Welcome to the Mifflinburg Buggy Museum elementary program. This program is designed for grades 3 -5. It is separated into four major parts - spelling, reading and comprehension, math and geography. Below are the Pennsylvania Department of Education Standards that this program meets.

PENNSYLVANIA CORE STANDARDS

English Language Arts Grade Pre K–5 March 1, 2014 6 1.1 Foundational Skills Students gain a working knowledge of concepts of print, alphabetic principle, and other basic conventions.

- CC.1.1.3.D Know and apply grade-level phonics and word analysis skills in decoding words. Identify and know the meaning of the most common prefixes and derivational suffixes. Decode words with common Latin suffixes. Decode multisyllable words. Read gradeappropriate irregularly spelled words
- CC.1.1.4.D Know and apply grade-level phonics and word analysis skills in decoding words. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology to read accurately unfamiliar multisyllabic words.
- CC.1.1.5.D Know and apply grade-level phonics and word analysis skills in decoding words. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology to read accurately unfamiliar multisyllabic words.
- CC.1.1.3.E Read with accuracy and fluency to support comprehension. Read on-level text with purpose and understanding. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. Use context to confirm or selfcorrect word recognition and understanding, rereading as necessary.
- CC.1.1.4.E Read with accuracy and fluency to support comprehension. Read on-level text with purpose and understanding. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. Use context to confirm or selfcorrect word recognition and understanding, rereading as necessary.
- CC.1.1.5.E Read with accuracy and fluency to support comprehension. Read on-level text with purpose and understanding. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. Use context to confirm or selfcorrect word recognition and understanding, rereading as necessary.
- 1.2 Reading Informational Text Students read, understand, and respond to informational text—with an emphasis on comprehension, vocabulary acquisition, and making connections among ideas and between texts with a focus on textual evidence.
- C.1.2.3.L Read and comprehend literary nonfiction and informational text on grade level, reading independently and proficiently.
- CC.1.2.4.L Read and comprehend literary nonfiction and informational text on grade level, reading independently and proficiently.

CC.1.2.5.L Read and comprehend literary nonfiction and informational text on grade level, reading independently and proficiently.

2.2 Algebraic Concepts

CC.2.2.3.A.2 Understand properties of multiplication and the relationship between multiplication and division. M03.B-O.2.1.1 M03.B-O.2.1.2 M03.B-O.2.2.1

CC.2.2.4.A.2 Develop and/or apply number theory concepts to find factors and multiples. M04.B-O.2.1.1

The program is offered as a stand -alone program or can be paired with a visit to the Buggy Museum. The Museum offers two different tours at the elementary level. Reservations must be made two week in advance. Tours are offered Monday through Saturday, 8:30 am to 5:30 pm from April through November. Evening tours are limited in early spring and late fall.

Program 1: 1.5 hours, 30 minutes in each building (Heiss House, Carriage Factory, Repository) In the Heiss House, students will learn about living in the late 19th century by discovering chores done on each day of the week. In the factory, children will learn about the various parts of the buggy and how buggies are assembled. In the Repository/Showroom, children will learn about using a buggy – different vehicles, loads, speed, and distance. Teachers/Parents may choose one, two or all three parts of this visit. Cost is \$1.00 per child, per building, chaperones are free.

Program 2: 1.5 hours, walking tour of Mifflinburg. Students being with Elias and Catherine Youngman's graves and see the historic buildings throughout the town while discussing important aspects of the community. Cost is \$2.00 per person.

Step 1 Read and S	Spell Step 2 Copy and Spell	Step 3 Cover and Spell
1. Mifflinburg		
2. Union		
3. Pennsylvania		
4. Youngman		
5. buffalo		
6. carriage		
7. factory		
8. Elias		
9. teacher		
10. village		
11. automobile		
12. spring		
13. amount		
14. salary		
15. axle		
16. assembly		
17. purchase		
18. invention		
19. economy		
20. structure		
Bonus: elliptical		

Write two sentences uspelling words you us	_	of your spelling words. Circle the
1		·
2.		
	Spelling (Correction
Circle the spelling wo bottom of the page:	ords that are miss	spelled and spell them correctly at the
about 20 miles from he further than they could invented the first steat not practical. One of German engineer. His American auto maker cars and used an assert several parts in comme 1900s, the average sa	nome in one day. Id in a carriage. If Im powered vyhic Ithe first atomobi Its first car was a to It was Ransom Eli It mblie line in his It non, such as the a Ilary for men was I have taken a lo	miles an hour. You can only travel People wanted to travel faster and Nicholas Cugnot, a Frenchman cle in 1769. But this invension was il manufacturers was Karl Benz, a tricycle with an engine. The first i Olds. Olds bought many parts for his faktory. Cars and carriages had axel and elptical spings. In the early a \$1200, (a teacher would have made ong time to save the money to porkase e for \$1370.
1	2	3
4	5	6
7 10		9

Spelling Words/Word Search

REHXEUQAYMLCJHIDTRVB OLAFFUBOSRGASBDVVEQU AXWPYSUEESOXCNFRCHFP JAQHANGRPPETBIRSBCUU PUDLGAUMVJWMCJTPGAAR WFAMLTAAZVMXBASPGEJC NRALCLPNOINUXLFFITOH YNIUBFJAFXIJFWYTGLGA WVRRDFSFKMUGPFAIOLLS MTUZOZLFETILENWVWVXE SBGPXISNXECONOMYAZOD EPXSNFWALLZRNIAXTIJZ ILRBCARRIAGESTMPUOQU FTUIHDORYLFHYNOUYMDT YRDKNJZKPAERLEUVFZOV GVIDVGLXFEASVVNRPICT YBXELIBOMOTUANTOXCGI HDXKIMRUJEJTNITHOZYL CNYTMMWWSNYFIDZOSYYR MNVNZHXJJRMUAYKWAFBB

AMOUNT
AUTOMOBILE
BUFFALO
ECONOMY
ELLIPTICAL
INVENTION
PENNSYLVANIA
SALARY
STRUCTURE

SALARY STRUCTURE UNION YOUNGMAN ASSEMBLY AXLE

CARRIAGE ELIAS FACTORY

PURCHASE SPRING TEACHER VILLAGE

MIFFLINBURG

Vocabulary

Frontier – in Colonial times (1608-1787), the frontier was land where white settlers did not live.

Saddler – a person who makes saddles for riding a horse.

Tanner – a person who makes leather. Leather is made from the skin of animals, particularly cows.

Mason - a person who works with stones, like building a stone foundation of a building

Governor – a leader of a state, usually elected by the people.

Agriculture or Agricultural – the practice of growing plants for food or clothing and raising animals for food.

Acre – measurement of land. One acre is 43,560 square feet no matter what shape the acre is.

Citizen – a person who lives in a certain place.

Population – the number of people who live in an area.

Industry - a company or companies that make something people buy, such as the textile industry makes products made from cloth.

Apprentice – a person training to do a job. A student teacher is an apprentice learning to be a teacher.

The History of Mifflinburg

Elias (E-lie-us) Youngman and his wife Catherine (Ka-th-er-in) were living in Shamokin, now Sunbury when Catherine's father, George Nagle (Naygal) sold them 1000 acres along Buffalo Creek. Elias and Catherine wanted to start their own town. They began by choosing a location within the 1000 acres for the town, which they called Youngmanstown. Elias and Catherine divided this area into 120 feet by 60 feet lots and laid out streets. They sold these lots of land to people interested in settling in the frontier. Among the first people to move to Youngmanstown were a shoemaker, a tavern or inn keeper, a saddler, a carpenter and a tanner. Elias and Catherine also sold "outlots" or one acre plots outside the town to residents who had animals that needed to graze or eat grass. Over the next few years more people moved to the area, among them a gunsmith, a blacksmith, a mason, a store keeper and a weaver. To the east of Youngmanstown, George Rote (Wrote) began selling plots of land for a town he called Greenville. When Rote died, his village was renamed Rotestown. Very quickly, these towns were known as Mifflingsburg, in honor of Governor Thomas Mifflin, the first governor of Pennsylvania after the Constitution of 1790. The extra g and s were dropped and the town officially became known as Mifflinburg in 1827.

One of the first things the citizens (sit-a-zens) did was build a structure (struck-char) that two separate churches used – the Lutheran Church and the Reformed Church. The citizens built another structure for a school. Because these families had originally come from Germany, they spoke German. Church services were held in German and classes were taught in German. There was also a school were classes were taught in English. Mifflinburg grew very slowly, the population was 1000 people in 1860; 1500 people in 1890; and today the population is 3600. Mifflinburg was a small town that served as an agricultural (a-gri-kal-cha-ral) center. Farmers could bring their crops and animals into town to sell or to transport to other towns. Farmers could buy seeds, fertilizer, and equipment. In the town, people made a living by making or repairing equipment for farmers; and selling seeds and fertilizer.

Originally people and the things they owned or wanted to buy would be transported by wagons on dirt roads. These roads had been created as walking paths by the Native Americans. As settlers moved into the area, these paths became wagon roads and today are our highways. Roads were maintained by tolls, a tax or fee paid to someone for using the road. There

were toll houses at the east and west ends of Mifflinburg. Today, the only toll road in Pennsylvania is the Pennsylvania Turnpike which connects Pittsburgh in the west to Philadelphia in the east. By 1871, tracks had been laid for the Lewisburg to Tyrone Railroad, part of the Pennsylvania Railroad.

In 1845, a new industry (in-dust-ree) came to Mifflinburg and over the next eighty four years that industry, buggy making, would shape the growth of the town. George Swentzel (swen-zal) opened the first buggy or carriage factory in town. George had two apprentices or students, Jacob Hendricks and Jacob Gutelius (Goo-tell-e-us). Eventually, George Swentzel moved to Illinois (ill-in-oy) where he sold cattle. Jacob Hendricks also moved to Illinois where he continued to work as a buggy maker. Jacob Gutelius stayed in Mifflinburg, opening his own shop on 3rd Street between Market and Chestnut. Jacob Gutelius taught his older brothers, Thomas and John how to make buggies. Both of them opened their own shops. Thomas' shop was on Walnut Street and John's shop was on Market Street. Many of the town's buggy makers started as apprentices and then opened their own shops. Some of the shops were very small with only one or two workers, some were larger. Two buggy shops in town, the Mifflinburg Buggy Company and the Hopp Carriage Company had almost 100 workers each. The buggy shops in Mifflinburg made 5000 buggies or carriages each year. The town was nicknamed "Buggy Town" because of the number of buggy makers and the number of buggies made. From 1845 to 1929, Mifflinburg had 90 buggy companies. Not all of the companies were in business at the same time.

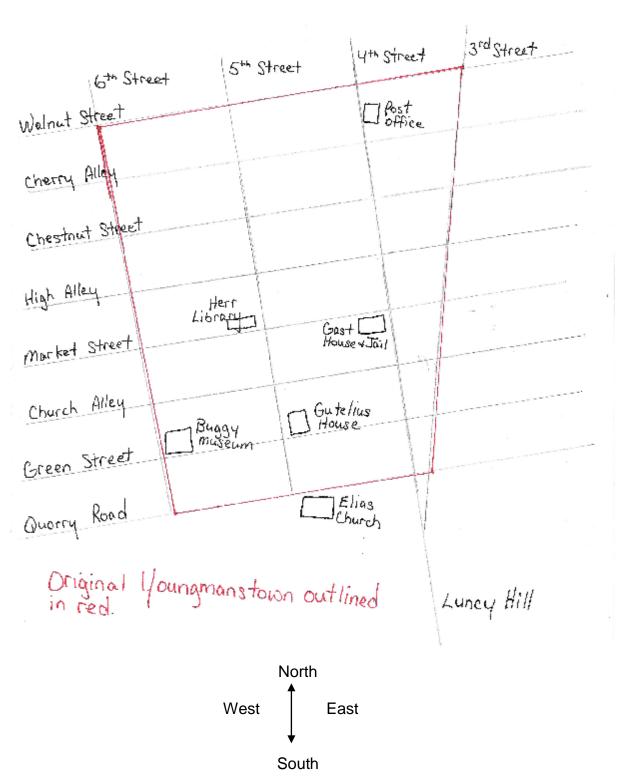
As the buggy business and the town did well, the town modernized (modurn-ized). They added new things that helped the people who lived here. In 1898, the town offered its citizens water. Water was piped in wooden tubes or pipes from the top of Luncy Hill. Not long after, sewer pipes were also installed to carry away the waste. The cost to have water piped into your home was \$6.00 per year for a residence. In 1903, the town of Mifflinburg became electrified (e-leck-tree-fied). Its rival town, Lewisburg had been talking about installing gas lines, but Mifflinburg, believing it could do better –installed electric. The cost was \$1.00 per bulb, per year for homes. As the buggy business declined or stopped, the citizens in town turned to other industries – toy making, textiles, cabinets, and houses. Today, Mifflinburg is still an agricultural support town and also still has manufacturing.

Comprehension Questions

1. Elias and Catherine Youngman bought 1000 acres from whom?
2. Mifflinburg started as two villages, named and
3. Thomas Mifflin was the first governor of what state:
4. The population of Mifflinburg today is
5. George Swentzel made what product:
6. How much did it cost to have running water in your home in 1898?

Questions for Discussion

- 1. Why do you think people would want to move to a new town?
- 2. If you were starting your own town, what skills or jobs would you want people to have?
- 3. Have you ever traveled by buggy? By train? By plane?
- 4. Ask the adults you live with about the electric bill and water bill for your house?



Map Exercise

Using the map locate and mark the following places:

- 1. Outline Rotestown to the east of Youngmanstown in blue ink.
- 2. Jacob Gutelius' factory was between High Alley and Market Street along the west side of 3rd Street.
- 3. Thomas Gutelius' factory was on north side Walnut Street between $3^{\rm rd}$ and $4^{\rm th}$ Streets.
- 4. John Gutelius' factory was on the south side of Market Street between 5^{th} and 6^{th} Streets.
- 5. The German School was on the south east corner of Green and 5th Streets
- 6. The English School was located on the north side of Market Street in the middle of the block between 3rd Street and 4th Street.

History Math

1. William Heiss was a buggy maker. He paid his painter \$1.50 per day. The painter worked six days a week. If the buggy factory was opened 50 weeks each year, how much would the painter make? Show your work:
2. Homer Artman lived with the Heiss family. He paid \$12.00 a month in rent. He paid Mrs. Heiss \$2.00 a week to do his laundry. How much money did Homer spend on his rent and laundry in one year? Show your work:
3. Dr. Piper wants to buy a new buggy from John Gutelius. Mr. Gutelius has a buggy for sale for \$75.00. Dr. Piper will pay Mr. Gutelius 20% of the price immediately and then pay 10% each week until it is paid off. How much will Dr. Piper pay: 1st payment, each weekly payment: How many weeks will it take Dr. Piper to pay for the buggy.

TEACHER'S ANSWER KEY Spelling Correction

Circle the spelling words that are misspelled and spell them correctly at the bottom of the page:

A horse and <u>cariage</u> can travel fifteen miles an hour. But you can only go about 20 miles from home in a day. People wanted to travel faster and further than they could in a carriage. Nicholas Cugnot, a Frenchman invented the first steam powered <u>vyhicle</u> in 1769. But this <u>invension</u> was not practical. One of the first <u>atomobil</u> manufacturers was Karl Benz, a German engineer. His first car was a tricycle with an engine. The first American auto maker was Ransom Eli Olds. Olds bought many parts for his cars and used an <u>assemblie</u> line in his <u>faktory</u>. Cars and carriages had several parts in common, such as the <u>axel</u> and <u>elptical spings</u>. In the early 1900s, the average salary for men was \$1200, (a teacher would have made \$970 a year). It would have taken a long time to save the money to <u>porkase</u> a Ford for \$250 Ford or an Oldsmobile.

1. carriage	2. vehicle	3. invention
4. automobile	5. assembly	6. factory
7. axle	8. ellipitcal	9. springs
10 1		

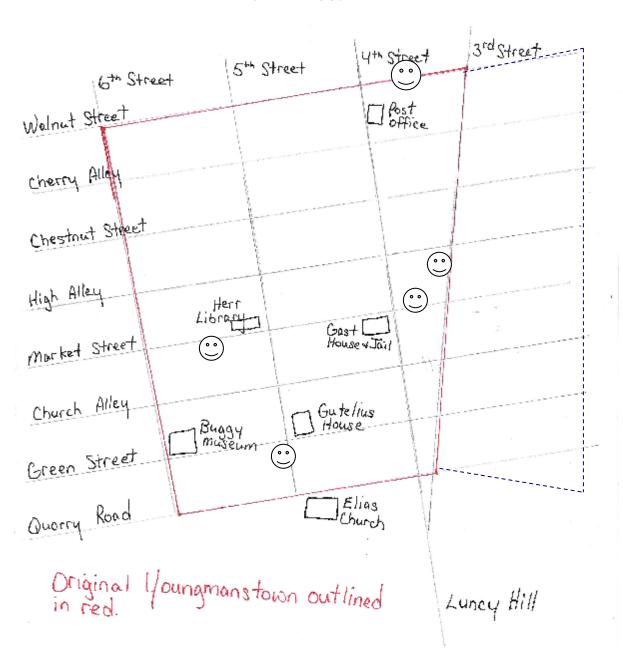
10. purchase

Comprehension Questions

- 1. Elias and Catherine Youngman bought 1000 acres from whom? <u>From Catherine's father, George Nagle.</u>
- 2. Mifflinburg started as two villages, named <u>Youngmanstown and</u> Greenville or Youngmanstown and Rotestown.
- 3. Thomas Mifflin was the first governor of what state: Pennsylvania
- 4. The population of Mifflinburg today is $\underline{3600}$.
- 5. George Swentzel made what product: he made buggies or carriages.
- 6. How much did it cost to have running water in your home in 1898? <u>\$6.00</u> per year.

Questions for Discussion

- 1. Why do you think people would want to move to a new town? Depending on what has been covered, you can discuss the push pull factors of migration. There were few families here prior to 1755, they 'ran away' after the Penns Creek Massacre. The land was then "regifted" as thanks for service in the French and Indian War. People moved here because the area around Philadelphia, spreading out into Lancaster, Reading was becoming more crowded.
- 2. If you were starting your own town, what skills or jobs would you want people to have? *Masons and carpenters to build homes and buildings, farmers to grow needed food, a blacksmith to make tools and repair equipment; a tanner for shoes and leather; a teacher for the children.*
- 3. Have you ever traveled by buggy? By train? By plane? Buggies travel 10 15 miles per hour on average. In the 1880s, the average train was 60 to 80 miles per hour, today's fastest train travels at 300 miles per hour (faster than Formula One race cars, which average just under 200 miles per hour. Planes travel about 550 miles per hour. Traveling from Philadelphia to Pittsburgh in 1750 would have taken 23 days; after the Allegheny Portage Railroad connected the Hollidaysburg Canal and the Johnstown Canal, travel between Philadelphia and Pittsburgh was cut to 5 days. By car you can travel between the two cities in 5 hours. By train, it takes 7 hours and by plane 45 minutes.
- 4. Ask the adults you live with about the electric bill and water bill for your house?



History Math

1. William Heiss was a buggy maker. He paid his painter \$1.50 per day. The painter worked six days a week. If the buggy factory was opened 50 weeks each year, how much would the painter make? Show your work:

$$6 \times 1.50 = $9.00 \text{ a week}$$

$$9.00 \times 50 = \$450.00 \text{ a year}$$

2. 2. Homer Artman lived with the Heiss family. He paid \$12.00 a month in rent. He paid Mrs. Heiss \$4.00 a month to do his laundry. How much money did Homer spend on his rent and laundry in one year? Show your work:

$$$12.00 \times 12 = $144.00$$

$$$144.00 + $48.00 = $192.00$$
 each year for rent and laundry

3. Dr. Piper wants to buy a new buggy from John Gutelius. Mr. Gutelius has a buggy for sale for \$75.00. Dr. Piper will pay Mr. Gutelius 20% of the price immediately and then pay 10% each week until it is paid off. How much will Dr. Piper pay: 1st payment \$15.00, each weekly payment: \$6.00. How many weeks will it take Dr. Piper to pay for the buggy. 11 weeks altogether 1st payment and then 10 payments of \$6.00 each.

$$$75.00 \text{ x } .20 = $15.00 \text{ } 1^{\text{st}} \text{ payment}$$

$$75.00 - 15.00 = $60.00$$
, $$60.00 \times .10 = 6.00$

$$60.00/6.00 = 10$$
 payments