

Lewis and Clark Rebus

Judith Gardner • Floris Elementary School Fairfax County Public Schools

Objective:

To introduce Lewis and Clark's expedition, to familiarize them with some of the goals of the Corps of Discovery.

Materials:

- Stamps associated with animals Lewis & Clark might have seen, Indian stamps, maps, Jefferson (reproduce on overhead or Power Point)
- Stamps for students
- Lewis & Clark pamphlet
- Rebus worksheet

Procedure:

- 1. Display Jefferson stamps and discuss Jefferson's role.
- 2. Display Lewis & Clark stamps discuss people involved.
- 3. Discuss reasons for expedition.
 - a. Catalog plants & animals.
 - b. Map area.
 - c. Contact with Indians.
- 4. Show stamp of Indian and animal stamps.
- 5. Give students cache of stamps and rebus worksheet. Students choose stamps to fill in story.

Evaluation: Rebus story

Extra: Worksheet Internet activity www.pbs.org/lewisandclark — developed by teacher from information on site. Follow by doing interactive activity at the end of the site.

Several sample lessons plans are included to demonstrate how you can use stamps in the classroom — language arts, geography, history, science, math, and the arts. Stamps provide an additional, unique, visual tool to engage the students in the day's lesson. For more information and ideas, go to www.stamps.org, the American Philatelic Society's website, or e-mail ysca@stamps.org.

Lewis and Clark

The third president of the United States		Jefferson		sent Lewis and Clark to			М	lap		the land bought from France.		
The Corps of Discovery was sent to catalog Plant and									l	Animal		
such as	Animal or plant		Animal (Anin pla			4		Animal or plant		
They traveled by Transportation and								d	Transportation			
Along the way, they interacted with more than 500 The people who were part of the Corp were represented by									tri	tribes.		
	Military		Slave		We	oodsman	and a			Dog		



Lewis and Clark Expedition

Tricia Childers • Lake Ann Elementary School Grade Level: Sixth

Subjects: Language Arts/Social Studies

Warm-up/Anticipatony Set: Each student will receive a piece of "canceled" mail, with a question to answer in their Language Arts journal: Where is your mail from? Finally, describe your stamp. Who is it? What is it?

Materials: U.S map (laminated), a box of stamps (ideally dealing with the geography, animal/plant life, political figures, etc., from the Lewis and Clark period 1803–1806), encyclopedias, white paper, and pencils.

Guided lesson:

- 1. Introduce the map.
- 2. Demonstrate the selection of appropriate people, places, and things.
- 3. Invite students to use the encyclopedias to research more information about their subject
- 4. Record their subject, and fast facts, and then share.
- 5. Next, have the students identify and place their subject stamp on the laminated U.S. map.
- 6. Once the map is complete, have the students examine the mosaic and discuss it.
- 7. Finally, have the students reflect in their Language Arts journal about what they learned or observed from the activity.

Extension/Independent Activity: Write a story using 5–10 stamps (found at home or collected from the community) and do an oral presentation or stamp story board to have a display in the classroom during the Lewis and Clark unit.

Assessment/Follow-up day

Lewis and Clark Stamp Lap Book

Lisa Woomer Grade Level: Third

Objectives:

- Students will write short biographical sketches about the major personalities of the Lewis and Clark expedition.
- Students will create fold-its (tri-fold, envelope fold, time lines/accordion fold) using stamps and their biographical sketches.
- Students will be able to identify commemorative stamps and souvenir sheets.
- Students will create stamps using real examples and create a souvenir sheet related to Lewis and Clark.

Materials:

- Copies of 2004 Lewis and Clark commemorative stamps, Sacajawea stamp, Thomas Jefferson stamp, variety of stamps/copies for students to use.
- Lewis and Clark Exploration Card Game
- *The Adventures of Lewis and Clark* by Ormonde de Kay Jr.
- The Postal Service Guide to U.S. Stamps (picture catalogue)
- Big Book of Books and Activities by Dinah Zike
- The Ultimate Lap Book Handbook by Tammy Duby and Cyndy Regeling
- Pockets, Pullouts, and Hiding Places by Jenn Mason
- Handcrafted Journals, Albums, Scrapbooks, and More by Marie Browning
- Paper, scissors, colored pencils, tape, glue stick, or other adhesive, file folders or 11x17 oak tag folded like a folder, clear 1 x 1½-inch rectangle mylar or plastic templates, big clasp envelopes or gallon zip lock bags

Procedure:

This lesson plan will take several days to complete. Big clasp envelopes or gallon zip lock bags should be used to keep student materials together during the process.

To prepare students for the writing and pamphlet activity, do the following:

- 1. Read aloud daily from *The Adventures of Lewis and Clark* and any other appropriate sources for children.
- 2. Play the Lewis and Clark game.
- 3. Show children a variety of stamps, explaining the basic types, giving special emphasis to commemorative and souvenir sheets. Use examples from Postal Service Guide and actual stamp examples.

After going over these concepts for a few days/lessons, begin the second phase of the assignment. The fold-it ideas are found in *The Big Book of Books and Activities* or other craft books.

- 4. Brainstorm facts about each person to be included in the lap book: Lewis, Clark, Thomas Jefferson, Sacajawea, York, and Seaman. Have these posted on poster paper or in student notebooks.
- 5. Distribute commemorative stamp copies to each student.
- 6. Have students use the tri-fold prototype as a model for stamp placement and glue them in place. (If real stamps are used you will probably want to use photo mounting corners on separated stamps (or stamp mounts available from APS All*Star Youth Programs), keeping the backing



- on and stressing the importance of keeping the project protected. I use copies and adhesive with the children.)
- 7. Have students create stamps for York and Seaman. Attach those stamps.
- 8. The last stamp they need to create is a souvenir sheet. Have this precut to fit in the remaining space in the tri-fold. Students should draw and color a scene from the expedition and then, using a clear template, trace a dotted line around the areas they would like to be "stamps." Attach to tri-fold.
- 9. The last step is to use the brainstorm ideas to crate three to four-sentence paragraphs about each individual in the tri-fold.

Additional Activities using the Lewis and Clark Exploration Card Game and stamps:

- 1. Students can sue the Lewis and Clark card game to create a discovery time line by putting the dates on the cards in chronological order. The cards could be separated by time periods by the teacher for a cooperative activity. Groups for each time period would write the dates and the discovery on strips of paper and attach the stamps that correspond to the discovery. This time line would be folded and added to the lap book or posted in the classroom.
- 2. Envelope folds could be used to create fold-its for mammals, reptiles, birds, plants, etc. Stamps again would be used to add interest.
 - The possibilities for more fold-its in the lap book are just about endless. See other craft books for more ideas. When the project is completed, decorate the cover of the file folder and attach all the fold-its.
- 3. Another fold activity not found in *Big Book* is the folded letter activity (learned in stamps in the classroom workshop) that the early Americans used to save on postage expenses. Student could take the part of one of the people in the tri-fold and write a letter home. Stamps or postage could be added again, and then the letter could be folded in that fashion and placed in the lap book.

Thomas Jefferson and Meriwether Lewis' Code

When the plans were laid for the exploration of lands beyond the Mississippi River, even Congress was not fully informed about Lewis and Clark's mission. British and Spanish spies still hoped to claim rights to the lands where the Corps of Discovery planned to explore. It was important, then, for Lewis and Jefferson to have some way of communicating about the Corps' progress in code.

President Jefferson sent Captain Lewis a system of secret writing on April 30, 1803. In this letter, Jefferson provided a 28-column alphanumeric table and explained how it could be used to translate a message with a special keyword.

In his letter, Jefferson wrote the first line to be ciphered (encoded) — The man whose mind on virtue bent. Next Jefferson wrote a sample keyword "antipodes" above, repeating it for the length of the line. The third line is encoded, with the help of the alphanumeric table.

To help you follow how this system works, we've transcribed the contents:

[President Jefferson writes,] "suppose the keyword to be 'antipodes' write it thus.

antipodesantipodesanti podes [keyword]

themanwhosemindonvirt uebent

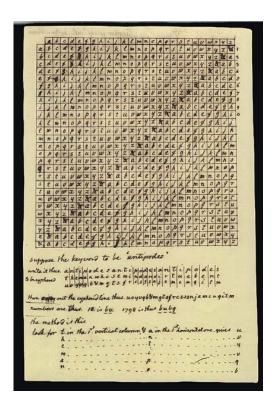
[line to be ciphered]

uvyuqb&mgtsfresssniem cugitm/ciphered line/

then copy out the ciphered line thus. uvyuqb&mgtsfresssniemcugitm.

Numbers are thus. 18 is by. 1798 is thus bubq."

[Jefferson then explained,] "The method is this. Look for the t in the 1st vertical column, & the a in the 1st horizontal one gives u; h [in the 1st vertical column gives] n and v [in the 1st horizontal one gives] v; etc.



```
ab c d e f g h i j k l m n o p q r s t u v w x y z
abcdefghijklmnopqrstuvwxyz&1
bcdefghijklmnopqrstuvwxyz&a2
cdefghijklmnopqrstuvwxyz&ab3
defghijklmnopqrstuvwxyz&abc4
efghijklmnopqrstuvwxyz&abcd5
fghijklmnopqrstuvwxyz&abcde6
ghijklmnopqrstuvwxyz&abcdef7
hijklmnopqrstuvwxyz&abcdefg8
ijklmnopqrstuvwxyz&abcdefgh9
j k l m n o p q r s t u v w x y z & a b c d e f g h i 0
klmnopqrstuvwxyz&abcdefghij
l m n o p q r s t u v w x y z & a b c d e f g h i j k
mn opqrstuvwxyz&abcdefghijkl
nopqrstuvwxyz&abcdefghijklm
opqrstuvwxyz&abcdefghijklmn
pqrstuvwxyz&abcdefghijklmno
qrstuvwxyz&abcdefghijklmnop
rstuvwxyz&abcdefghijklmnopq
stuvwxyz&abcdefghijklmnopqr
tuvwxyz&abcdefghijklmnopqrs
uvwxyz&abcdefghijklmnopqrst
vwxyz&abcdefghijklmnopqrstu
wx y z & a b c d e f g h i j k l m n o p q r s t u v
xyz&abcdefghijklmnopqrstuvw
yz&abcdefghijklmnopqrstuvwx
z&abcdefghijklmnopqrstuvwxy
&abcdefghijklmnopqrstuvwxyz
```

To help you unravel this puzzle, look at Jefferson's 28-column alphanumeric cipher table, which follows:

a b c d e f g h i j k l m n o p q r s t u v w x y z

Use this transcribed table and follow Jefferson's instructions. Find the letter you want to change in the middle line. Then locate the letter above it in the keyword to plot the coded letter. For example, the first letter from Jefferson's message is the letter "t". Just above the letter "t" is the letter "a". With your left hand, locate the "t" in the first column, and with your right hand, locate the "a" in the first row. Draw your fingers together along the column and down the row to get the coded letter "u." Write that underneath the "t" and move on to the next letter.

To decode a message, you would reverse the process. Write the coded line, and then write the keyword above it. In Jefferson's example, the second letter in the encoded line is "v." The letter above, from the repeated keyword antipodes, is "n". On the alphanumeric table, find the "n" in the first row. Then read down this column to find the letter "v". With your fingers, follow that row left to the first row of letters, to the "h" Write that underneath the "v" and move on to the next letter.

Activities

1. Write a letter telling of what you think about one of the following, as though you were Meriwether Lewis telling President Jefferson of the wonders of your trip. Lewis was not any better at spelling than most people of his time. This is one time where phonetic spelling is acceptable.

The letter should start with the place the letter is written and the date (sometime in 1803–1806). Typical letters from this time would be signed "Your obedient servant" or "yr. obdt. svt." and often started with mention of the weather and general standard of health.

a. Compare and contrast the negative response from the Teton Sioux with the friendly visit with the Arikara. or the Nez Perce and Shoshone tribes. Remember that Sacajawea was a member of the Shoshone and eased this portion of their trip.

Philatelic Activity: Identify Indian stamps that could illustrate your report.

b. Describe the "barking squirrels" (prairie dogs), the bison and the "white bears" (grizzly bears) as though you were the first person seeing them. Use a sketch to supplement your observations.

Philatelic Activity: Identify stamps showing the grizzly, prairie dog and buffalo.

c. Tell the President how you managed to get sufficient food to survive the winter in Fort Mandan. Include details about York's dancing for food, black smithing war tools and hunting parties.

Philatelic Activity: Identify stamps that show Blacks dancing, smithing, hunting buffalo.

2. Challenge Activity: In his letter Jefferson used another example, an imaginary first message from Lewis to him: "I am at the head of the Missouri. All is well, and the Indians so far friendly." The back of Jefferson's letter says that he established a cipher with Captain Lewis, using the keyword "artichokes." How would that message read in code?

ANSWER: isfjwawpmxbvhowptxnktfn&li&waxmcuwgawpnfe&uwv&cqfjgibngl&i

Now translate your letter into code. Then trade your letter with another classmate's and translate their letter out of code.

Calculating Distance Using a Map Scale

by Tina Houser Huntington School District

Materials

- Several large class maps of Lewis & Clark journey
- Individual physical U.S. maps (1 per student) with a scale
- Worksheet
- Yarn
- Scissors
- Tape
- Stamps
- Stamp Mounts

Objectives

- The student will be able to make accurate measurements.
- The student will be able to correctly use a map scale.
- The student will be able to justify their decisions in writing.



- Review how to properly mount stamps.
- Distribute U.S. maps.
- Review how to use the scale on a map.
- Distribute worksheets, yarn, tape, scissors, and class maps. (Students will need to share materials.)
- Students will work through the worksheets, pairing up if necessary. The teacher will monitor their progress and assist as necessary.



Mapping Worksheet



Read all directions carefully.

- 1. Using the Lewis and Clark Expedition map, find two modern-day cities or points of interest on the path they traveled. These points may not be located in the same modern-day state. Label these locations on your map.
- 2. Using yarn, trace the river path between two points. Trim the exact length. How many miles did they travel between these two points.
- 3. Tape the yarn to the river path.
- 4. Using a different colored yarn, create a straight path between the two points. Trim to the exact length. How many miles are they apart?
- 5. Tape the yarn to the straight path.
- 6. Find stamps that identify the beginning and ending points you chose. They can deal with the state, locations, animals in that area, etc. Mount them in an appropriate location on your map. Justify your stamp choices.
- 7. Could Lewis and Clark have followed the straight route? Justify your answer.
- 8. Did Lewis and Clark follow the best route? Why or why not? If not, what would have been the best route?

The Write Stuff: Folding 'Stampless' Letters

Instant messaging, e-mail, and cell phones provide a fast way to communicate today. In the Jeffersonian era of America, communication was much slower, with information spread by newspapers and travelers.

If you wanted to send a letter, you had four choices: You hand-carried your letter by foot or horse to the nearest post office — an inn or a general store. You waited alongside the road to stop the post rider. You went to a coastal bay to find a ship traveling where you wanted your letter to go. Or you asked a friend or traveling business person to carry the letter for you.

No stamps existed so the postmaster (the inn- or store-keeper) would mark the cost for mailing on the letter. It was common procedure for the sender NOT to pay the postage because mail delivery was not reliable. More often, the recipient of the letter paid the cost of transporting the mail.

To receive a letter, people traveled to town and searched through the letters, often stored with everyone else's mail in a basket that was hung on a peg in the inn or store. Then they took the letter to the postmaster and paid the postage due.

The cost for mailing a letter was based on the distance it was sent and the number of sheets of paper used by the writer. To save money, people often wrote on larger sheets than we use now. They did not use envelopes, but rather folded the letter with the message inside and wrote the address on the outside.





A common letter folding technique begins with folding the paper in half. Each side then was folded in an inch or more. The top was folded down about 1/3 of the page. The bottom folded up to overlap. One flap was tucked inside the other before sealing with wax wafers.

A writer had to be aware of where the seal would go; it could obscure part of the message. Some correspondents broke the seals open; others used scissors to snip around the wafer of wax impression on the letter.

When looking at folds on a letter from the pre-adhesive period, it's important to distinguish between the storage creases from the original mailing folds. Throughout the 19th century, it was customary to file letters by folding them in thirds lengthwise; marking near the top of the middle fold information about the correspondent and letter date, and bundling them chronologically — held in place by docket boards.

Resources: "Postal History," by Nancy Clark, American Philatelic Society, 2003 "Folded Letter," by Diane DeBlois, PS — A Quarterly Journal of Postal History, Vol. XI, No. 1, 1st Ouarter 1989.

Lewis and Clark – A Synopsis

by Nancy Clark

The Plan

Thomas Jefferson was intrigued by the thought of a Northwest Passage, as were other educated leaders of the time. George Washington, Benjamin Franklin and Thomas Jefferson all belonged to the American Philosophical Society, based in Philadelphia. Before he left to lead the Corps of Discovery on their journey across the continent, Meriwether Lewis was inducted into the Society as well.

Meriwether Lewis was instructed to follow the waterways from the Mississippi, up the Missouri, crossing the Western mountains and then by water to the ocean. The existence of a Northwest Passage was a rumor of long standing. Perhaps Lewis could confirm its



existence. It was hoped he could return by ocean via a trading or whaling vessel. The return by land was a back-up plan.

The People

For his fellow leader, Lewis chose a man he knew from his military days following the Whiskey Rebellion, William Clark.

The men shared a Virginia heritage, both being born in Albemarle County, where Washington and Jefferson both had homes. Lewis left to spend his youth in Georgia and Clark moved to Tennessee, but in the military, their Virginia roots were important ties.

Clark had been Lewis' superior, before he left the service to return home to help manage his older brother's financial affairs. George Rogers Clark had taken on the expenditure of the Revolutionary War out of his own pocket, expecting to be reimbursed by the government. The government was not so forthcoming as he had anticipated, and his financial affairs were a mess.



The Politics

Prior to their adventure, adventurers and trappers had explored further into the interior than any settled area.

Lest we attribute the adventure simply to land and water exploration, or scientific focus; all of which were achieved, the politics of the land exploration and implied acquisition should be explored. Virginia farmers were eager to own undisturbed land for farming tobacco, a crop with huge drains on soil nutrients.

Prior to their journey, Alexander MacKenzie, a North West Company fur trader in Canada, had explored the land route from Alberta, Canada, to the Pacific and written his name on a rock there. Indians, Russians, Spain and Great Britain claimed Pacific coastal land. The Columbia River, where Lewis and Clark came to the Pacific, was named for the ship *Columbia*, captained by Providence and Boston

Master Robert Gray, in the spring of 1792. He met Captain George Vancouver on that trip, while he was making an official survey, charting the Pacific coast for Britain. Spain had established missions in what would become California, New Mexico, and Texas. Russia had laid claim to the parts of Alaska, Canada, and Washington.

The lands of the Louisiana Purchase itself had occupants and claims by several Indian tribes as well as France, Great Britain, and Spain. Before its purchase, Jefferson had planned to survey the lands through spy ventures. Its purchase was a complex deal.



In fact, Napoleon hoped to keep the Louisiana lands, despite its gift as a boon to Spain. He planned to use Haiti as a military base as he reserved the central portion of the Colonies for French use to provide furs to refill the coffers. A series of military and natural events served to convince him this was not practicable, especially while fighting on so many fronts closer to home.



When he arranged the sale of the Louisiana lands for 15 million dollars, no one had any idea of how much land was involved or where the boundaries existed. The U.S. had hoped to purchase rights to use the Mississippi, the Port of New Orleans and the western Florida lands. Instead they doubled the size of the country with this single purchase.

President Jefferson instructed Lewis to lead what became known as the Corps of Discovery — an expedition from the mouth of the Missouri River near St. Louis to the Pacific Ocean and back. By taking this route, not only would the Louisiana Purchase lands be



mapped and the people living there become aware of the change of leadership, but also the rumored Northwest Passage might be proved and located. It was hypothesized to end at the Columbia River, and was the fabled water route across the continent. Any nation who found this route would be able to transport the furs of the northwest to the markets in the east in a timely and profitable manner.

The Indian tribes had a well used route over land, which they declined to tell European Americans. Their route more closely followed what became the Oregon Trail many years later.

So, after training in Pennsylvania Lewis stocked up from Army suppliers in Wheeling, WV; Philadelphia, PA; and elsewhere. The initial troop started from Pittsburgh in a barge with a hinged mast so they could sail when the weather allowed, and two canoes. Lewis started down the Ohio River with the original group of men and his black lab dog, Seaman.

The builder of the barge was so tardy in completion of his work that the group was unable to start until August. The waters of the Ohio River were so low that the barge kept hanging up on sandbanks. At times the vessel became so deeply stuck that local farmers and their teams of oxen had to be called into service (for a handsome fee!). The men had to dig the barge out and haul it along by means of ropes so frequently that they joked that they were traveling and digging the Ohio canal.

Lewis met Clark in Clarksburg, IN. Lewis had requested that Clark be appointed a Captain in the Corps too, and that they be joint leaders. This went against military precedent, and was not granted; although Lewis took pains not to reveal that to his crew.

Clark, while an experienced waterman and military leader, had physical frailties. He probably would not have been physically able to complete the journey were it not for his personal slave, York.

While in Clarksburg they took a bit of time to recruit more men and took a side trip to see the dinosaur bones in Big Lick, and then commenced to go by water to Ft. Wood, IL. There they made camp, recruited the remainder of their troops, trained, and waited for the clearance of the paperwork with the French and Spanish. President Thomas Jefferson instructed Lewis and Clark to follow the Missouri River, cross the mountains and then follow the Columbia River, to locate, if it existed, the elusive Northwest Passage.

Their first winter was spent in Fort Wood, IL, across the Mississippi River from St. Louis. Their second winter was spent at a trading post among the Mandan and Hidatsa Indians in South Dakota, where they built Fort Mandan. It was here that the Shoshone Indian Sacagawea and her husband, Charbonneau, joined the Corps. Her son Jean-Baptiste was born that winter.

The third winter was spent in Fort Clatsop on the West coast, where the Columbia River joined the Pacific, with the Clatsop Indians. They spent a rainy winter making salt, and saw a whale carcass that had washed ashore nearby.

They returned to St. Louis September 23 and spent the winter of 1806 in civilized territory.

The first to render an accurate map from scientific readings, they returned to St. Louis after 28 months, having traveled over 8,000 miles with a 33-member permanent corps. They lost one man to illness (Sergeant Charles Floyd), and killed two Indians, (Piegan of the Blackfoot Confederation in a fight over rifles and horses in the return trip), a remarkable record considering the travelers were the first people of European heritage to travel this route and the first to meet many of the native Americans.

They set other records. After they reached the Pacific, the corps voted on whether or not to attempt a return that winter. A slave, York, and a woman, Sacagawea, voted. This is cited as the first time either a black man or a woman cast a ballot. Sergeant Floyd is the first U. S. military man to die west of the Mississippi.

The Corps met 50 different Native American tribes. Hundreds of new plant and animal species were recorded by Lewis and Clark, including the blacktailed prairie dog, the grizzly bear, bitterroot, and salmonberry.