



SCHOOL TOUR 2017

Lesson: Preparing for the tour

Objective: Help students understand how the storage and transmission of information is essential to the world they live in today.

Time: :30 min to - 2 hours (depending on age and depth of discussion)

Materials: :some incentive gift - like M&Ms
list of simple words (appropriate to age)
list of numbers
paper and pencil for half of the students

Objective: to illustrate thorough contrast and possibility of reward the significant value of writing and the ability to "store" and "communicate" ideas over space and time.

Let's play a little game. I've got a bag of M&Ms here. I'm going to divide the class in half and let you try to win the M&Ms, (divide the class) into WRITERS and REMEMBERERS.

Okay, writers, writing is kind of slow and I'm going to go kind of fast, so you should get into teams of two and write every other word. Rememberers, you might try the same thing.

Okay, ready set go? (Have a prepared list of long and short words that do not make sentences, all word types... ie: Fog, iron, run, moon, swallow, see, twisted, old, excited, winners, heavy, dug, prune, etc... do about 40. Then tell each side to huddle together to come up with one list to give back to the teacher, the writers will have to have one person read from a list, the rememberers will have to have one student in charge of remembering the list. (No writing on their team).

Of course, the writing team should get a vastly better score.

It looks like the Write it down Team wins all the candy... Remember Team: why did you have such a struggle? Listen and encourage response like, it's not fair, it's hard to remember, cause we didn't get to write down... etc... empathize

Ask the Write it down team why they think they did so much better? Listen, ask them if they think they would have done as well without pencils or papers.

Ask both teams, "Suppose I said I have a treasure map for like a ZILLION \$ in my head and I want to give it to you. Would you like to listen carefully? Or maybe write it down?

Summarize, challenge and discuss:

Let's make a list of some of the good things about knowing how to write things down.

(Examples of how writing helped them THIS WEEK.)

Repeat a similar exercise with numbers

Discuss whether they think being able to write numbers down and add them together is useful or not?

Emphasize how important written language and math are in their daily lives.

IMPORTANT NOTE:

This lesson idea is simple and flexible enough that it can take place on the bus to the Pioneer Village, or it can easily be productive as a more formal presentation in the classroom together with a meaningful formal discussion of how valuable reading and writing are in coalescing ideas and spreading them to others across both geological space and time.

Scale this outline to the age appropriate parameters for your class.

Emphasis should be put upon the fact that the "knowledge" it takes to build cell phones & video games etc has been collected over thousands of years through the exercise of "writing" and then someone else reading.

Emphasis should be put upon the fact that the reading and writing of mathematical symbols and ideas is no different than the reading and writing of literary symbols and ideas.

Final emphasis should be put upon the fact that "ideas have been written down for 6 thousand years or so, but really only in the past few hundred years have they exploded into the knowledge we have today. This visit to Pioneer Village will show you some of the things that were created to help this happen.



SCHOOL TOUR 2017

Lesson: Pre-tour

Objective: anticipatory set for the tour - en-route or upon arrival in the school

Time: : 30 min - 10-20 for lecture - 10-20 Q & A

Put this narrative in your own words suitable to your students:

For human beings “information” has been almost more important than food or water. In fact, to some of the ancient people the MOST IMPORTANT information they had was “WHERE THE FOOD AND WATER IS!

Today we have so much information that we can’t possibly keep it all in one book, or even one library, not even the school is big enough to keep all the information. In fact, we have so much information that there isn’t even one person who can know all the information.

As we have discussed, by writing things down we are able to store information, that leaves room in our brains for us to find more information, then we can write it down too. So writing is one of the most important ways we save information. Of course, writing is useless if we don’t also read. So reading is important for us to be able to gather information!

When mankind started writing things down things began to change; the more things changed the more we wrote and then the more we wrote the more things changed. In the last 300 years that has all started happening so fast that we can hardly keep up.

We started writing on cave walls, that didn’t work out so well because caves are not portable. Then we started just carving in rocks, those we could move; we used clay, and then we learned to make copies of the clay. Finally we started writing on paper, and then at long last, we invented printing for making lots of copies of the stuff on paper.

As we all got smarter because of all this information, we started making machines to help provide even more information for even more people. Some of those people invented more machines to make even more information more available. So now there are machines to make our lives easier and make it easier to get food and water!

In the last 200 years we have made machines that do almost everything for us; in fact today, we even have created machines to help us find the information we need as quickly as possible. Today, because we can read and write and do math, we can use computers, text messages, calculators, all things to help us do other jobs easier and better!

At Pioneer Village we will see a school the way kids saw schools over a hundred years ago. Today we have tablets, those people had tablets too, but they were a lot different than the ones we have today. They had stoves to keep them warm and they had lunch options (bring your lunch or go hungry), and they had water to drink. We will see what that was like.

At Pioneer Village we will see how people over a hundred years ago collected information and how they shared it. We will see some of the machines they made for gathering and preparing food, what their homes were like and where they worked. We will see how they got from place to place and we will see the doctor’s office and the dentist’s office. When you see these things you will be so happy that people continued to gather information and make things better!

Solicit and entertain questions of how information collection, transmission and storage has changed the way humans relate and create.



SCHOOL TOUR 2017

Lesson: At the Village THE TOUR

Objective: Experience Museum Collection

Time: : 3 hours allow a minimum of 3 hours. (If you wish an in depth experience your tour can easily take the entire day)

The “Teacher’s Guide” and student guides are designed to take your students to multiple examples of how the “technology of information” has changed. In the process the students will also be surrounded by examples of how common technologies have continued to improve as people continued to accumulate and interpret information through writing and reading.

Special attention should be given to the one-room school where the opportunity is provided for you to emphasize not only the old technology of chalkboards and chalk tablets, but also the student discipline that was required to maintain the wood stove, water bucket. Also show them tin box lunches used because every student had to bring their own lunch or go hungry. Of course, it is impossible to overlook the contrast between a chalk tablet and today’s digital tablet.

Again, the tablet vs tablet contrast is the best opportunity to make clear to the students that it was the ability of those pioneer students to read, write and do math which made that change possible, and that the simple school of those days is what made possible the educated workers, businessmen, industrialists and inventors that supplied the modern school of today! Another fun thing to point out is that since there were no cell phones in those days, the “bell” was the way the school called the children into class! (You can note how today - the “buzzers” in many schools - are still called “bells”). And if you take your students behind (just north) of the Church, you can show them a bell that would call all the kids in town!

The student workbook is laid out to take you through many of the buildings in the Village. There are questions designed to provoke student thought. It is not likely that you will have time to ponder every question so you will want to review the student handbook before you begin your tour in order to be prepared to focus your students as there is much visual distraction in the Museum.

The workbooks focus on the value of reading, writing, and math as information which has continued to collect and become more sophisticated. You will see thousands and thousands of items which can stimulate the basic principle of the tour: Human understanding has only been able to accumulate because of the ability to read, write and calculate; without schools, this “technology of learning” would have been almost impossible.

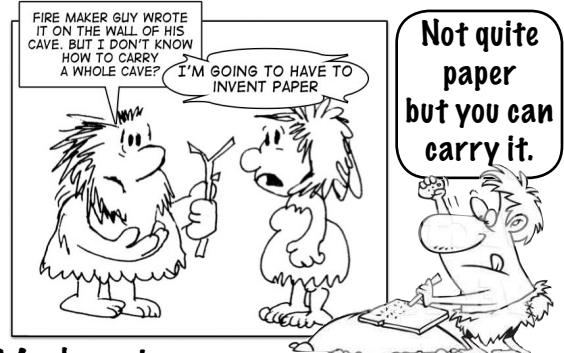
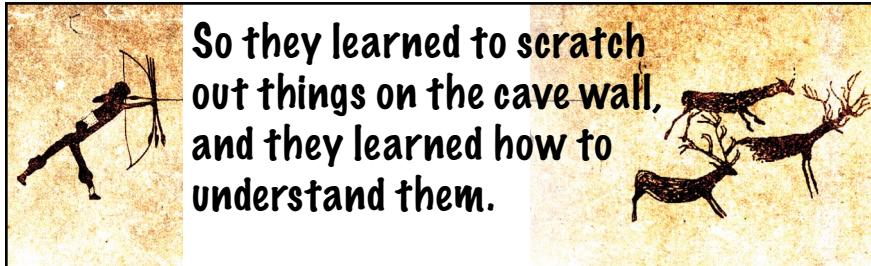
The items in the workbooks will not take you through every building in the Museum. You will want to review the Student Handout to determine whether you want to take your students into every building. The “lesson tour”; although extensive, is still only meant to be a baseline structure. We encourage you to see as much of the Museum as your time will allow.

Post tour:

Review & Summarize

Long ago in a cave far away...

Early people did not have a way to save information. So sometimes good ideas either got forgotten or mixed up in speaking.

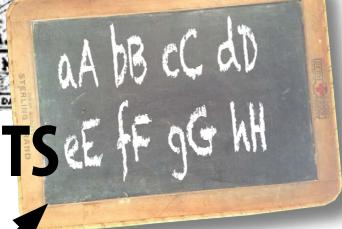


...after people figured out how to make stone tablets they learned how to squish images into wet clay and let it dry. Much easier.



SCHOOLS USE STONE TABLETS

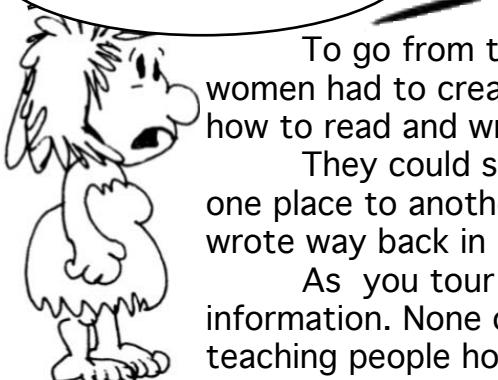
There is a big difference between the tablet you use and the tablet pioneer kids used in school. You will see one in the old school building.



This SLATE-BOARD tablet was made from a thin piece of black stone and the students would write on it with chalk.

When they finally invented paper that made it a lot easier to have schools!

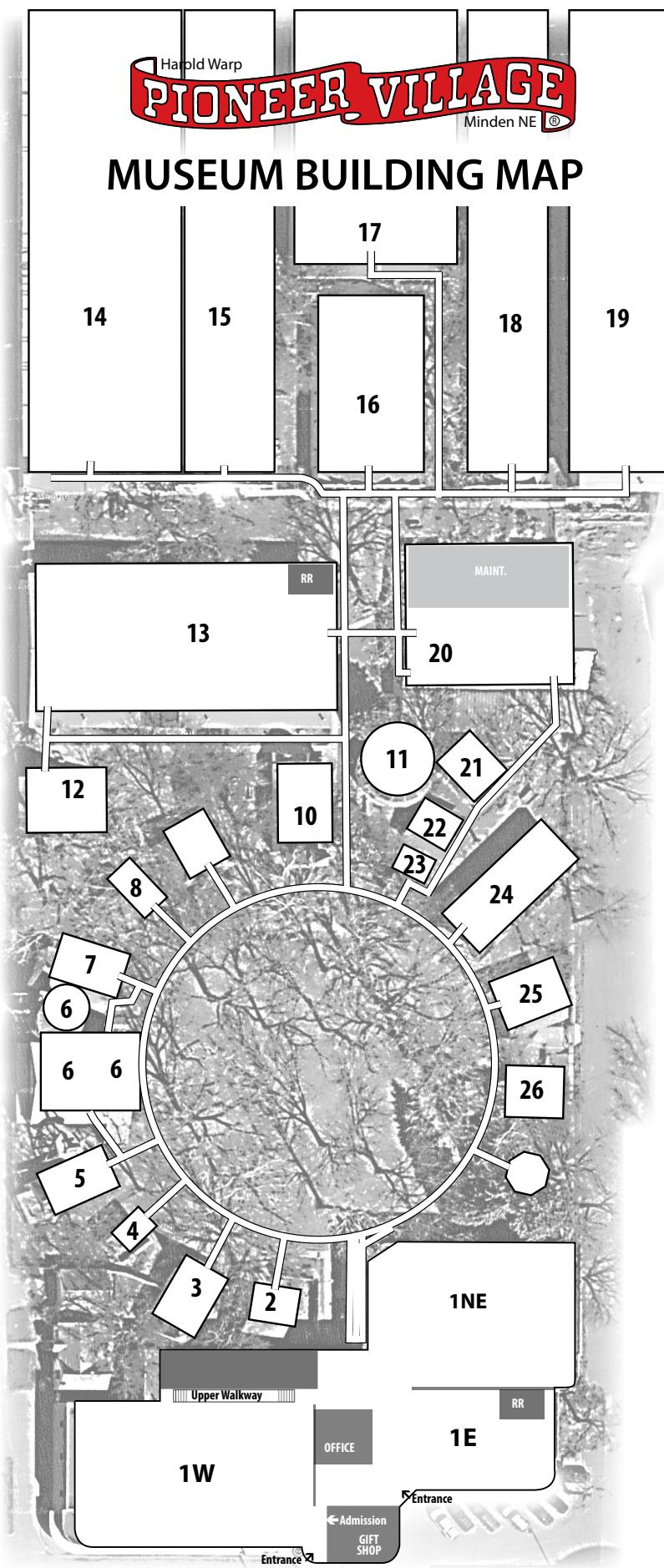
BUT PAPER IS EASIER!



To go from the SLATE-BOARD tablet to the modern digital tablet men and women had to create, save, and move a lot of information. They had to know how to read and write and do math.

They could save information by writing. They could move information from one place to another, even from one time to another! Things Abraham Lincoln wrote way back in 1865 has been moved over time to us today!

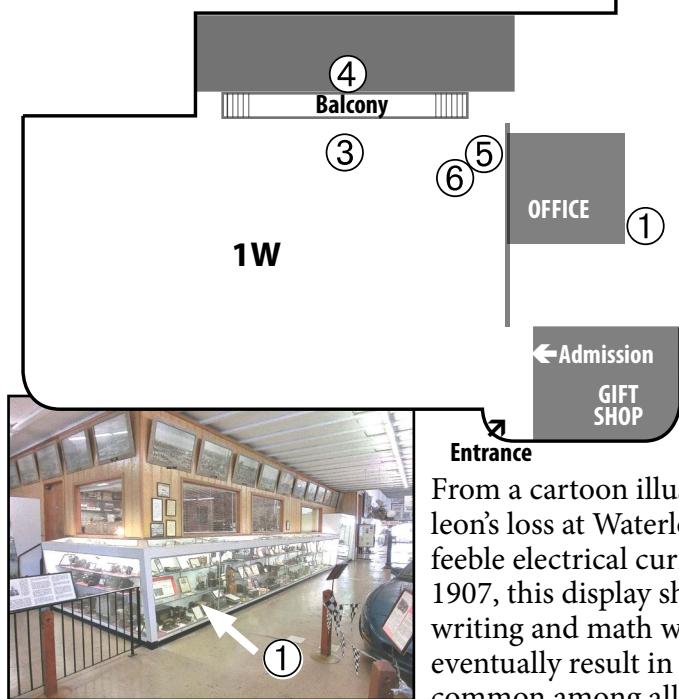
As you tour the Museum you will see many ways in which people moved information. None of these new ways could have been created without schools teaching people how to read, write and do math.



- 1 MAIN BUILDING**
- 2 ELM CREEK FORT**
- 3 THE PEOPLE'S STORE**
- 4 GOVERNMENT LAND OFFICE**
- 5 FIRE HOUSE**
- 6 LOWELL DEPOT & TRAINS**
- 7 COUNTRY SCHOOL**
- 8 SOD HOUSE**
- 9 CHINA HOUSE**
- 10 CHURCH**
- 11 MERRY-GO-ROUND**
- 12 HORSE BARN**
- 13 HOMES AND SHOPS BUILDING**
- 14 ANTIQUE FARM MACHINERY**
- 15 ANTIQUE TRACTOR AND TRUCK**
- 16 LIVERY STABLE**
- 17 ANTIQUE CARS**
- 18 CHEVROLET'S AND OTHER CARS**
- 19 FORDS, STUDEBAKERS,
19 up MOTORCYCLES, SNOWMOBILES AND BICYCLES**
- 20 AG BUILDING & STEAM TRACTORS**
- 21 BLACKSMITH SHOP**
- 22 PONY EXPRESS BARN**
- 23 PONY EXPRESS STATION**
- 24 HOME APPLIANCE BUILDING**
- 25 HOBBY HOUSE**
- 26 SNACK BAR**
- Rest Rooms - 1E & 13**

Building 1 MAIN BUILDING

More than 10,000 items in this building are arranged in the chronological order of their development.



Use this small display to take your students on a brief but rich journey through the development of ideas and technology like the telegraph, radio and telephone sets displayed here. A perfect time to emphasize the value of communication skills!



Here you can briefly discuss the Pony Express experiment in "rapid mail delivery". There is commemorative coin and a saddle bag on display. You can show them the telegraph hand set and discuss what an amazing impact it made on being able to deliver information rapidly from one place to another. They will also see the hands-free home phone and the car phone.

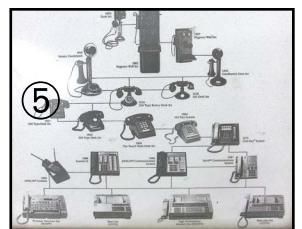


② Your students will enjoy the antique crank phone demonstration set also located in **1E**



Ask your students if they can find the sign that tells them about the first operators. ⑥

Area **1W** has isles of antique vehicles but along the north wall is ③ a display of typewriters and clocks. You can point out the mimeograph machine and tell how that was used in schools. Above that there is a ④ balcony with dolls and medical instruments. On the West wall of **1W** is a great display of ⑤ telephones!



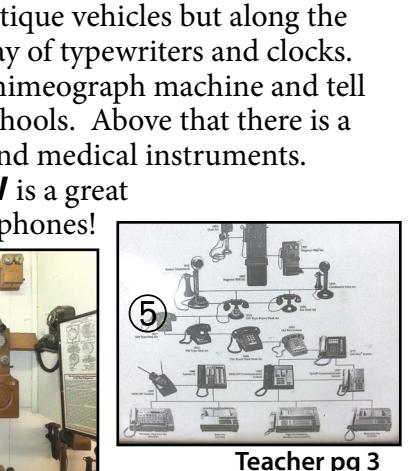
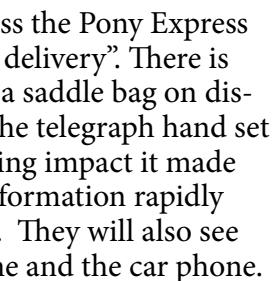
On display are examples of transportation, lighting, guns, money, and many other facets of daily life, including very early examples of the internal combustion engine and the jet airplane. There's even a section devoted to art and sculpture.

Moving Information

*Just east of the office area located in building area **1E** is:*

① The "communications display": The museum's most compact collection documenting the progress of communication technology from the past.

From a cartoon illustrating the pigeon delivery of the mail announcing Napoleon's loss at Waterloo to the schematic drawing of the "Device for amplifying feeble electrical currents", submitted for patent in 1907, this display shows ample evidence how reading, writing and math were used to create devices that eventually result in the cell phones that are so common among all of us today!



Before you leave the west wing show your students the "Jenny" biplane ① see the sign about how a Jenny like this one once carried mail.



As you pass north of the Office area ② you will see a variety of antique cash registers. The cash registers are a great opportunity to discuss the need for math in conducting any kind of commerce. We must be able to read and write clearly and we must also know enough math to be able to keep track of our money!

#2 ELM CREEK FORT

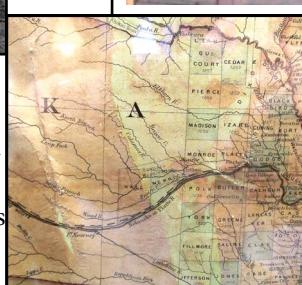


The Elm Creek Fort (or Stockade) is the first log cabin built in Webster County, Nebraska. Built both as a dwelling and as a community fort against Indian attack, it dates from 1869. The interior is authentically furnished. An original Pony Express mailbox is on the wall. Illustrate to your students how sparse the information environment was in a fairly common prairie home of the mid 1800s.

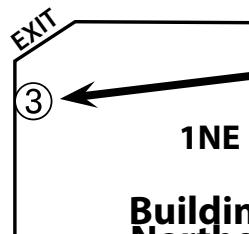
#4 LAND OFFICE



This Government Land office was moved from its original location in Bloomington, Franklin County Nebraska. This tiny building actually served pioneers filing their homestead claims. Explain to your students how this office had to manage all of the original information about land surveys, claims and ownership. Without good record keeping then we wouldn't know who owns what now. It contains early maps, old land records and John N. Warp's original homestead title.



This early map, hanging in the Land Office Building requires reading and math skills in order to be understood. It was their version of Google Maps.



Building 1 Northeast

1NE

③ Near the exit from building 1 you may want to take students to the small model of The Museum Grounds. With this you can discuss the plan for the day and help orient them for the visit you are about to undertake.



1E

RR

Entrance

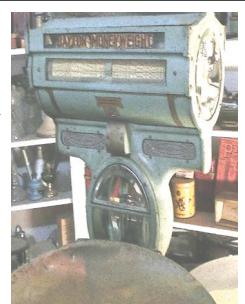
There will be more on the Pony Express, but as you pass through this area ask your kids what impact they think airplanes had on the movement of written information? Ask them if they believe airplane pilots use much math.

#3 THE PEOPLE'S STORE

The People's Store is based on a general merchandise store that served the Stamford, Nebraska area in pioneer days. It is completely stocked with by-gone items. Point out to your students the original Fort Kearney Post Office mailboxes. If you cannot read or write it doesn't do you any good to even have a mailbox.



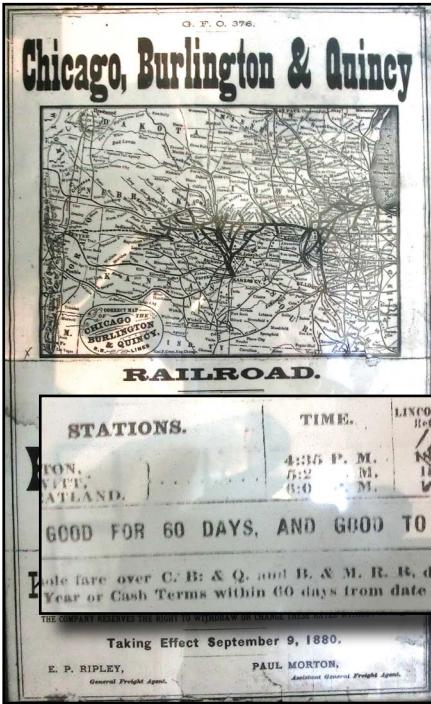
Point out the old scale and remind your students that pioneers often purchased things like flour out of barrels by the pound. They had to know how to read the scale so they would know how much they were getting and they had to be able to do the math so they could understand the cost!



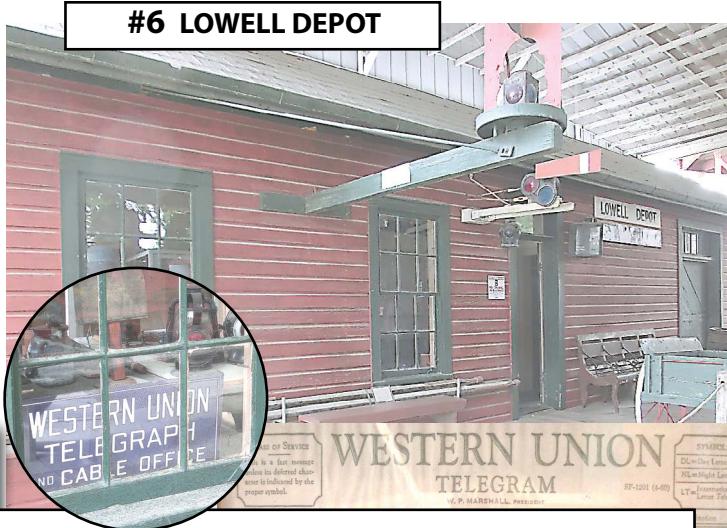
#5 FIRE HOUSE



The development of fire-fighting equipment from hand cart to modern fire trucks are here. How do you suppose firemen communicated to the town to let them know when there was a fire? Bell?



Show your students the map in the depot. Help them understand the rate chart. Explain to them that back in the day we did not even have standard time yet, so they had to understand "railroad time".



#6 LOWELL DEPOT

Show them the Western Union Telegraph Office and explain that was the only way to send information quickly before the telephone. Tell them about Morris Code - dots and dashes. You might also tell them that Western Union even had a way for people to send money. Point out the glass jars that were early forms of "wet cell" batteries

Children love to play on the train, please tell them to be careful.

Explain to them the trains used to carry the mail.

Sometimes you had to be careful when you took your mail to the depot. If it was mail going east and it accidentally got on the westbound train it might go all the way to California before it got turned around and headed east where you intended.

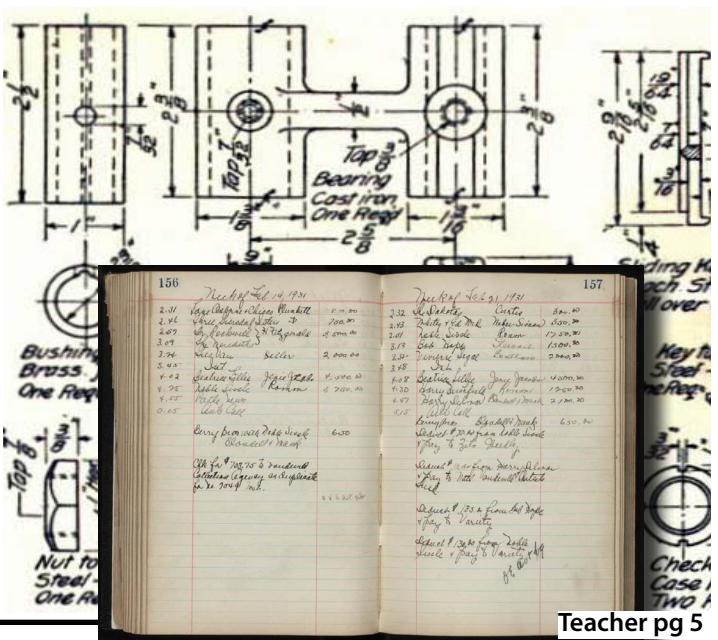


THE IMPORTANCE OF SCHOOL

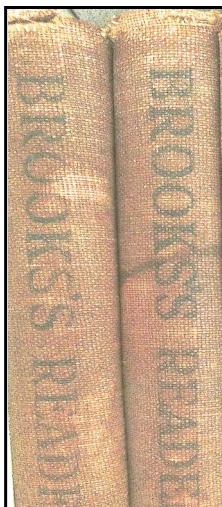
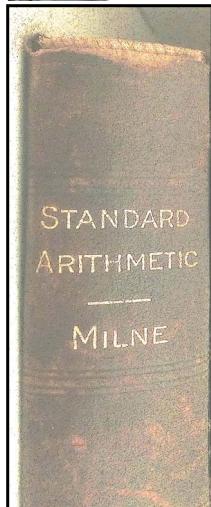
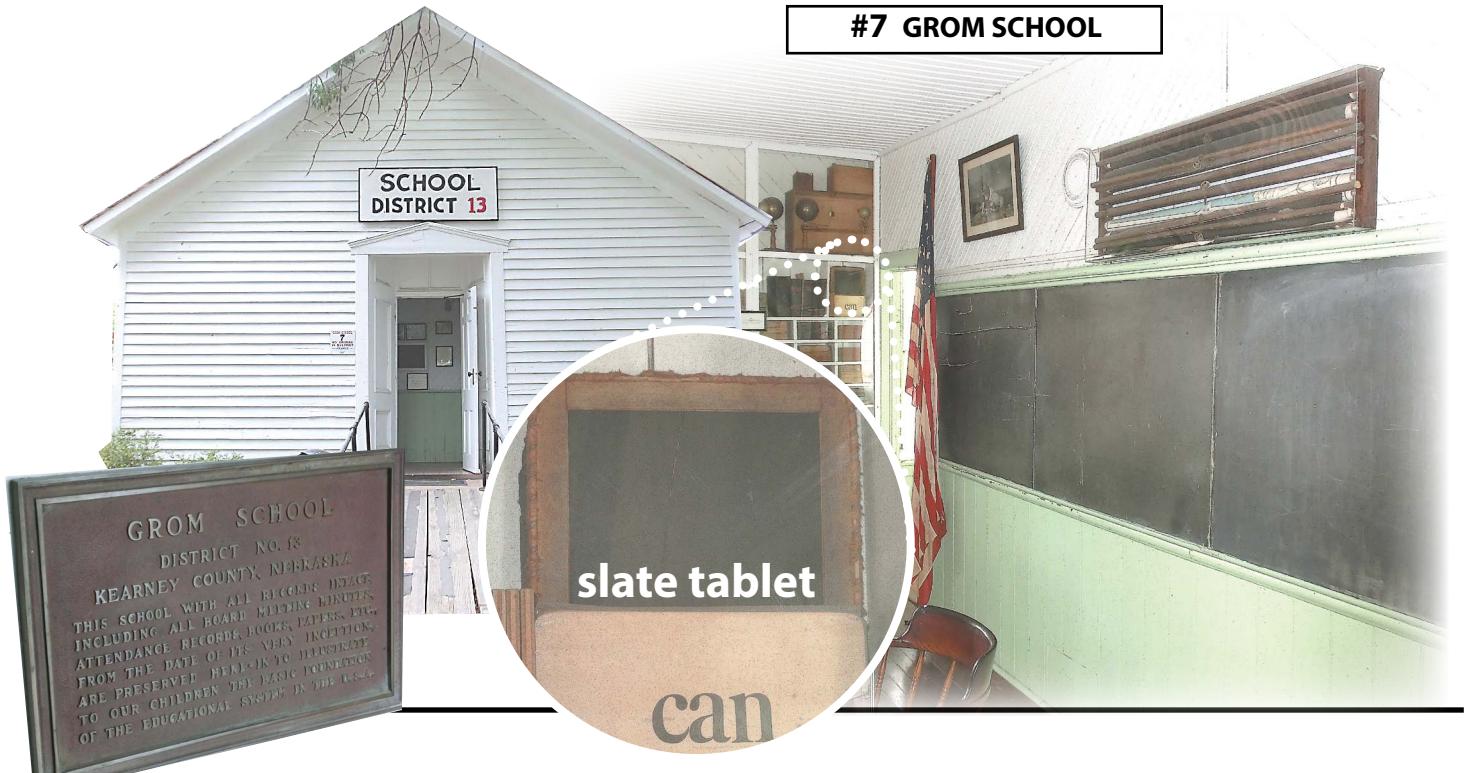
The first public high school in America opened in Boston, MA in 1821. It was called "English High School". It was for boys 12 to 15 years old who were admitted by examination. Its stated purpose was to prepare students for MERCANTILE and MECHANICAL employment.

Help your students understand the meaning of mercantile and mechanical; students were specifically trained to be able to write, and do numbers.

Explain to them how people with mechanical training would have to understand and work with weights and measurements make records, define things and calculate well. Students in mercantile training would have to learn to calculate, order, receive, inventory and sell merchandise and keep clear and accurate records of everything.



#7 GROM SCHOOL



The Grom school is an authentic rural school building of the late 19th and early 20th century, furnished with original desks, books, water pail, dinner pails, outhouses, etc. On the shelves are antique textbooks. An authentic wood-burning heating stove sits in the midst of original desks.

Your students can see the example of the handheld chalk and slate tablet. Help them imagine using it to practice their letters and numbers. Because paper was expensive students had to do lessons by writing with chalk on slate tablets.

SECTION I	
1 catch	The boy will catch the ball.
think	I think that I could catch it.
could	Ned can catch it.
2	
gold	The man has a gold watch and chain.
watch	The watch is gold.
chain	And the chain is gold.
3	
sheep	The sheep have white wool.
white	The wool of the sheep is white.
wool	Do all sheep have white wool?
4	
meet	Will you meet me?
show	I will show you the way.
lift	I can lift a pail of water.
pail	The pail is full of water.
5	
how	How the baby grows!
grow	Did you hear him say papa?
hear	Baby's name is Fred.
Fred	You may play with the baby.

I have a fan. I see the fan. See the fan. See the fan I have.	
I have a fan. I see the fan. See the fan I have.	

Digitized by Google

Explain to your students how everyone in the school used chalk. Especially the teacher, using the giant chalkboards at the front of the room.

Indicate to them the pull-down maps (although they don't pull down now). They once were the most important item the teachers had for teaching about Geography. No Google Maps back then.

Show them the hole in the top of their desks that once accommodated the ink wells. Explain how the kids used to have to dip their pen for ink.

From the following pages you can show them the example pages from the old "Speller" and the "Brook's Reader".

There are additional resources on the tour website resources page including many old textbook pages. These pages are quite entertaining for their style of language as well as their look and feel.

**Example Page
SPELLER**

SECTION I

1 catch The boy will catch the ball.
think I think that I could catch it.
could Ned can catch it.

2

The man has a gold watch and chain.
gold The watch is gold.
watch And the chain is gold.

3 sheep The sheep have white wool.
white The wool of the sheep is white.
wool Do all sheep have white wool?

4

Will you meet me?
show. I will show you the way.
lift I can lift a pail of water.
pail The pail is full of water.

5

How the baby grows!
grow Did you hear him say papa?
hear Baby's name is Fred.
Fred You may play with the baby.

**Example Page
Brook's Reader**



I have a fan.

I see the fan.

See the fan.

See the fan I have.

I have a fan.

I see the fan.

See the fan.

See the fan I have.

#8 SOD HOUSE

Authentic replica of the, "little old soddy on the plains". Originally built with heavy blocks of dirt, called "sod", cut from the ground thick with roots and grass. Soddies like this were common on the early prairie because there were few trees from which to harvest wood. Inside are furnishings like they used in those days including a "trundle" bed.



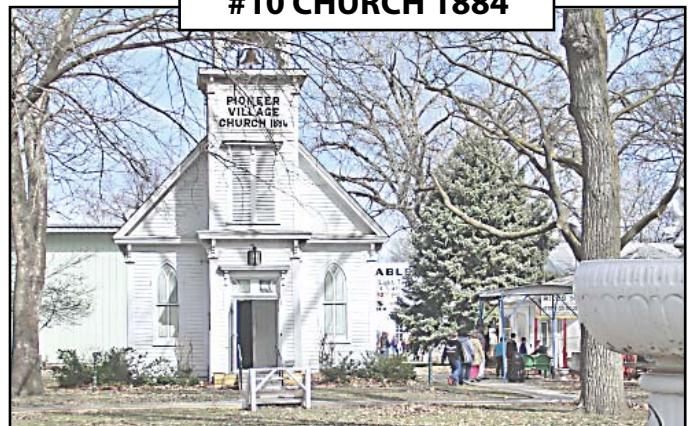
#9 CHINA HOUSE



Built in 1884 this first church in Minden has the original pews and pulpit. Observe the highly decorated organ, tin ceilings and the statuary. Behind the church is a working church bell on a stand next to the sidewalk. Have your students cover their ears if they should decide to ring it. This is still an active church used for non-denominational services held every Sunday during summer months. It is also popular for weddings throughout the year.

Houses fascinating collections of china, pottery, cut glass and precious keepsakes, some of which were carried west in covered wagons. Included is an antique sugar bowl glazed pictures of a mother and grandmother. Not the most interesting thing to the young children, older kids can get an appreciation for how valuable such items were especially when compared with the basics held forth in the old sod house.

#10 CHURCH 1884

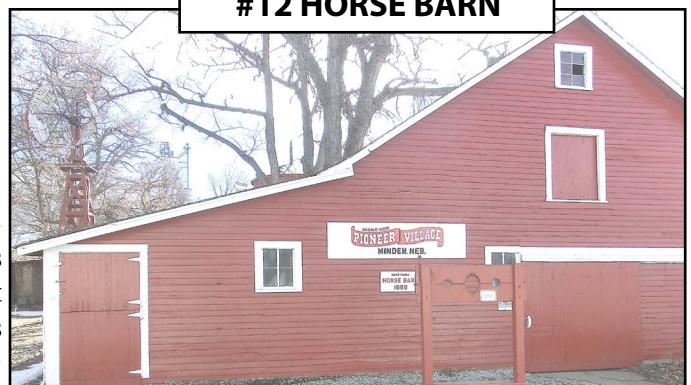


#11 MERRY-GO-ROUND



Rare 1879 Armitage-Herschell Steam Powered Traveling Carousel. This merry-go-round was once regularly operated by the museum through the use of the steam engine located next to it. Although the steam engine is still functional the original boiler is too old to allow for continued use.

#12 HORSE BARN



Typical pioneer barn, moved from Warp home-
stead 9 miles south of Minden. (Harold Warp's
parents were good Christians, so the hayloft
boards were laid rough side up, so young folks
couldn't have barn dances.)

#13 HOMES AND SHOPS BUILDING:

Twenty rooms of the past, showing kitchens, living rooms and bedrooms of each generation since 1830. Also see a doctor's office, print shop, drug store, barber shop, many others. Weaving, and broom making are demonstrated. Second floor shows surprisingly low mail order prices on furniture at turn of century. Artifacts from some past some elections and Carl Curtis', Senate Office 1954 to 1978.



Building 13 is easily the most comprehensive illustration of lifestyle changes in the past 150 years. You can use any variety of technologies as the foundation for discussing and clearly illustrating how important the accumulation of knowledge has been in creating the life of abundance and luxury we live in today.

As you walk your students down the row of period kitchens in chronological order it is easy to point out the evolution of communication. The appearance of newspapers, telephones, radios, and finally televisions..

A quick look at the various professional offices, including the dentist, will help your students appreciate how schools and training have seriously advantaged them today with many improved technologies. The print shop in building 13 gives them an idea how primitive the printing industry was not many decades past.



Upstairs in building 13 you will find a display of obsolete computers. There you can point out to your students the venerable Apple IIe which we all remember as being ubiquitous in schools not that long ago. Ask the students if their parents were taught "keyboarding" when they were kids, then discuss the responses.



What came before i-tunes or the playlist on my phone?



TV Broadcast Studio - then



How much did it cost for a table?



Inflation is a concept not well understood by many children. Talk about your personal experience with common examples, such as the price of hamburger and minimum wage. In 1968, one hour of work would buy me two pounds of hamburger. That is not so different today. What changed?

BUILDINGS 14 through 20



These six large buildings hold hundreds of amazing examples of automobiles, motorcycles, snowmobiles and huge complex farm machines larger than almost anything you can imagine. Gigantic threshing machines and even an antique motor home. Your students could spend hours and hours wondering through these buildings so be sure you have enough tour time before you venture into these "back lot" buildings. If you decide to go there you'll be glad you did, but you may also be sorry. It is going to take some time.

14 ANTIQUE FARM MACHINERY: 265 feet long, houses complete evolution of plowing cultivating, seeding, harvesting and threshing equipment. (Including a huge combine of 1890, pulled by 30 horses.)

15 ANTIQUE TRACTOR AND TRUCK: 100 early farm tractors. Also, farm trucks, lawn mowers and gasoline engines. (Including a hot air engine and one of Dave Buick's first gasoline engines.)

17 ANTIQUE CARS: This bldg., 22,400 sq. ft., two stories, featuring antique Buicks, Cadillacs, Dodges, Chryslers, Oldsmobiles, etc., 100 cars in their order of development. Also an early house trailer.

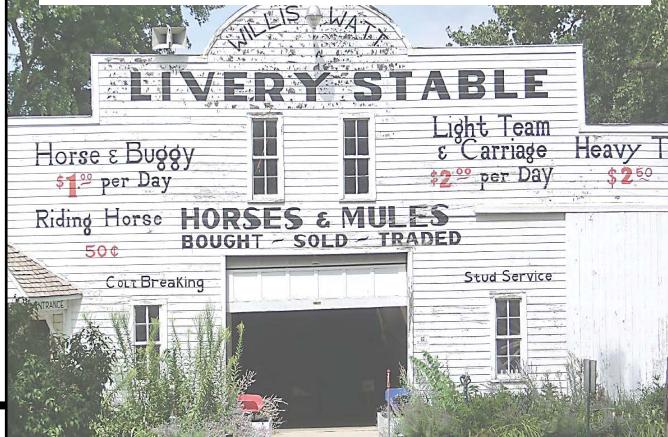
18 CHEVROLETS AND OTHER CARS: Antique auto bldg., two stories, 265 feet long. Featuring over 50 Chevrolets on first floor, including an example of the first year Corvette and extinct cars on 2nd floor.

19 FORDS, STUDEBAKERS, MOTORCYCLES, SNOWMOBILES AND BICYCLES: Two stories, 265 feet long, housing over 50 Fords, Lincolns, Mercurys and Edsels on first floor. On second floor is a fine collection of antique motorcycles, bicycles, snowmobiles.

20 AGRICULTURAL BUILDING & STEAM TRACTORS: This two-story building houses over 500 agricultural implements, in order of development, that helped build our vast agricultural economy. (Replica of McCormick's first reaper & Deere's first plow design.)

Originally built in Minden during the "horse and buggy days," this huge two-story building houses saddles, harness, fly nets and horse drawn rigs galore (including a complete harness shop and set of huge logging wheels).

Consider this an optional stop on your tour. It has been deliberately omitted from the student handout.

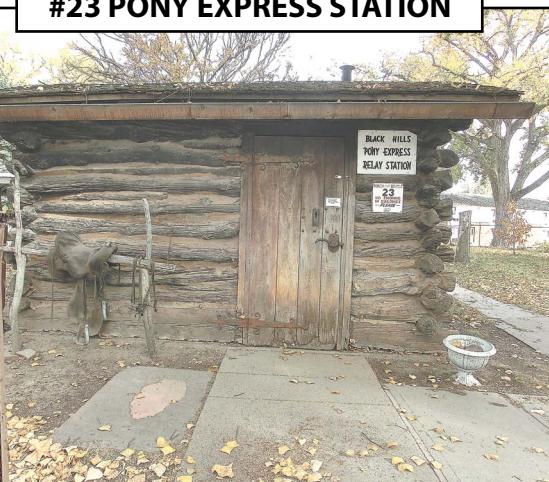


#16 LIVERY STABLE:
Downstairs in the Livery Stable you will find a collection of US mailboxes, absolutely essential for cross-country communication one hundred years ago. Upstairs you'll find this very curious old buggy.

What do you think that this buggy was used for?



#23 PONY EXPRESS STATION



Authentic log building, moved to Pioneer Village from Bridgeport, Nebraska, where it originally served as the Pumpkinseed relay station and later as a stage stop on the way to the Black Hills gold fields.

Few endeavors of the old west have been so celebrated and so short lived as the famous Pony Express.

This amazing chapter in the history of mail delivery is just another example of how commerce, technology and information leap-frog one another due to the ingenuity of American Citizens amplified by a free and effective Public School System.

22 PONY EXPRESS BARN

Directly behind the Pony Express Station is the barn that was essential for keeping fresh horses. Authentically reconstructed, with model horses and historic saddles. Includes 20-mule team Borax type wagon and items dug up at Fort Kearney.

21 BLACKSMITH SHOP

Behind the Pony Express Barn is a period Blacksmith Shop. The Smithy was the equivalent of today's mechanic in shoeing horses and making repairs to many metal items. On display are many of the Smithie's forges, and iron anvils and tools.

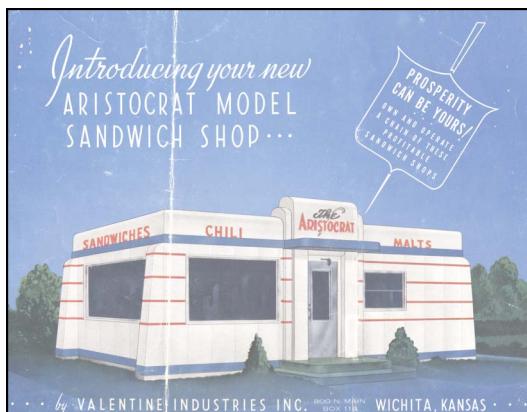
24 HOME APPLIANCE BUILDING

This building shows evolution of washing machines, stoves, refrigerators, bathtubs, etc. Including a "Franklin" style stove & a 1925 "Kelvinator" refrigerator.



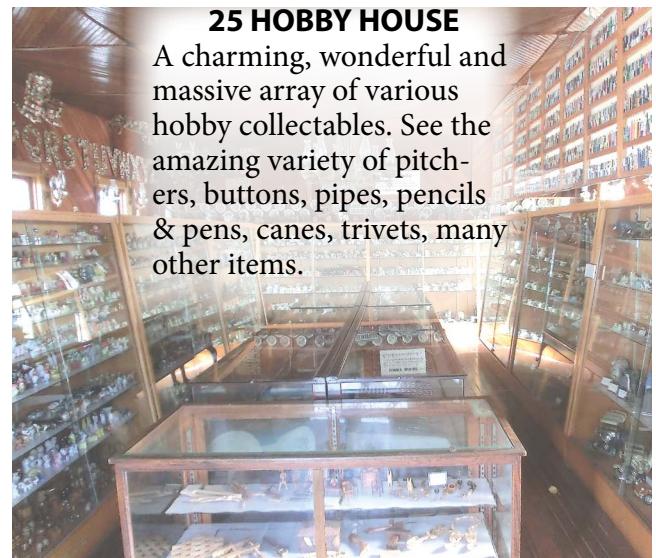
Discuss how it is different from modern generators. Explain without an understanding of math we would have no electricity and no refrigeration today!

shops all around the central States. This one was moved to Pioneer Village in 1953 and is still in use. Usually open only during the summer tourist season the snack bar serves hamburgers, hot dogs, ice cream, cold drinks and coffee.



26 SNACK BAR

This amazing sandwich shop was built in Wichita, Kansas by a small postwar start-up who built and delivered the



25 HOBBY HOUSE

A charming, wonderful and massive array of various hobby collectables. See the amazing variety of pitchers, buttons, pipes, pencils & pens, canes, trivets, many other items.