

Statistics in the Civil War
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Overview

This curriculum unit will be about statistics in the Civil War. It will involve students using different research tools such as a library and the web to find these statistics. Students will also be reading and writing about the Civil War. Students will use information they found from the web to compare themselves to people of that time period.

Students will also be writing questions and answers based on our primary source, the book, The Nation Divides. Students will create graphs and tables from the statistics they collected. Students will also use a Venn diagram to compare two things. Anything from how many white males vs. black males were living at the time.

Students will have a culminating activity of creating and playing the Math Mania game, a game similar to Jeopardy. This is where the students will answer questions relating to the Civil War. The students will have to keep track of their score and at the end of the game there will be only one winner.

Rationale

I am a middle school mathematics teacher in the Pittsburgh Public Schools. My rationale for writing this curriculum unit is to introduce my students to the importance of Mathematics. Students do not realize that Mathematics is all around them. I decided when I began this seminar that I would focus on the Civil War. I myself have been interested in the Civil War for quite some time. One of my best friend's husband, Bill, was a History major.

I decided to accompany them on a weekend trip to Gettysburg a few years ago. He, being a history major, was fascinated. This was not his first trip to Gettysburg. Bill was so

excited to tell me all he knew as we walked through the battlefields. Seeing how interested Bill was about Gettysburg really got me excited as well. This is how I became interested in the Civil War. I would like to pass this interest on to my students.

My students do not see the importance of Math beyond the classroom. I feel that this would be an interesting opportunity for my students to see Math in a different place, in history. Also I felt this would be a great opportunity to collaborate with the Communications teacher. This would also allow the students to use the research skills they learned in communications class. Also the students can use their organizational skills to organize the data they collect.

Students would get a chance to learn more in-depth about the Civil War. The Civil War began on April 12, 1861. It began when a canon was shot on Fort Sumter by the Confederacy. At the time only 128 men from the Union were stationed at Fort Sumter while about 6,000 Confederate soldiers occupied Fort Moultrie, Fort Johnson, and other military positions. At 4:30am that fateful morning the Confederates shot on Fort Sumter with a canon. The Union soldiers did not respond until 7:00am. At 1:30pm on April 13, 1861, Major Anderson of Fort Sumter raised a white bed sheet after 33 hours and 3,341 shells on the Fort had been fired. No one had been seriously wounded or killed.

Objectives

In this curriculum unit the students will be expected to think mathematically about the Civil War. Students will be expected to do research on the Civil War. I also want the students to think about why the Civil War started. The students will use effective research skills to find information on the Civil War.

Students will have to find statistical information on the Civil War. Students will also have to evaluate data collected from various websites and books. Students will also have to create graphs and interpret them. Students will also be able to understand why the Civil War happened. Students will also be able to understand the importance of the Civil War and how it affected our United States History.

Strategies

One of the strategies I would use while teaching this curriculum unit is questioning the author. This is when you ask probing questions while reading a book. Another strategy that I will use is the KWL chart. KWL stands for: Know, Want to Know, and Learn. We would also use brainstorming.

Another strategy I would use is research. Students will use their knowledge of completing a research paper to help them complete their presentation. Students will also use their knowledge of mathematics to only use the information they need for their presentation.

Classroom Activities

Lesson 1

Since I am a Mathematics teacher I would begin the discussion with how Mathematics is found everywhere, including History. I would then begin my lesson by asking the students what they know about the Civil War. I would then give the students a KWL chart. (Handout #1) A KWL chart stands for: Know, Want to Know, and Learn. I would be using an overhead projector to fill in the Know column. I would then instruct the students to fill in the Know column with what we already know. The class would then brainstorm ideas on what we Want to Know. and then fill it in on the KWL chart. We would then begin reading the book The Nation Divides: The Civil War (1820-1880) by Richard Steins. We would read the Introduction and Chapter 1. I would use the strategy of questioning the author while reading. Questioning the author is when you ask probing questions while reading. This lesson would take one class period.

Lesson 2

I would begin the lesson by reminding the students of our previous lesson. We would then read Chapter 2 and Chapter 3. I would continue to use the strategy of questioning the author. This lesson would take one class period.

Lesson 3

We would finish the book The Nation Divides by reading Chapter 4. I would continue use the strategy of questioning the author. I would then go back to the KWL chart and ask the students if we can fill in the Learn column. Students will say what they learned so far but we can not finish because there is much more to learn. This lesson will take one class period.

Lesson 4

The students would meet in the computer lab. I would discuss with the students the importance of the internet as a research tool. I would also discuss with the students that they need to be careful to go to websites that are reliable. We would discuss what kinds of websites are reliable such as: .org, .gov. and .edu. I would then tell the students that we would only be using one specific website: <http://valley.vcdh.virginia.edu/>. This website compares two different counties during the time period surrounding the Civil War. These two counties are: Augusta County, VA and Franklin County, PA. I would then tell the students what we are looking for, statistics. The students would spend this class period exploring the website. This lesson would take one class period.

Lesson 5

The students would return to the website: <http://valley.vcdh.virginia.edu/> and look specifically for census records. Students will be able to find details on: whites vs. blacks, males vs. females, and, Augusta County, VA vs. Franklin County, PA. The students can also use a Venn Diagram to compare these two things (Handout #2). Students can refine their search by spending some time on this site and putting in different criteria to get different statistics. For example, if a student were only interested in finding out how many black males there were in Augusta County during 1860 this website would give them this information. Students will also be able to spend some time looking at the site to see if they can find their last name on the site. This lesson will take one class period.

Lesson 6

The students will meet in the school library. I will discuss with the students the importance of using the library as a research tool. I will use myself as an example, how I used various libraries to help me in my research for this curriculum unit. I will then introduce the students to their assignment.

The presentation must be on statistics. Students will have one week to create a presentation. The students are to create a project on all of their research findings. I will then tell the students that they must use at least two books in their research for their presentation. They must also use the research they found from the web. The students can choose any topic within the Civil War as long as they can find statistics to back up their findings. The students will present their findings to the class. The students will do this by creating an oral presentation as well as displaying their findings on a poster. The poster must include at least one table, one graph, and their paper. The students will have two class periods to compile this information. They will create their oral presentations on their own time at home and we will spend two to three class periods refining their presentations. We will then take two class periods to present this information. It would be two class periods per room.

Lesson 7

The students will return to the classroom with the statistics they collected from the computer lab. Students would then create tables and graphs from these statistics. For example, students can go to the census page and find out: how many white males there were in Franklin County in 1860 vs. white males in Augusta County in 1860. Students can also compare statistics from 1860 to statistics from 1870. This lesson will take one to two class periods.

Lesson 8

Students will use the information on the website <http://valley.vcdh.virginia.edu/> to look up letters and diaries. They will pick a county and then they will pick a person and read through their letters or diary (Handout #3). They will then compare these letters or diary to what they write to each other through instant messaging and text messaging. Students will write a short essay on their findings, comparing their life with the life of this one individual. This lesson will take two class periods.

Lesson 9

Students will use statistics from Handout #4 to make comparisons. Students will first make two graphs comparing population in the North and South from 1850. Students will then make graphs to display the population by region from 1830-1900. Students will display their graphs through out the hall as part of our Civil War Unit.

Lesson 10

Students will use the information from Handout #5 to make tables and graphs of specific artillery. Students will compare the different sizes of The Columbiad, and the Parrott Heavy Rifles. Students will create tables and graphs displaying this information. They will hang out in the hall with the other work from our unit.

Lesson 11

Students will read as a class the book-Across Five Aprils by Irene Hunt. This book tells of the Civil War from the view point of the author's Grandfather. The book was written from different stories the author was told by her Grandfather. See Handout #6. Students will read the book as a class and as they are reading complete the activity from Handout #7.

Lesson 12

Students will use the book we read The Nation Divides by Richard Steins as a primary source of information for this activity. Students will create questions and write their answers on note cards. These note cards will be used with the 6th grade class as part of the Math Mania game. Math Mania is a game similar to Jeopardy. Students will be split into teams and the teams will answer the questions and keep track of their score. At the end of the game the team with the greatest score is the winner. Both 6th grade classes will play the game. The team that wins from each class will pick their best player. These students will compete in the school auditorium for both sixth grades to see.

Appendices

Student Handouts

Handout #1- KWL Chart

Handout #2- Venn Diagram

Handout #3- Sample excerpt of a diary (Anna Mellinger)

Handout #4-Charts on Statistics

Handout #5- Copies of the book-Cannons, An Introduction to Civil War Artillery

Handout #6- Copy of the Author's note from the book-Across Five Aprils

Handout #7- Pre-reading Activity-Major Battles of the Civil War

Annotated Bibliography

Steins, Richard. The Nation Divides: The Civil War (1820-1880). Twenty-First Century Books. 1993.

Mr. Steins discusses four main ideas in his book. Slavery, Pre-war, During the war, and Post war. Mr. Steins' book is an easy read and also gives first hand accounts of these ideas.

Kent, Zachary. The Civil War "A House Divided". Enslow Publishers, Inc. 1994. Mr. Kent discusses everything from the war's first days to the aftermath.

<http://valley.vcdh.virginia.edu/>. This website is titled The Valley of the Shadow. This website gives information from 1860 to 1870. It has census information as well as a reference library. There are also photographs and you can also find specific soldiers.

Standards

Reading, Writing, Speaking, and Listening

1. All students use effective research and information management skills, including locating primary and secondary sources of information with traditional and emerging library technologies.
2. All students read and use a variety of methods to make sense of various kinds of complex texts.
3. All students respond orally and in writing to information and ideas gained by reading narrative and informational texts and use the information and ideas to make decisions and solve problems.
4. All students write for a variety of purposes, including to narrate, inform, and persuade, in all subject areas.
6. All students exchange information orally, including understanding and giving spoken instructions, asking and answering questions appropriately, and promoting effective group communications.
8. All students compose and make oral presentations for each academic area of study that are designed to persuade, inform, or describe.

Mathematics

1. All students use numbers, number systems, and equivalent forms to represent theoretical and practical situations.
6. All students evaluate, infer, and draw appropriate conclusions from charts, tables, and graphs, showing the relationship between data and real-world situations.
7. All students make decisions and predictions based upon the collection, organization, analysis, and interpretation of statistical data and the application of probability.

Citizenship

1. All students demonstrate an understanding of major events, cultures, groups, and individuals in the historical development of Pennsylvania, the United States, and other

nations, and describe the patterns of historical development.

4. All students examine and evaluate problems facing citizens in their communities, state, nation, and world by incorporating concepts and methods of inquiry of the various social sciences.

8. All students demonstrate that they can work effectively with others.

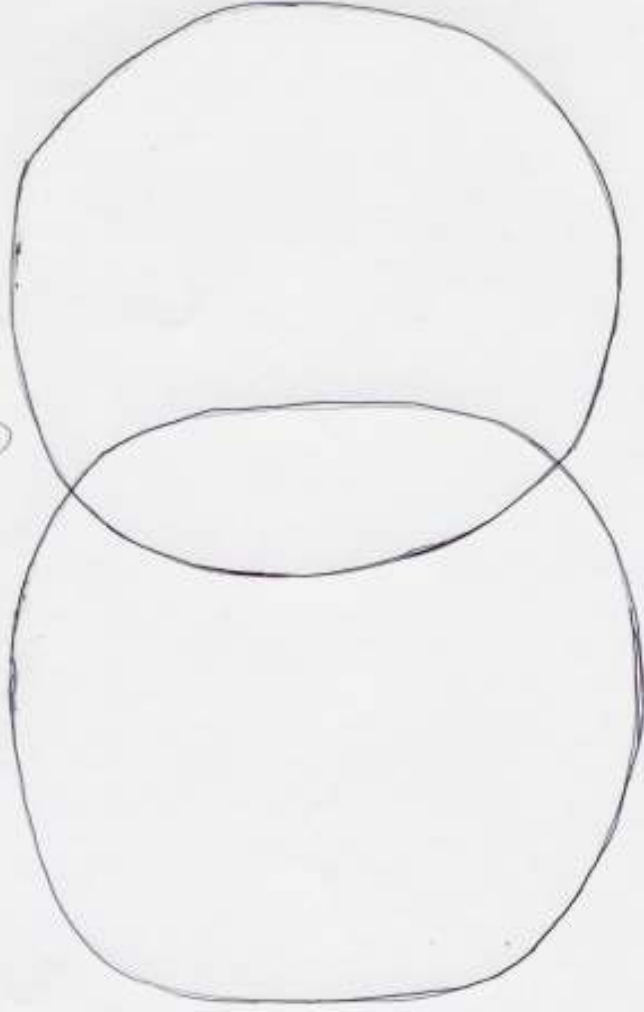
Name _____ Date _____

KWL WORKSHEET

K What I know	W What I want to find out	L What I learned and still need to learn

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Venn Diagram



Handout #2

THE
VALLEY
OF THE
S H A D O W

Franklin County: Diary of Anna Mellinger (1864)

[View the entire work \(255 KB\)](#)

1857

May 1857

May th 9 1857

we left home for West
we took our horse and Carriage to Peter Mellingers the first day then we took the car for Macanicsburg
we Staid all Night at Brother Landis on Saterdag night Sunday we went to Christ Bucks [Book] eat
Dinner in the Evening from there went to David Bucks [Book] Eat Supper on Sunday Evening went to
to Brother Diedrichs [Steiner]

On Monday Morning th 12 Day of May we left Die'h for Mechanicsburgh we Stopt at Sisters
[unclear: Neweummers] Eat Supper at Six OClock thirty minutes for Herrisburg Staid alnight we left
the next morning at four OClock we eat breakfast in Altonia [Altuns] in the Evening we landed in
Wostart [Wooster Ohio] at nine O Clock in the evening took lodging there

On the 13th Day of May we hired a hack to Smithvile
Wayne Co. took Dinner at Friend Brenners in the afternoon Brenner took us to Brother Stootsmans

On the 14 there was Evening Meeting at Brother Stootsman

on the 15 they took us to Wooster from there to Mansfiel [Mansfield] from there to Lexington
from ther to Brother Bars from there to Brother Ernst Minister from there to Brother Knowers
Morro County
Mount Gilliad seat of the Co. of Ohio

May th 17 Sunday

there was Meeting in the Meeting house after meeting we went to Brother Hilts from there to
Brother Strawbridges from there Sister Elys from there to Brother Lantz from there to Brother Bairs
Mansfield

May 19th

we left Bare, they took us to Brother Stoner near [Spring] Mansfield thers was Evening Meeting
from there we went [to] Mansfield Richland Co. Ohio from there to Osborn Green County from there to
Brother Kaufmans in Clark Co. Ohio then to Bro Clines then to Bro Wylands then to Bro Openlanders
then to B Broseys then to Bro [unclear: Rohrar] then to Bro John Harnish Minister then to a Sister from
there [to] Bro Abraham Harnish then to Bro Shafers then back to Openlanders again we were all night

<http://etext.lib.virginia.edu/etcbin/toccer-valley?id=FD1011&data=/texts/english/civilwar/...> 4/24/2006

there

24th was Meeting in the Meeting house at Midway

May 25th

we left the Members in that Naighbourhood for Porter Co. State of Indiana then they took us Osborn and took the Cars to Dayton to Leffette then to Westville from there to Bro Longs Porter Cothen to Bro Burss then to Bro Millers from there to Preaching in School house from meeting to Bro Summers in the afternoon was an Examination at Bro Fairmans

on the 28 was Preaching at Bro Summers in the afternoon we left our membe[rs] in that part

On the 29 Day of May we left our Members for Illinois

on the 30 Day of May we left Porter Co. for Illinois Henry City for John Stoner Deep River

June 1857

June th 1st

we left Henry City or Brother Johns family we left Henry at noon [we left] for Lescell then to Dixson from Dixson to Sterling landed at Abraham Landis III Whitesite Co.

June 3^d

We left Landis for Emanuel Landis Widow she had Sale she had Sale that Day then we went to Bro Weavers all night

4th

to Sister [unclear: Monia] Landis from thers we went to Evening Preaching from there back to Weavers again

June 5th

we left Weavers went to Bro Hendricks at Elk Crick then to the Widow Susan Landis then to Bro Delps then to Old Sister Hendricks in Sterling there was Preaching

On Saturday the 6 in the Evening we went to Ann Landis the Widow

On Sunday the 7 was Preacher at Brother Shultz in the Evening we went to Sterling again to Sister Hendricks over night

On Monday Morning the 8th we went [to] Bro Hages at nine o clock AM we left the members in that place for New York State

On the 9th Day of June at 4 oclock PM / *about 9 oclock in the Evening* / we arrived in Bufolo then we hired a hack that took us to Brother Ri/ *o* / sts we landed there at nine oclock that Evening

on the 11th Brother Riest took us to Buffalo we took the ferry boat across the River to Canada we went to Bro Augensteins first then to Jessa Morningstas then to Old Morningstars there was Evening Meeting in a school house we went to Jesse Morningstars and staid all night

Next day Saturdayhe took us to the Black Crick there the Examination was on Sunday the Breaking of Bread was in there Meeling house on Saturday we went home with Bro & Sister Bardon

next day Sunday after meeting we went home with Bro Beems

in the morning on Monday Bro Beam took us to the ferry then left / *for* / New York State

June th 15

that Evening was Preaching in the Williamsville meeting house
on the 15 at two oclock PM was meeting Bro Miller fetched us from the ferry we eat Dinner there he took us to the meeting after meeting went home with Bro Longs this was on the 15 / *on th to we u* / in the Evening after Supper we went / *we* / to Preaching and after Preaching we went home with old Sister Miller

on the 16th in the Morning Bro Knous took us to Reasers then they took us to Lancaster New York State we eat dinner at Reasers & Supper at Knous

On the 16 in the Evening at Six Oclock we left the Members in that place for good old Penn on the 18 we arived at Peter Mellinger & on the 19 we come to our Respective home s/ *o* / ect home
Anna Mellinger

Handout #4

Civil War Era Statistics

Population by Year and Region, 1830-1900 (in thousands)

Year	Northeast	North Central	South	West
1830	5,542	1,610	5,708	—
1840	6,761	3,352	6,951	—
1850	8,627	5,404	8,985	179
1860	10,594	9,097	11,133	619
1870	12,299	12,981	12,288	991
1880	14,507	17,364	16,517	1,801
1890	17,407	22,410	20,028	3,154
1900	21,047	26,333	24,524	4,309

Population in Northern and Southern Cities—1850

Population of Northern Cities in 1850		Population of Southern Cities in 1850	
New York, NY	696,115	New Orleans, LA	116,375
Boston, MA	136,881	Louisville, KY	43,194
Philadelphia, PA	121,376	Richmond, VA	27,570
Cincinnati, OH	115,435	Mobile, AL	20,515
Pittsburgh, PA	46,601	Norfolk, VA	14,326
Buffalo, NY	42,261	Nashville, TN	10,165
Newark, NJ	38,894	Columbus, GA	9,621
Rochester, NY	36,403	Memphis, TN	8,841
Chicago, IL	29,963	Montgomery, AL	8,728
Detroit, MI	21,019	Lexington, KY	8,159
Milwaukee, WI	20,061	Raleigh, NC	4,518
Columbus, OH	17,882	Atlanta, GA	2,572

Source: Bureau of the Census, U.S. Dept. of Commerce

PARROTT HEAVY RIFLES, SEACOAST

The 100-pounder (6.4-inch), the 200-pounder (8-inch), and the 300-pounder (10-inch) were the largest Parrott rifles produced at the West Point Foundry. On land, the 100-pounder was mounted on an iron carriage in seacoast fortifications, or in prepared siege positions. The Navy used quite a few 6.4- and 8-inch Parrotts at sea, but all three sizes had a bad habit of bursting. The famous "Swamp Angel" in the Marsh Battery behind Morris Island, S. C., was an 8-inch rifle that burst at its 36th round.

	6.4-inch	8-inch	10-inch
Bore Diameter	6.4"	8.0"	10.0"
Tube Material	Iron	Iron	Iron
Length of Tube	151'	159'	173'
Weight of Tube	9,700 lbs.	16,300 lbs.	26,500 lbs.
Weight of Projectile	100 lbs.	175 lbs.	250 lbs.
Powder Charge	10 lbs.	16 lbs.	25 lbs.
Range at 5° Elevation	Maximum ranges in excess of 5,000 yards, although the 10-inch was not tried.		



Samuel Archibald

Battery No. 1 before Yorktown, Va., 1862 -- 100-pounder (6.4-inch) Parrott rifles mounted on wrought iron, front pintle, barbette carriages. Note the quoin for elevating the tubes.

COLUMBIADS

The Columbiad was introduced to the United States service in 1811. Originally chambered, it combined features of the gun, howitzer, and mortar, and was our primary seacoast defense for many years. These smooth-bores used during the Civil War were principally of the following types:

1. Model of 1844 — 8-inch and 10-inch. (Some of these were rifled and banded for added strength by the Confederates.)
2. Model of 1858 — 8-inch and 10-inch.
3. Model of 1861, "Rodman" Columbiad — 8-inch, 10-inch, and 15-inch. (One 20-inch was cast in 1864.)
4. Confederate copies of the "Rodman" — 8-inch and 10-inch.

The "Rodman" Columbiad was developed before the war by U. S. Ordnance Lieutenant (later Major) Thomas J. Rodman. The cast iron was poured into the mould around a water-cooled core, and simply this was the reason for their great strength. The "Rodman" is distinguished by its clean lines and notched, flat breech. Most U. S. Rodmans were mounted on iron carriages, while C. S. Rodmans are seen in contemporary photographs on wooden carriages. In defense of Northern cities and ports, it is probable that no 15-inch Rodmans ever fired a shot in anger.

	8-inch	10-inch	15-inch
Bore Diameter	8.0"	10.0"	15.0"
Tube Material	Iron	Iron	Iron
Length of Tube	124"	126"	190"
Weight of Tube	9,210 lbs.	15,400 lbs.	50,000 lbs.
Weight of Shot	65 lbs.	128 lbs.	428 lbs.
Powder Charge	10 lbs.	18 lbs.	40 lbs.
Range at 5° Elevation	1,800 yds.	1,800 yds.	*

* At 25° Elevation with 300-pound shell and 50 pounds powder — 4,680 yards.



A battery of 10-inch "Rodman" Columbiads at Fortress Monroe, Va., 1863, mounted on wrought iron, center pivot, barbettes carriages. The large cylinder attached to the rear of the first carriage may be an experimental apparatus to measure or lessen recoil.

Author's Note

The accounts of battles and the historical background of ACROSS FIVE APRILS are drawn from research in many books, periodicals and other sources of information. As to the story of the Creightons, there is hardly a page in this book in which a situation has not been suggested by family letters and records and by the stories told by my grandfather. He was a boy of nine at the beginning of the Civil War, and by the time his grandchildren knew him, most of his days were spent in reliving the war years, in which the great struggle sharply touched him and every member of his family. He was a good storyteller, and he gave his listeners a wealth of detail that enabled us to share with him the anxiety and sorrow of the times as well as the moments of happiness in a cloudy but family.

There are many questions that I should like to have asked my grandfather as I wrote ACROSS FIVE APRILS. For example, I was unable to name the exact date of the story's opening because I could not determine how long it would have taken

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for news of the firing on Fort Sumter to reach the farm in southern Illinois. Again, I was not sure just how broad was baked in the ashes of the fireplace: I only know that my Grandfather remembered it, that bread was the "secretest" he ever tasted. Then there in the little song that I have called "Seven Stars" for lack of any known title. I have heard my grandfather sing it many times, and I sing it myself, yet the words never have any real meaning for me. I have never seen the words written, so I have spelled them as they sounded. I must admit I do not know what the "rambeau" is. I wish I knew what the words really meant; I think, however, that even Grandfather would have been unable to tell me.

It would indeed be good to have been able to ask the many questions that came to mind during the days of research and writing; it would be better still to be able to thank my grandfather for the memories he shared with us. This book is dedicated to his great-grandchildren, but the story is his.

I. H.

About the Author

JERENE HUNT is the author of many distinguished books for young people. Her first novel, *Across Five Aprils*, won a Newbery Honor Book and received a Lewis Carroll Shelf Award. For her second novel, *Up a Road Slowly*, Ms. Hunt was awarded the Newbery Medal. Ms. Hunt was born in southern Illinois and has received degrees from the University of Illinois and the University of Minnesota. She has done advanced graduate work in psychology at the University of Colorado. For many years she taught in the public schools of northern Illinois, and later she taught psychology at the University of South Dakota. Ms. Hunt now lives in Florida.

Pre-Reading Activity

Major Battles of the Civil War

The firing on Fort Sumter marked the beginning of the war. This and the other battles listed below are discussed in *Across Five Aprils*. As you read about each in the story, write down a few facts related to the battle. Include when the battle occurred, which side won, the generals in charge, and other important facts.



Location of Battle

1. Fort Sumter
2. Bull Run
3. Pittsburg Landing
4. Antietam Creek
5. Fredericksburg
6. Chancellorsville
7. Gettysburg
8. Vicksburg
9. Chattanooga
10. Atlanta

Important Facts