (Type B)	BO (Type B)
O	AO (Type A)	BO (Type B)	OO (Type O)

### Polygenic traits

Inherited traits that are determined by more than one gene are called **polygenic traits**. Have you ever seen parakeets in a pet store? Feather color in parakeets is determined by two genes. One gene controls yellow color and the other controls blue color.

Figure 11.16 shows the possible genotypes and phenotypes. In humans, eye color and skin color are polygenic traits. The range in skin colors of humans is determined by no less than four genes!

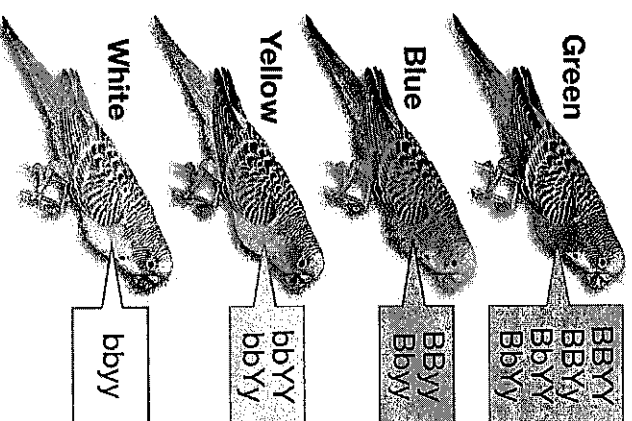
### Environmental factors

Genes aren't the only influence on the traits of an organism. Environmental factors may also influence traits. For instance, in some turtle species, sex is determined by temperature. During the development of the embryo, higher temperature favors the production of males. Human height is determined by genes. But if a person does not get the proper nutrients, he or she may not reach his or her potential height.



### VOCABULARY

**polygenic traits** - traits that are determined by more than one gene.



**Figure 11.16:** Feather color in parakeets is determined by two genes.

### MY JOURNAL

Can you think of other environmental influences on your traits? Make a list of as many influences as you can think of.





Materials

- CPO life science Ebook that is uploaded into google classroom
- 5 question quiz

Task

- Students read pages 226-228 in chapter 11.
- Students complete a 5 question quiz.

Quiz-Section 11.3

1. Eye color and skin color are examples of \_\_\_\_\_
  - a) Probability
  - b) Polygenic traits
  - c) Incomplete Dominance
  - d) Codominance
  - e) Heredity
2. \_\_\_\_\_ is when the phenotypes of two alleles blend together.
  - a) Probability
  - b) Polygenic traits
  - c) Incomplete Dominance
  - d) Codominance
  - e) Heredity
3. The mother determines the sex of the baby in humans.
  - a) True
  - b) False
4. The human blood type AB is an example of \_\_\_\_\_-when an organism shows the phenotypes of two different alleles at the same time.
  - a) Probability
  - b) Polygenic traits
  - c) Incomplete Dominance
  - d) Codominance
  - e) Heredity
5. \_\_\_\_\_ carry genes that determine whether an individual is female or male.
  - a) Alleles
  - b) Genotypes
  - c) Sex chromosomes
  - d) Recessive allele

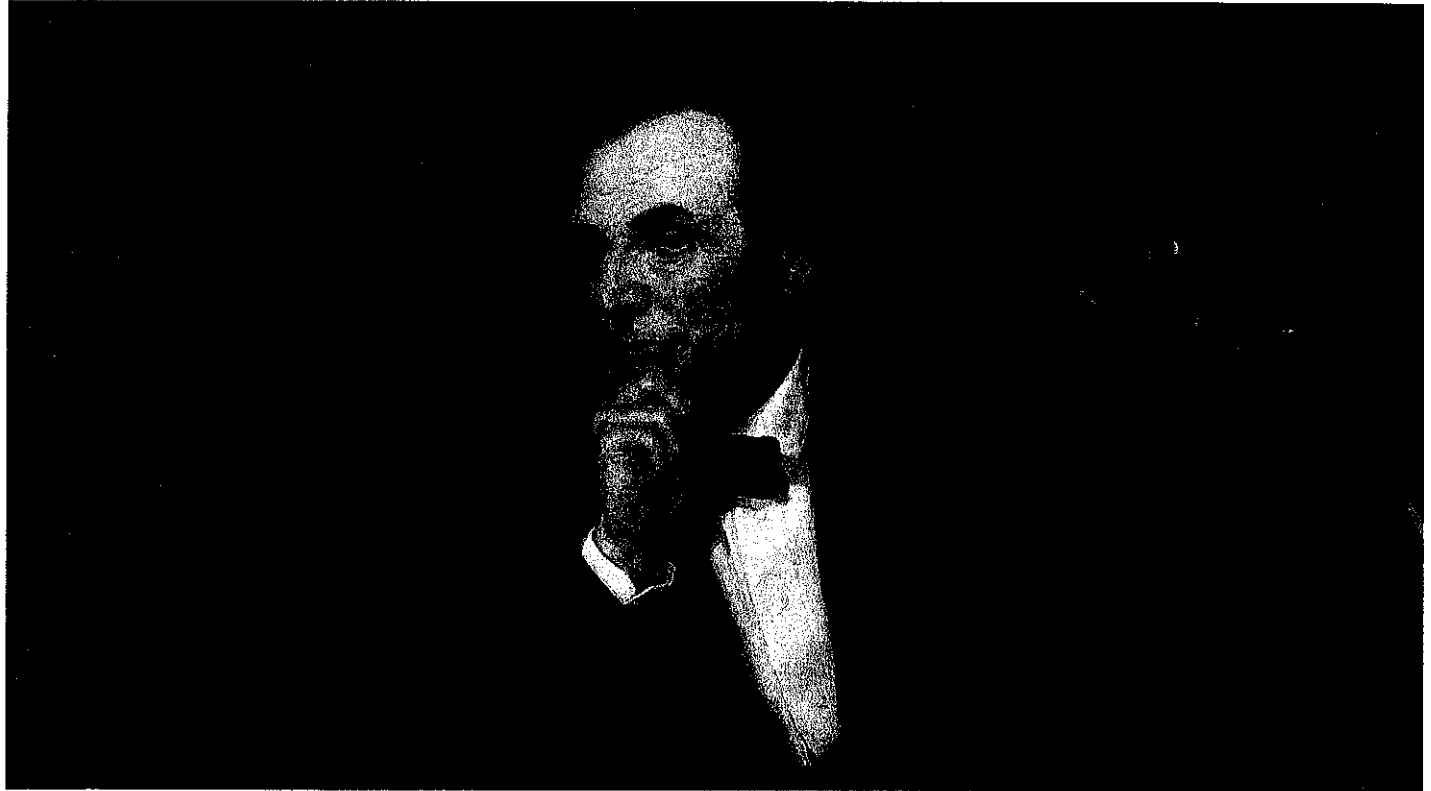


# Presidential Profile: Abraham Lincoln

By White House Historical Association, adapted by Newsela staff on 07.04.13

Word Count 936

Level 1050L



Official White House Portrait George Peter Alexander Healy/White House

In his inaugural address, President Abraham Lincoln warned the South that in their hands rested the question of whether the country entered into a civil war. Lincoln felt that such a war would be catastrophic for the country and asked the Southern states not to secede.

"You have no oath registered in heaven to destroy the government," he said. "I shall have the most solemn one to 'preserve, protect and defend' it."

## Confronted With Secession

Lincoln faced a country divided and on the brink of war. To a large degree, this was because of the question of slavery. The Southern states, whose economies were based on agriculture, wanted to protect their right to own black people as slaves because agriculture requires many workers to be profitable, and slave owners did not want to have to pay workers. The North felt that no person had the right to own another and wanted slavery to be illegal.

At the time of Lincoln's election, the Southern states were considering the possibility of secession, or breaking ties with the United States and forming their own country - the Confederate States of



America. Lincoln thought secession was illegal and was willing to use force, if necessary, to keep the United States as one nation. When the first shots of war were fired at Union troops at Fort Sumter in South Carolina by the Confederate Army, it forced the surrender of the fort. Lincoln then called on the Northern states to send 75,000 volunteer fighters. Four more Southern states joined the Confederacy, but four others allied with the North to remain within the Union.

The Civil War had begun.

### **Struggles Of Early Frontier Life**

The son of a Kentucky frontiersman who had helped settle new parts of the country, Lincoln had to struggle for a living, and to find time to learn and study. He worked on ferryboats, was a store clerk and postmaster. Five months before receiving the Republican Party's nomination for president, he described his early life.

"I was born Feb. 12, 1809, in Hardin County, Kentucky. My parents were both born in Virginia, of undistinguished families," Lincoln said. "My mother, who died in my tenth year, was of a family of the name of Hanks ... My father ... removed from Kentucky to ... Indiana, in my eighth year ... It was a wild region, with many bears and other wild animals still in the woods. There I grew up ... Of course when I came of age I did not know much. Still somehow, I could read, write, and cipher (do arithmetic) ... but that was all."

### **Self-Taught Lawyer**

Lincoln made extraordinary efforts to attain knowledge while working on a farm, splitting rails for fences and keeping store at New Salem, Illinois. His father remarried, and his stepmother encouraged young Abe to read. He was a captain in the Black Hawk War, a brief fight between the United States and Native Americans, that was named for Black Hawk, the Native American leader.

Lincoln studied law on his own and spent eight years as a lawyer, an Illinois congressman, and a traveling judge. His law partner once said of him: "His ambition was a little engine that knew no rest," illustrating how important it was to Lincoln to succeed. In 1842, Lincoln married Mary Todd and they had four boys, only one of whom lived to adulthood.

### **Presenting The Emancipation Proclamation**

In 1858, Lincoln ran against Stephen A. Douglas for senator of Illinois. He lost the election, but in debating with Douglas he gained a national reputation that made possible his nomination for president in 1860.

As 16th president, Lincoln united most of the Northern Democrats to the Union cause. On Jan. 1, 1863, he issued the Emancipation Proclamation that declared forever free those slaves within the Confederacy.

Lincoln would not let the world forget that the Civil War involved the even larger issues of freedom and democracy. This he stated most movingly in dedicating the military cemetery in Gettysburg, Pennsylvania, in his famous Gettysburg Address. He said "we here highly resolve that these dead shall not have died in vain. That this nation, under God, shall have a new birth of freedom and that government of the people, by the people, for the people, shall not perish from the Earth."



## **Re-Election And War Victory**

Lincoln won re-election in 1864, as Union military triumphs heralded an end to the war.

In his planning for peace, the president was flexible and generous, encouraging Southerners to lay down their arms and join speedily in reunion.

The spirit that guided Lincoln was clear in his second inaugural address, now inscribed on one wall of the Lincoln Memorial, a monument built in his honor in Washington, D.C.

He said: "With malice toward none; with charity for all; with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in; to bind up the nation's wounds ..."

## **Assassination Of The President**

On Friday, April 14, 1865, Lincoln and his wife were watching a play at Ford's Theatre in Washington, D.C., when John Wilkes Booth, an actor and Confederate sympathizer, burst into the president's box and shot him point-blank. Lincoln died the next morning.

Booth was convinced he was helping his beloved South. The opposite was the result, for with Lincoln's assassination, the possibility of an easy peace between the North and the South was lost.

*Adapted from the Presidents of the United States of America, 18th edition, published by the White House Historical Association, 2009.*





## Quiz

Social Studies  
Day 20

- 1 Which section highlights the idea that an early election loss still helped further Lincoln's political career?
  - (A) "Confronted With Secession"
  - (B) "Self-Taught Lawyer"
  - (C) "Presenting The Emancipation Proclamation"
  - (D) "Re-Election And War Victory"
  
- 2 Which piece of evidence BEST explains the cause of the Civil War?
  - (A) In his inaugural address, President Abraham Lincoln warned the South that in their hands rested the question of whether the country entered into a civil war.
  - (B) The North felt that no person had the right to own another and wanted slavery to be illegal.
  - (C) When the first shots of war were fired at Union troops at Fort Sumter in South Carolina by the Confederate Army, it forced the surrender of the fort.
  - (D) On Friday, April 14, 1865, Lincoln and his wife were watching a play at Ford's Theatre in Washington, D.C., when John Wilkes Booth, an actor and Confederate sympathizer, burst into the president's box and shot him point-blank.
  
- 3 Which of the following MOST influenced John Wilkes Booth's decision to assassinate the president?
  - (A) Lincoln's treatment of Southerners following the war
  - (B) Lincoln's view of fallen soldiers in the Gettysburg Address
  - (C) the South's loss to the North in the Black Hawk War
  - (D) the North's victory over the South in the Civil War
  
- 4 Which of the following choices BEST describes President Lincoln's reaction to the South's threat of secession?
  - (A) He was sympathetic to both causes but was unwilling to choose sides.
  - (B) He was pleased that the nation would have a chance to settle its differences.
  - (C) He was willing but not eager to fight to preserve unity.
  - (D) He was convinced that a civil war was unavoidable.

