This social studies unit traces the development of the American road system beginning with early Indian footpaths and continuing through horse trails, wagon roads, all-weather highways, and the first national road. The role played by the Conestoga wagon is emphasized as well as the physical, economic, and political factors involved in road development. The loose-leaf student activity book features twelve reading selections followed by questions and suggested activities, more than 20 illustrations, and eight maps. The teacher's edition contains historical background, supplemental activities, tests, a filmstrip text, answer keys, and a list of references. (KC)
EARLY PATHS AND TRAILS TO CONESTOGA ROADS

STUDENT ACTIVITY BOOK

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INTRODUCTION

How did you come to school today?
Most of you either walked or rode a bus, car or bicycle. Each person began his journey on a road leading to the school. These roads came from all directions: north, east, south, and west.

Look at a highway map. Locate your town. How many roads lead to and from your town? These roads were not always there.

What was it like to travel before good roads were built? Why did people need roads? How did people build early roads?

The story of roads started a long time ago. Let's go back to a time when people had only trails to follow in North America.
Along time ago before Indians came to eastern United States, there were only animal paths. Some of the paths led to water holes and to places where the animals found food. The paths became wider and deeper as animal herds used them more often.

People made paths also. Historians do not know exactly when Indians came to this area. By the time Europeans arrived, the Indians had many trails crisscrossing the land.

Sometimes the Indians traveled along animal paths. But most of the time they made their own trails.

The Indians were very good trail makers. They chose the route carefully. Where possible they kept the paths on high, dry ground. When the path had to cross a stream the Indians chose the best place to ford.
The Indians made most of their paths just wide enough for a man to walk. Some paths were only half the width of a modern city sidewalk. Indians made different kinds of paths for different reasons. They had paths for hunting, visiting, trading, and fighting.

When the tribes were at war, they needed to protect themselves from their enemies. Usually the war paths were made through dense woods. The thick trees and brush would hide the Indians from their enemies. Whenever possible the war paths ran along higher ground. From this high point warriors could watch for their foes.

If they wanted to visit or trade with other tribes, the Indians took the most direct route to the village. These paths were usually dry. They had good drainage with no hidden springs to wash away the surface.

The Indians built shelters along these trails. They used the shelters if the weather was bad or the journey too long. They often left a piece of smoked bear meat hanging from the roof to help a hungry traveler. The Indians were not in a hurry when they traveled on the visiting or trading trails.

The Indians did not need road signs. They were skilled in finding their way through the forest. Men carried bows, arrows, and knives on a trip. Hikers today follow well marked trails. They take watches, compasses, matches and food. If they plan to stay on the trail overnight they take sleeping bags, tents, and cooking equipment.
MAP WORK ABOUT "MAIN INDIAN PATHS OF PENNSYLVANIA"

Use the map about Indian paths to answer the following questions. Circle the correct answer.

1. Which path is in western Pennsylvania?
   Venango  Tioga  Minisink

2. Which path goes from Maryland into southern Pennsylvania?
   Wyoming  Nemacolin's  Great Shamokin

3. Which path is in northern Pennsylvania?
   Raystown  Allegheny  Pine Creek

4. In which direction is the Great Shamokin Path from the Raystown Path?
   North  East  South  West

5. In which direction is the Portage Path from the Pine Creek Path?
   North  East  South  West

6. In what two directions did Indians travel over the Paxtang Path?
   North-South  East-West  North-West

7. In what two directions did Indians travel over the Raystown Path?
   North-South  East-West  North-East

8. What are the directions the Indians traveled over the Wyoming Path?
   Northeast-Southwest  North-East

9. What are the directions Indian warriors traveled over the Iroquois Main Road?
   Northeast-Southwest  North-East

10. What is another name for the Great Minquas Path?
    Conestoga  Allegheny  Venango

11. What western path crisscrosses the Frankstown, the Nemacolin's and the Raystown Path?
    Allegheny  Catawba  Virginia Road

12. Which northern path joins the Great Warrior's Path and the Iroquois Main Path?
    Great Shamokin  Paxtang  Forbidden
EQUIPMENT FOR THE TRAIL

1. Study the pictures below. Which objects would Indians have carried on the trail? Put a big I over each object.
2. Put a circle around the equipment modern hikers might carry on the trail.
3. Put a big XX over the items that neither the Indians nor modern hikers would use on the trail.

PICK A TRAIL

The story tells about different kinds of trails that the Indians used. Write the name of the trail the sentence describes.

1. This trail is hard to see. It passes through a thick growth of bushes.
2. An animal has nibbled the leaves from the bushes along this trail.
3. A trail stops in the deep grass near a small pond.
4. A small shelter stands along this trail.
5. There is a wide meeting place on this trail. On the ground are a few grains of corn and a broken clay pot.
6. A warrior on this winding trail can look down to see if anyone is following him.
7. This trail is between friendly villages.
WORDS TO KNOW

1. company—a group of people working together in a business for money.

2. detour—to go around when the main way is blocked or closed.

3. exchange—to trade an object for another object.

4. macadam—smooth, hard road made by rolling stones and tar together.

5. pass—a narrow way between mountains.

6. pelt—the skin of a furry animal.

7. trader—a person who exchanges one item for another item.

The Indians were skilled at trapping fur-bearing animals like the beaver, fox and rabbit. In Colonial times people wanted these furs to make cloaks, beaver hats, and slippers. British and Colonial companies sent fur traders to Indian villages to trade for pelts. The traders carried a supply of goods, such as cloth, guns, and iron kettles. They exchanged these articles for pelts.

As traders traveled to Indian villages in western Pennsylvania, they rode horses and led packhorse trains. Where possible, traders followed paths or streams through passes in the mountains. When the passes were too narrow for the packhorses, the traders had to find new routes over the steep mountains. In this way, trails used by packhorses became wider than footpaths.

Travel was not easy or pleasant. In the summer mosquitoes made fur traders miserable. In the winter sleet and snow storms made the trail slippery. Fallen trees and flooded streams often forced the traders to detour. If they had to spend the night along the trail they slept on beds made of
hemlock or balsam branches. The traders ate the food they found in the forest. Boiled rattlesnake was a good meal for a hungry man.

The traders soon found that their pack-horses could not carry enough trade goods. The companies decided to build storehouses and haul small wagon loads of kettles, hatchets and knives to these places. Beads, lace, hairpieces and other fancy articles were added to the necessary supplies.

Now men who were stationed at the posts could get furs whenever the Indians were ready to trade. The companies sent trade goods to the posts and collected the furs.

After trading posts were started small settlements grew around them. Many trips were made over the trails to the trading posts and settlements. Historians know trading posts stood at Harrisburg, Carlisle, Shippensburg, Bedford, Ligonier and Pittsburgh.

The trails became wider as more men and wagons used them. Still the roads to the trading posts were hardly more than rutted, dirt paths. No one paid to have the roads repaired. Trips were made in the summer and fall because the trails were mud holes in the spring and frozen ruts in the winter. There were no hard-surfaced roads of macadam, concrete or cement.
MAP WORK OF "EARLY TRADING POSTS"

1. Use a red crayon to make an arrow to show the direction the Indians moved from eastern Pennsylvania.
2. Color the Ohio River blue.
3. Use a modern map of Pennsylvania to find the cities which are now located where trading posts were built. Label them on the map beside each post.

FOR THE EXTRA CURIOUS

1. Furs were shipped across the Atlantic Ocean to Europe by the companies. How were they used in England and France? See what you can learn about European fashions during the 1700s.
2. Study the history of macadam roads.
3. How did the Indians trap the furry animals? Did they use traps like modern ones?
Number the fur trading pictures in order.
TRAILS TO FORTS

WORDS TO KNOW

1. fortify—to make stronger against attack.
2. navigate—to travel by water.
3. portage—route to carry boats and supplies over land between two waterways.
4. territory—a large area of land.
5. threat—a warning of danger.

Both the French and English traders followed the Indians into the Ohio Valley. The French used water routes and portages to reach the Indians in the Ohio Valley. They traveled up the St. Lawrence River into Lake Ontario and Lake Erie. The French removed their canoes and supplies from the water at Presque Isle and carried them 20 miles to a branch of the Allegheny River. Then they navigated the river to the Forks of the Ohio River. The French traded with the Indians and sent the pelts back through the rivers and lakes to Quebec. From Quebec the pelts were shipped to France.

The French found the English had also come to the Ohio Valley to trade for furs. Traders for the English companies crossed the Allegheny Mountains by foot and pack horse. Many times they followed Indian trails.

Both the French and English believed that their explorers had been first to claim the Ohio Valley for their countries. To enforce their claim the French built a chain of forts from Lake Erie to the Forks of the Ohio River. They planned to hold the Ohio Territory by military force.

Because of the French military threat the traders for the English began to fortify their trading posts. To support the English claim the Governor of Virginia
sent a messenger to the French at Fort Le Boeuf. The messenger was to deliver a letter which said that the Ohio Valley belonged to England and the French must leave.

Each side prepared to defend its claim to the Ohio Valley. Each would fight to keep its fur trade with the Indians. This would be difficult for the English. First they would need to build roads across the mountains to the Ohio Valley.

MAP WORK OF "FRENCH AND ENGLISH CLAIMS TO THE OHIO VALLEY"

Use the map to answer the questions.

1. The Ohio River flows through the Ohio Valley. Find the Ohio River on the map. Draw a green circle around the name of the "Ohio Valley."

2. Two rivers meet at the Forks to make the Ohio River. Which river flows south? ______________ Which river flows north? ______________

3. The story tells about the route of the French into the Ohio Valley. A long arrow marks this route. Color the arrow blue.

4. Color the portage between Presque Isle and French Creek green.

5. The French built forts along the way. Use the key to locate the six French forts. Color each marker blue.

6. The traders for the English moved westward across the Allegheny Mountains. They started near the Atlantic Coast and followed two main routes to the Ohio Valley. Color these two arrows red.

7. The traders for the English fortified their posts. Use the key to locate the posts. Color them red.
In the Ohio Valley, French and English claims to the Ohio Valley were significant. French forts, such as Fort Le Boeuf and Presque Isle, were established along the Allegheny and Ohio Rivers, respectively. The Ohio River was a crucial waterway for trade and travel. The Adena and Ohio culture sites are also indicated on the map, which flourished during the Pre-Columbian period. 

The map also highlights Presque Isle, Forts of the Ohio, and various other geographical features important during the 18th century. The scale is marked in miles, with 0, 25, 50, 100, and 150-mile intervals. The key includes symbols for body of water, mountains, French forts, and English and traders' posts.
WILDERNESS TRAVEL

WORDS TO KNOW

1. **frontier**—the land where people are beginning to settle.
2. **interpreter**—a person who changes words from one language to another.
3. **plod**—to travel slowly.
4. **scarce**—not enough; hard to find.
5. **shallow**—not deep.
6. **wilderness**—an area where there are very few people; the land has not been changed by people.

The Governor of Virginia sent a young man named George Washington to carry a letter to the commander of the French. It was near the end of October, 1753, when Washington left Williamsburg, Virginia, to deliver the message.

He traveled the new road that had just been built through the wilderness to Fort Cumberland. Along the way Washington bought horses and supplies for the winter journey. From the fort he would have to follow trails.

Washington needed to hire a guide who knew the area. Christopher Gist, who lived in the wilderness and worked for the trading company, agreed to lead Washington's group of six men to Fort Le Boeuf.

Seven men started by horseback over Nemacolin's Path. Rain and heavy snow made the trails wet and muddy. Dry wood was scarce. Cold winds and low temperatures made the journey miserable. The high, swift-moving streams were difficult to ford. Finally the weary men and tired horses plodded into Fort Le Boeuf.

After the French commander read the letter, he wrote his own message for Washington to take back to Virginia's Governor. He stated that the Ohio Valley belonged to the French and they would not leave!
The horses were too weak to carry full packs on the return trip from Fort Le Boeuf. Washington sent some of the men and the horses ahead to Ft. Machault at Venango. With the rest of the party, he canoed down French Creek. The canoes were filled with the supplies. Often the men were forced to wade in freezing water at places where the stream was too shallow for the loaded canoes. It took nearly a week until the two groups met again.

From Venango, the men rode their horses. Freezing rain caused an icy crust to form on top of the snow. It cut the legs of the horses when they broke through the snow.

Because travel was so slow, Gist and Washington left the group and hurried ahead on foot. They planned to walk across the frozen Allegheny River. When they reached the river it was not completely frozen. They hastily built a raft. In crossing Washington was thrown into the rushing water. He clung to the raft until large chunks of ice forced it onto an island. Here they spent the cold night in frozen clothes.

The next morning a solid sheet of ice had formed on the river, and they were able to continue the journey to Frazier's trading post. Beside a blazing fire Washington and Gist rested and regained their strength. Borrowing two horses, they rode back to Fort Cumberland over Nemacolin's Path. It was not until January 16, 1754, that Washington was able to hand the French Commander's message to the Governor of Virginia at Williamsburg.

Travel was very slow. It took a lot of time to deliver messages in the frontier with few or no roads. Today, it would take only two days for a letter to be sent from Williamsburg, Virginia, to western Pennsylvania. A messenger traveling by car could make this trip in a day.
When a person sets out on an important mission he often keeps a daily record of the trip. The record is called a diary.

George Washington kept a diary of his mission to Fort Le Boeuf. Others who went with him may have kept a record, also.

DIRECTIONS: Read Christopher Gist's diary. Follow the trip. Write the dates on the map to show where each event happened. Use a different colored pencil to write the dates of the return trip from Fort Le Boeuf.
CHRISTOPHER GIST'S DIARY AS A GUIDE

Nov. 14 - Washington arrived at Ft. Cumberland with horses, supplies and a French interpreter; hired me to be his guide and four others to help.

Nov. 15 - set out from Ft. Cumberland over Nemacolin's Path; crossed seven mountains and forded many streams; heavy snows and rain slowed our travel.

Nov. 22 - arrived at the mouth of Turtle Creek where John Frazier has a trading post. Youghiogheny River was too deep for fording. The horses had to swim; got a canoe from Frazier so two of the men could canoe the baggage the next 10 miles to the Forks of the Ohio.

Nov. 25 - came to Logstown; friendly Indians told us that the shortest and easiest trail was too muddy to travel; took Logstown Path; some Indians joined us.

Nov. 30 - traveled in very bad weather along the trail to Venango.

Dec. 4 - arrived at Venango. The French had chased Frazier out and fortified his trading post. They renamed it Ft. Machault.

Dec. 7 - left for Fort Le Boeuf; traveled through rain and snow which made the trail very muddy. French Creek was too high and swift to ford or cross by raft; traveled along the stream.

Dec. 12 - met the French at Ft. Le Boeuf.

Dec. 13 - waited for the French answer; studied the fort and saw many cannons; counted 50 birch canoes and 170 pine canoes. The French were preparing to haul their forces down to the Forks of the Ohio in the Spring.

Dec. 14 - sent the weak horses back to Venango because the snow was beginning to fall again; got an answer from the French.
Dec. 16 - began a dangerous trip down French Creek in canoes; was still snowing.
Dec. 22 - took 6 days to canoe 130 miles down the crooked creek; met the weak horses at Venango; continued south on Venango Path.
Dec. 26 - travel was so slow; Washington and I left the other men and horses and set out on foot through the woods. Washington was in a hurry to deliver the answer to the Governor at Williamsburg, Virginia.
Dec. 27 - a party of French Indians fired at us; we captured one and held him as a hostage until 9 o'clock that night; walked all night to get ahead of the Indians.
Dec. 29 - arrived at the Allegheny River near Shannopins, an Indian village.
Dec. 30 - built a raft with one poor hatchet; began to cross the swift river; Washington was pulled into 10 feet of water but saved himself by hanging onto the raft.
Ice forced the raft onto an island; spent the cold night on the island; froze my fingers and toes.
Dec. 31 - left the island and walked across the frozen river; arrived at Frazier's trading post.
Jan. 1 - left Frazier's house.
Jan. 2 - reached my place before dark; Washington bought a horse and saddle for the last leg of the journey.
Later I heard that Washington arrived at Ft. Cumberland on Jan. 7. He delivered the answer from the French to the Governor at Williamsburg on Jan. 16.
There was only one day on the entire trip that it did not snow or rain. The weather was cold and wet for the whole mission.
Trent left the trading post at Redstone Creek for the Forks. He had seventeen packhorses loaded with supplies and materials. Several families who wanted to settle the region traveled with him.

Before Trent's group finished the post friendly Indians arrived. The Indians brought word that the French were preparing to attack Trent's post. Trent sent an urgent message to the Governor of Virginia asking him to send troops for protection.

The Governor sent for George Washington who had just returned from seeing the French at Fort Le Boeuf. He had learned about the kind of country that troops with military supplies must cross to reach the Ohio Valley. The Governor asked Washington to recruit men and get supplies to save the settlement. Washington assembled his troops at Fort Cumberland. Before he could leave, another messenger arrived. He said
that the French had already captured Trent's trading post. The French changed the name of Trent's settlement to Fort Duquesne. However, the young leader decided to move his men through miles of wilderness between Fort Cumberland and Redstone where he planned to fortify the trading post at Redstone.

Washington knew the trail to Redstone would be too narrow to move his supply wagons. Men with axes were sent ahead of the troops to widen the trail. This wider route was still little more than a rough path. The roadbed was the forest floor. Big rocks and tree stumps jutted from the ground.

Horses could not pull the wagons up the steeper grades. Men had to put their shoulders along the sides of the wagons and shove. When they were going down hill some men had to stay beside the wagons to keep them from rolling too fast.

Every foot of the way was a struggle. Weary men dropped by the campfire in the evening. Their clothes were torn by branches and briars. Their hands were cut by rocks and tree stumps.

Finally the wagons rolled down Laurel Hill into the Great Meadows. They had crossed the last of the Allegheny Mountains that blocked the Ohio Valley from the settlements along the Atlantic Coast.

Washington's men had chopped the first road leading into western Pennsylvania. Never before had wagons entered the Ohio Valley. This road was wider than the packhorse trails. But it was still rough and full of ruts.

It took Washington and his men over one month to reach Laurel Hill. They continued to widen the trail to Gist's home. Here news arrived that the French planned to attack, so Washington retreated to Great Meadows.
DOWN
1. protected French settlement on the frontier
3. name of the French fort at the Forks of the Ohio River
4. number of packhorses lent used
5. to stick out
7. British trading post on the Monongahela River
9. deep track worn into a path

ACROSS
2. English trading places
6. very important, needs quick action
7. to sign up men to join an army
8. British fort where Nemacolin's Path started across the Alleghenies westward
9. direction a path or road takes
10. tools used to clear the forest
11. Captain's name who went to the Forks of the Ohio River
ROSS THE MOUNTAINS

ROSS THE MOUNTAINS

WS TO KNOW

advance—to move ahead.
advise—to give knowledge to another.
boast—to brag; to speak proudly.
defeat—fail to win.
engineer—person who is trained to build a road.
retreat—to move backward; to go back to a safer place.

Washington and his men left the Ohio Valley after they were defeated by the French forces. The French now controlled rich fur regions of western Pennsylvania.

One year later, the English king directed General Braddock to force the French to leave the Ohio Valley. To do this Braddock would have to capture Fort Duquesne from the French.

Because Washington and his men had cleared a rough road into the Ohio Valley he was sent to advise Braddock. How difficult it would be to take an army and supplies over eight steep mountains!

Braddock's force of 2,200 men marched from Fort Cumberland in early June, 1755. English supply wagons that followed needed a road twelve foot wide. The heavy cannons needed a firm roadbed.

At the head of the army 600 men moved with axes to clear and widen the road started by Washington's men a year earlier. New growth of young trees and blackberry brambles had to be hacked away! Men and equipment could advance only as fast as the axmen could chop and engineers repair the road. Sometimes it took ten days to move twenty-four miles.

It seemed that making this road would stop the army. Large supply wagons were broken crying to move over the rough road.
Sometimes those that got off the trail sank axle deep in mud. Horses that became too weak to pull the loads were left by the roadside.

The soldiers were weary and discouraged. On dry days, dust from the wagons in front covered their coats and made breathing hard for those in the rear. At night mosquitoes came in swarms. Day after day the men faced the same hardships. Somehow, Braddock urged his men forward.

After struggling over many mountains Braddock's army viewed the Ohio Valley near Fort Duquesne. The Governor of New France had boasted that not enough English soldiers could cross the Allegheny Mountains to bother the French. But he was wrong: Braddock's army had built a military road across the rugged mountains!

The road was soon used for another purpose. Braddock's troops were not prepared to fight the way the French and Indians of the frontier fought. As a result the English were badly defeated. Braddock's battered army retreated back to Fort Cumberland. They used the same road they had worked so hard to build.

Today, a main highway follows the same route Braddock's men chopped through the forest. Cars and trucks travel along the smooth surfaces.
FIFTEEN PROBLEMS ON THE WAY

"Find and circle fifteen words that are hidden in the letter puzzle. When you find all fifteen words you will have a list of problems that Braddock and his troops faced on the journey to the Forks of the Ohio River.

AWZFORESTTOPMQRTH
LKTSRZPVWVDICICL
CJDSTEMFMBROGNBA
OSPTUDQFGEREDHW
PBUTMDJCJHMRNIO
MOSQUITOESFANAYF
ATBZDREMXXIRNQG
WCHDMOUNTAINSTH
SNSCKCTRJMKTDAI
TREESKSBRAMBLESN
BDFLHSQGJPCSCHUB

TIRED MEN

Match each word in Column I with the word it describes in Column II.

MAP WORK ON "MILITARY ROADS ACROSS THE ALLEGHENY MOUNTAINS"

1. Use a yellow crayon to trace Washington's road building trip to Gist's home.
2. How many times did Washington cross the Youghiogheny River? _____________
3. When Washington retreated from Gist's home he built a fort in the Great Meadow. What did he call the fort? _____________
4. When General Braddock prepared to leave Fort Cumberland he believed it was only 15 miles to Fort Duquesne. Was he right? _____________
5. Was it 15, 50, or 110 miles to the French fort? _____________
6. Name the two rivers that join to form the Ohio River. _____________
MILITARY ROADS ACROSS
THE ALLEGHENY MOUNTAINS

Washington's road, 1754
Braddock's march, 1755
WAGONS ON FORBES' ROAD

Four years after Braddock's defeat, the English General John Forbes and his army set out to capture Fort Duquesne. He struggled to open another military road over the mountains. When he arrived at Fort Duquesne he found it deserted.

In other battles the French were defeated and forced to give up all claims to North America. At last the English and Colonists could settle the Ohio Valley and trade with the Indians.

WORDS TO KNOW
1. navigable—boats are able to travel over a stream or river.
2. sturdy—strong.
3. vehicle—wagon used to carry supplies.

Pioneers Move Westward

The frontier was separated from eastern cities and towns by the rugged Allegheny Mountains. Because of the mountains there were no navigable rivers flowing toward the Ohio Valley from the eastern coast. There had been only Indian and packhorse trails for pioneers to follow. After Forbes' Road was built it became the best way for settlers and supplies to move to western Pennsylvania.

For the next thirty years a few people traveled along Forbes' Road into western Pennsylvania. A string of trading posts was started westward along Forbes' route. Slowly people began to settle around the
posts. Forts were built to protect these frontier settlements from Indian raids.

From Packhorse To Conestogas

The growing settlements of western Pennsylvania needed many supplies from the eastern cities and towns. Packhorses were not able to carry all of these items. Sometimes, the tools and goods settlers wanted were too heavy for the packhorses to carry. Imagine what a packhorse would look like loaded with heavy barrels of flour!

A sturdy wagon was needed to haul trade items over the rugged mountains. Such a wagon was found near Lancaster. It was first built and used by Pennsylvania Dutch farmers in the Conestoga River Valley. It was called the Conestoga wagon.

The Conestoga wagon was used already for heavy trade in eastern Pennsylvania. Farmers hauled their products from Lancaster to the market in Philadelphia.

Some men used the Conestoga wagon for trade with the Indians. The Indians received gunpowder, salt, rum and other goods. In return they traded skins and furs.

The Conestoga wagon became a very important vehicle. It was used to carry supplies to the pioneers who settled frontier Pennsylvania. There are many interesting stories about this wagon.

A WAGON LOAD OF SUPPLIES

The frontier settlers needed many supplies. Draw a line under those you think were too heavy for a packhorse to carry.

- boots and shoes
- pewter dishes
- blacksmith forge
- salt and sugar
- cotton materia.
- barrels of flour
- razors with strops
- tobacco
- blankets
- bars of iron
- grindstone
- buttons
- carpenter's tools
- nails

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THE STURDY CONESTOGA

WORDS TO KNOW

1. bow—piece of curved wood.
2. hemp—a plant that is used to make rope and coarse fabric.
3. homespun—cloth that is woven at home.
4. socket—an opening into which something is placed.
5. teamster—a person who drives a team of horses and wagon.

The Conestoga wagon looked like no other wagon of its day. It was shaped like a boat. The body curved upward and outward at the front and rear ends. This shape kept most of the dust and rain from entering the wagon.

Bows of bent wood were arched over the top of the wagon. These wooden hoops were fastened into iron sockets on the wagon's side. Homespun white cloth made from hemp was placed over the bows to protect the goods inside the wagon. The sides of the finished wagon were painted blue. The running gears underneath were painted red.

The front wheels were smaller than the rear wheel. Smaller front wheels

Color the wagon the way it was painted.
made it easier for the wagoner to turn the wagons. Blacksmiths put iron rims around the wooden wheels to make them stronger.

The Conestoga wagon had a long iron lever on the left side of the wagon. When a wagoner wanted to brake he pulled down on the lever. This pushed large wooden blocks against the rear wheels to slow the wagon. The driver sometimes rode a lazyboard. This narrow piece of wood was pulled from the left side of the wagon. He rode near the brake lever.

A teamster found it necessary to carry some important equipment. A water bucket was needed to provide the horses with water. A feed box was placed across the rear gate of the wagon. At feeding time the wagoner carried the box to the horses. Each wagon had a wooden tar pot so that wheel axles could be greased with pine tar.

A number of tools and spare parts were in a wooden toolbox on the left side of the wagon. The wagon also carried a jack. If a wheel needed replacing a man found it much easier to raise three tons of supplies with a jack!

Each Conestoga horse wore an iron arch of bells on its harness gear. Bells were needed on narrow roads to warn other travelers of an approaching team. Teamsters took great pride in their bells. A wagoner gave up his bells when he became stuck in the mud and needed help from another passing teamster.

The blacksnake whip became another part of the wagoner's gear. It was about seven feet long and made of leather. The sound of the cracking whip was a signal for the horses to move faster. However, no wagoner ever struck any of his horses with the whip. The team and wagon were very valuable to the wagoner.
ACTIVITY 1: Write the name of the object under its picture.

Homespun cloth  | Lazyboard  | Tar pot
Iron rimmed wheels | Bells | Feed box
Blacksnake whip | Brake Lever | Jack
Wooden hoops | Wooden blocks | Bucket

ACTIVITY 2: Write the letter and number of each object beside the words that describe its use.

A-2 made the wooden wheels stronger

___ used to water the horses

___ lifted the wagon in need of repair

___ held the canvas top in place

___ protected goods inside the wagon

___ used by a wagoner tired of walking

___ carried greasy stuff for the wheels

___ used to give grain to the horses

___ warned other travelers

___ cracked a message to the horses

___ was pulled to slow or stop the wagon

___ rubbed against the rear wagon wheels
THE CONESTOGA HORSE

WORDS TO KNOW

1. enormous—great; very much.
2. merchandise—items to sell or trade.

It took a sturdy kind of horse to haul Conestoga wagons—the Conestoga horse. Lancaster farmers first used these animals to plow their fields and to haul their products to market. Later, wagon roads opened to Pittsburgh and the Ohio Valley. Conestoga horses pulled heavy loads over hundreds of miles of poor roads and mountains.

What was the Conestoga horse like? This animal was friendly and had enormous pulling strength. A team hauled from three to four tons of merchandise. One farmer owned a Conestoga horse that pulled three tons of goods a number of miles by himself!

Conestoga horses were very important to farmers and wagoners. They were well fed, never overworked or treated unkindly.

Six horses were used to pull a loaded Conestoga wagon. The driver controlled the team through the lead horse which was always on the left front side. A single jerk line was connected to the bit of the lead horse. He was trained to obey the driver's commands. The word "haw" meant turn left. "Gee" meant to turn right, and "whoa" meant stop.

The driver did not ride in the wagon. He walked on the left side of the wagon or rode a saddle placed on the left rear horse. Sometimes, he sat on the lazyboard.
HARNESS THE CONESTOGA TEAM
Write these labels on the drawing of the Conestoga team.

1. jockey stick
2. lead horse
3. saddle horse
4. jerk line

FIND THE SECRET WORD
Fill in the answer to discover the secret word in the puzzle.

1. trade items carried in the wagon
2. command to stop
3. driver of the team
4. The horses had great
5. number of horses in a team
6. Where was this horse first used?
7. animal trained to obey commands
8. command to turn right
9. command to turn left
THE CONESTOGA WAGONER

WORDS TO KNOW

1. ferryboat—a large, flat boat used to float vehicles across water.

2. hardship—a problem that made the journey difficult.

3. stogies—high black boots.

Wagoners were a hardy bunch of rough men who feared nothing. Most of these teamsters wore wide-brimmed black hats, home-made suits, stogies and beards. They puffed on foot-long cigars and usually lived to a ripe old age. Teamsters did not carry weapons on the trail.

Wagoners were very proud of their teams. They often stayed in the rain with their teams when no shelter for the horses was found. In summer many of them liked to sleep on the ground next to their horses.

These men were very strong. One wagoner once lifted one-half ton of pig iron on his back.

Wagoners faced many hardships. They drove their wagons over roads full of ruts. Teamsters did not like cold nights. To stop wagon wheels from freezing in the mud the rig was driven onto wooden logs. However, the horses had to stand on the soft ground all night. Sometimes, by morning their hooves were stuck in the frozen ground. In springtime wagon wheels sunk into the oozy mud. This made it very hard for the horses to move the heavy wagons.

Conestoga wagons were packed with care so that the weight was placed evenly on the wagon floor. Otherwise, during a long journey over rough roads the goods would shift. Sometimes this extra heavy strain broke an axle.

Loaded wagons could not be held back
with brakes on steep downhill slopes. Some wagoners jammed tree poles into the rear wheels to lock them into place. Other teamsters chained the rear wheels to the wagon floor. Then, the wagons were skidded down the hill.

During Conestoga days there were very few bridges over rivers. Ferryboat crossings were started in some places to float wagons across rivers on a large raft. One famous boat crossing on the Susquehanna River was called Harris Ferry. Often wagoners had to wait several days for their turn to cross on the ferry.

At other times wagoners forded places along streams and rivers at great danger. Sometimes the goods they carried got wet. What a headache for a Conestoga wagoner if his load of flour got wet!

There were other dangers along the Conestoga trail. Wild animals such as bears, horses became lame from slipping on smooth rocks. Wagoners had to watch for men who were ready to rob them of their goods.

Although there were many dangers in the wagoning business, men still made money. Their job of hauling goods across the rough Conestoga roads to waiting pioneers in the Ohio River Valley was very necessary.

Finish this drawing so that the man looks like a Conestoga driver.
SOME JOBS ARE STILL THE SAME!

Read the list of nouns in the Conestoga Wagon column. Think of the job that each noun did. In the Modern Vehicle column write the name of a word that has a similar purpose.

<table>
<thead>
<tr>
<th>Conestoga Wagon</th>
<th>Modern Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>tavern</td>
<td>motel</td>
</tr>
<tr>
<td>bells</td>
<td></td>
</tr>
<tr>
<td>iron-rimmed wheels</td>
<td></td>
</tr>
<tr>
<td>wagoner</td>
<td></td>
</tr>
<tr>
<td>horsepower</td>
<td></td>
</tr>
<tr>
<td>brake lever</td>
<td></td>
</tr>
<tr>
<td>grain and water</td>
<td></td>
</tr>
<tr>
<td>pine tar</td>
<td></td>
</tr>
<tr>
<td>reins</td>
<td></td>
</tr>
<tr>
<td>lazyboard</td>
<td></td>
</tr>
<tr>
<td>jack</td>
<td></td>
</tr>
<tr>
<td>ferryboat</td>
<td></td>
</tr>
</tbody>
</table>

WHICH DOES NOT BELONG?

Three words have something in common. Circle the one word that does not belong in the group.

1. valleys, taverns, mountains, forests
2. lazyboard, jack, hammer, axe
3. beaver, deer, fox, trout
4. bedroll, feedbox, grain, waterbucket
5. tongue, saddle, axle, running gear
6. bells, wooden bows, lazyboard, toolbox
7. barrels of flour, bar iron, salt, jack
8. inns, boulder, tree trunk, muddy rucs
9. cigar, tongue, stogies, whip
10. wooden wheel, spokes, harness, iron rims

FOR THE EXTRA CURIOUS

1. How were the Conestoga wagons different from the covered wagons used to cross the prairie to the Pacific Coast?
2. How were ferryboats used in the past? Are they still used today? How is the present use different?
MIND YOUR P’S AND Q’S

Old Bullwhip Barney Harper was hauling a load of food supplies from Harrisburg to Pittsburgh. All of the drivers agreed that Barney was the best bullwhip man this side of the Ohio River.

Bullwhip had just spent a hot and tiring fourteen hours driving his team over the dusty road. By sundown he had reached his favorite tavern along the route. Bullwhip was halfway to Pittsburgh.

Jonas Carter had opened the hilltop tavern in 1810. The inn became a favorite stopping place for wagoners.

Barney fed and watered his team of horses. Then, he headed to the tavern to get a good meal, to drink away his big thirst and to talk with his friends.

Bullwhip felt good that evening and treated his friends to drinks. Every time Bullwhip got a pint of whiskey, Jonas marked a P on a slate beside Bullwhip’s name. Jonas marked a Q for each quart that Barney and his friends drank. After so many P’s and Q’s were added, Jonas reminded the big wagoner to “mind your P’s and Q’s.” Old Bullwhip pulled out his money pouch and paid Jonas for the drinks.

It was a happy time for telling stories and singing. Jonas told the other drivers about the time Bullwhip showed his great driving skill. Barney lay on his back in the middle of a field. By giving his horses commands, he guided
the team and wagon over his body. He ordered them to turn around and called them back over him again. The horses' hooves and the wagon wheels never touched Old Barney.

Jonas also remembered the time Old Bullwhip snapped a cigar stub out of his mouth. The old teamster stood seven feet away and cracked his blacksnake whip. Not a whisker moved on Jonas' beard as the whip yanked the cigar butt from his teeth.

The tired wagoner went to bed feeling pretty good. He placed his bedroll on the ground near his team of horses. Tomorrow would be another long, hot day on the dusty trail.

Before sunrise Bullwhip crawled from his bedroll. First, he fed and watered his horses. Next, he ate a hearty breakfast at Jonas' inn. By sunup, his team was harnessed and ready to begin the day's journey.

FOR THE YOUNG AUTHORS
The stories tell about what it was like to be a wagoner, including many of the hardships and difficulties along the way. Write your own tale about a Conestoga wagoner. Choose one of these hardships and write your own adventure story. You may want to use one of these titles.

The Wolf Attack
Barney Nearly Loses His Bells
Elam Escapes a Band of Robbers
CONESTOGA WAGON DATA SHEET

1. Time built: about 1750 to 1850
2. Where first built: Conestoga Valley in Lancaster County by Pennsylvania Dutch farmers
3. Length of wagon bed: 26 feet
4. Height of wagon: 11 feet
5. Width of wagon bed: 3½ feet
6. Length of 6 horse team and wagon: 60 feet
7. Number of wooden bows or hoops: 8 to 13 depending on wagon length
8. Size of front wheel: 3 to 4 feet high
9. Size of rear wheel: 5 to 6 feet high
10. Weight of one wooden wheel: 150 lbs.
12. Weight of goods one wagon could haul to market: 3-5 tons or 6000-10,000 lbs.
13. Heaviest weight of goods one wagon was known to haul: 14,000 lbs.
14. Cost to build: $250
15. Amount of cloth used to cover a large wagon: 20 yards
16. Length of time to build: 2 months
17. Number of barrels one wagon held: 30 barrels of flour
18. Average one day's journey: 15 miles
19. Cost of six horse team: $1,200
20. Freight cost charged: $1 per barrel
21. Salary of wagoner who did not own his own team: $8-10 a month
22. Cost of good meal at a tavern: 12½¢
23. Cost of a stiff drink: 3¢
24. Cost of toll bridge: 14½¢ for a wagon and 6 horse team
25. Cost of toll road: 2¢ for 11 miles
26. Average time it took to travel from Philadelphia to Pittsburgh: 20 days
27. Cost of overnight stay at a tavern for a wagoner and team: $.75 to $1.50
28. One hand of horse's height = 4 inches
EVEN A WAGONER NEEDED TO KNOW HOW TO DO 'RITHMETIC

Use the Data Sheet to answer these questions.

HARD

1. Could you lift one wagon wheel without any help? __________

2. What was the wagon distance from Philadelphia to Pittsburgh? __________

3. Could a merchant ship 13,000 lbs. to market in one wagon? __________

4. How much larger were the back wheels than the front wheels? __________

5. If a wagon maker wanted to cover 8 wagons, how many yards of homespun cloth would he need? __________

HARDER

1. How much would it cost to buy a wagon and 6 horse team? __________

2. How many wagons would a merchant need to ship 500 barrels of flour to market? __________

3. How many days would it take to haul a load of goods 240 miles? __________

4. How many cars would fit beside a wagon and 6 horse team? __________

5. How many classmates could fit lengthwise (from head to toe) in a wagon? __________

HARDEST

1. How many square feet was the floor of an average size wagon? __________

2. If a wagoner who did not own his own wagon saved all his salary, how long would it take him to buy his own wagon and team? __________

3. What would be the cheapest cost for a wagoner who crossed 4 toll bridges and spent 4 nights at taverns on one trip? __________

If he carried a wagon load of flour to a merchant, what would be his profit? __________

4. Change the measurements of the Conestoga wagon to the metric system.

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CONESTOGA WAGON ROUTES

MAP WORK: Place your answers to these questions on the map below.

1. Place a C in the area the Conestoga wagon was first built.

2. Trace in yellow the wagon route first used by Conestoga wagoners to carry farm products to market.

3. Draw a circle around the place where Bullwhip used a ferryboat on his trip to Pittsburgh.

4. Put an X on the place where Bullwhip spent the night in the story "Mind Your P's and Q's."

5. The northernmost wagon route to the Ohio River Valley was the least traveled. Trace this route in red.

6. Trace Braddock's road in green.

7. Forbes' Road was the most popular route west. Trace this route in blue.

8. Place a capital R along the main route that was not built for military reasons.
FIRST NATIONAL ROAD

WORDS TO KNOW
1. **caravan**—traders leading animals to market.
2. **Congress**—a group of people elected to make laws for the United States.
3. **hibernation**—a period of time with very little activity.
4. **Interstate**—a four lane highway that crosses many states.

By the early 1800's heavy traffic crowded the main road westward through Pennsylvania. It often took 6 weeks to travel from the eastern cities of Philadelphia and Baltimore to the Ohio Territory. It took 8 days for mail to be carried by horseback to the settlers.

The nation was growing rapidly, and new roads were becoming necessary. Many people urged Congress to set aside money for a good hard-surface road that would link the western settlements with the East. In 1806, President Jefferson signed a law to build the first national road.

The National Road began at Baltimore, Maryland. At Cumberland it followed Braddock's route over the mountains and branched westward to Wheeling on the Ohio River. Later, the Pike was continued through Ohio, Indiana and part of Illinois.

The pike builders followed the ideas of John McAdam, a famous road builder in England. First, the old route was dug up and raked smooth. Next, a layer of small stones 3 to 9 inches deep was laid. Stone breakers, working for $1 a day, broke them into small pieces. They used an iron hammer shaped like an apple with a wooden handle to crush the stones. The new roadbed was 30 feet wide. Ditches were
dug along the sides so water would drain from the road surface. Stone bridges were built over the rivers. McAdam's methods marked the beginning of good hard-surface roads.

It was faster and cheaper to use the new National Road. During the day there was a constant flow of Conestogas loaded with merchandise. On a busy day as many as 30 stage coaches rolled along past one tavern. Caravans of sheep, hogs, cattle, mules and horses were led to market. Sometimes the U. S. military used the road. Mail coaches raced the mail between Baltimore and Wheeling in 48 hours.

Life was busy for people who lived along the new National Pike. Men opened taverns for the travelers. Blacksmiths spent their nights shoeing horses and repairing wheel rims. Stable keepers tended fresh horses for the coaches. These men who worked along the road were called Pike Boys.

By 1850, traffic on the National Road became less and less. People had begun to use another way of travel. The Pike Boys sang this song:

We hear no more of the clanging hoof, And the stage coach, rattling by; For the steam king rules the traveled world, And the old pike's left to die.

The steam king was the railroad locomotive. Tracks had been laid across the mountains. Merchandise was being hauled
on the railroads. Many wagoners retired from the business. Others moved westward to places beyond the reach of the railroads where their driving skills were still needed.

The iron horse caused the hibernation of road building. However, the invention of motor vehicles changed that! Cars and trucks needed good modern roads.

The route of the old National Pike was not forgotten. Many years later, it became part of the first road to cross the United States. This coast to coast road was U. S. 40. Today, drivers follow parts of U. S. 40 and interstate 70 along the route of the first national highway, the Old Pike.

PIKE PROBLEMS
Search the story for clues to help you solve these problems.

1. How many days faster was the mail delivered between Baltimore and Wheeling over the National Pike? __________

2. Most coaches carried 9 passengers. On a busy day how many passengers traveled past one tavern? ________________

3. A stage driver earned $12 a month. What was his yearly wage? __________

4. How much money did a stone breaker make in one year? ________________

5. How much more money did a stone breaker make than a stage driver? ________________

6. A stage coach cost between $500 and $600. Which was more expensive, a stage coach or a Conestoga wagon? ________________

7. It took 10 years to build the 129 miles between Cumberland and Wheeling. What was the average number of miles built in each year? ________________
MAP WORK ON THE NATIONAL ROAD

1. The heaviest traffic on the road was between Baltimore and Wheeling. Trace that section with a red crayon. Was its distance 100, 260 or 812 miles long? ____________________

2. Was the milepost in the picture located at Washington, Pa., Cumberland, Md., or Indianapolis, Ind.? ____________________

3. Was the entire length of the Old Pike 129, 605, or 812 miles? ____________________

4. Use a green crayon to trace the section of the road that was most difficult to build because of the mountains.

5. Put an X on the place where the Old Pike crossed the Ohio River.

WHAT MIGHT A TRAVELER SEE?

Sometimes we play games about the things we see when we travel. Find fifteen words hidden in the puzzle that name things a stage coach passenger might have seen while traveled along the National Road.

MILEPOST G X C E M
F P C J H O S M A I L G D
E I A K O Z L U M V T R V
G K R S G R L K S E T L
B E A S S H E E P L T R P
R B V E D E K S H V E U N
I O A O I J N C A T T L E
D Y N A T H A G O N E R D
G S A L H O R S E S V B R
E D I T C H E S W R D C I
Z C O N E S T O G A S M J

FOR THE EXTRA CURIOUS

1. Make a study of early railroads. Why did people prefer to use them instead of the roads after 1850?

2. Roads became more important again with the invention of motor cars. What can you learn about these inventions and their inventors?
   Horseless carriage—J. Frank Duryea
   Diesel engine—Dr. Rudolph Diesel
   Steam car—Francis and Freelan Stanley
   Gasoline powered car—George Seldon

3. Interview several older people who live in your town. Write a report about what kind of roads and vehicles they used when they were young.
SUPPLIES FOR A FRONTIER POST

The Conestoga wagon brought needed merchandise to frontier settlers. Read the list of groceries, dry goods and hardware carried in the Conestoga wagon.

Set up a frontier trading post in your classroom. How many of these items can you collect? Organize your store into areas for the groceries, the dry goods and the hardware.

<table>
<thead>
<tr>
<th>GROCERIES, DRY GOODS AND HARDWARE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hauled in the Conestoga Wagon</strong></td>
</tr>
<tr>
<td>Broad cloth</td>
</tr>
<tr>
<td>Best hyson tea</td>
</tr>
<tr>
<td>Jeans and nankeens</td>
</tr>
<tr>
<td>Corduroys, velvets</td>
</tr>
<tr>
<td>Linens, all widths and prices</td>
</tr>
<tr>
<td>Carpenter and shoemaker tools</td>
</tr>
<tr>
<td>Chocolate</td>
</tr>
<tr>
<td>Loaf sugar</td>
</tr>
<tr>
<td>Molasses</td>
</tr>
<tr>
<td>Cotton handkerchiefs</td>
</tr>
<tr>
<td>Silk, thread and cotton</td>
</tr>
<tr>
<td>Pepper</td>
</tr>
<tr>
<td>Muslin</td>
</tr>
<tr>
<td>Hats of all kinds</td>
</tr>
<tr>
<td>Blankets of all kinds</td>
</tr>
<tr>
<td>Coffee</td>
</tr>
<tr>
<td>Shoes and boots</td>
</tr>
<tr>
<td>Umbrellas</td>
</tr>
<tr>
<td>Waist coat buttons</td>
</tr>
<tr>
<td>Sealing wax</td>
</tr>
<tr>
<td>Flour</td>
</tr>
<tr>
<td>Ink pots</td>
</tr>
<tr>
<td>Writing paper and quills</td>
</tr>
<tr>
<td>Locks &amp; hinges of all kinds</td>
</tr>
<tr>
<td>Pewter dishes, plates &amp; mugs</td>
</tr>
<tr>
<td>Saddles and bridles</td>
</tr>
<tr>
<td>Gunpowder, shot and bar lead</td>
</tr>
<tr>
<td>Candle sticks and snuffers</td>
</tr>
<tr>
<td>Surveyors' compasses</td>
</tr>
<tr>
<td>Scythes and sickles</td>
</tr>
<tr>
<td>Shaving boxes and brushes</td>
</tr>
<tr>
<td>Ostrich feathers</td>
</tr>
<tr>
<td>West Indian rum</td>
</tr>
<tr>
<td>Razors and strops</td>
</tr>
<tr>
<td>Knives and forks</td>
</tr>
<tr>
<td>Cinnamon</td>
</tr>
<tr>
<td>Cloves</td>
</tr>
<tr>
<td>Tooth brushes</td>
</tr>
<tr>
<td>Hair powder</td>
</tr>
<tr>
<td>Snuff in boxes</td>
</tr>
<tr>
<td>Smoothing irons</td>
</tr>
<tr>
<td>Salt</td>
</tr>
<tr>
<td>Nutmeg</td>
</tr>
<tr>
<td>Almonds</td>
</tr>
<tr>
<td>Hooks and eyes</td>
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<tr>
<td>Needles and pins</td>
</tr>
<tr>
<td>Soap</td>
</tr>
<tr>
<td>Raisins</td>
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<tr>
<td>Figs</td>
</tr>
<tr>
<td>Spectacles</td>
</tr>
<tr>
<td>Money scales</td>
</tr>
<tr>
<td>Frying pans</td>
</tr>
<tr>
<td>Gridirons</td>
</tr>
<tr>
<td>Steel spurs</td>
</tr>
<tr>
<td>Prunes</td>
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<tr>
<td>Tin kettles</td>
</tr>
<tr>
<td>Bar iron</td>
</tr>
<tr>
<td>Nails</td>
</tr>
<tr>
<td>Flint</td>
</tr>
<tr>
<td>Hair pins</td>
</tr>
<tr>
<td>Tumblers and glasses</td>
</tr>
<tr>
<td>Knitting needles</td>
</tr>
<tr>
<td>Cross cut saws</td>
</tr>
</tbody>
</table>
A STORY WITH NO ENDING

You have followed the story of roads from Indian paths to the beginning of modern roads. You have learned about paths and early roads that were used mostly for trade and travel.

Today, a road map of the United States shows a network of highways connecting every part of our nation. New roads are under construction and older roads are constantly being improved.

The history of roads has no ending. You can follow its story into the future . . .
EARLY PATHS AND TRAILS TO CONESTOGA ROADS

TEACHER'S EDITION

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Ruth Friedline
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ILLUSTRATOR

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The story of roads started before the time of written history. Whenever man left a record of his activities, the account has shown a positive correlation between the advancement of his society and the development of roads. In North America the gradual change of Indian footpaths to hard-surfaced roads followed the settling and expanse of the Colonies.

When the Indian arrived in North America he first used animal paths. Later, to satisfy his increasing social and economic needs, he added his own trails. However his transportation needs never developed beyond the footpath.

The first Europeans settled along the Atlantic seaboard. As their numbers increased the Europeans appropriated more land already settled by the Indians. This pushed the Indians, with whom the Colonists traded, farther from the coast. Since furs were the Colonists most important trade item with Europe they had to follow the Indians to secure pelts. The fur trader used Indian paths for journeying to the Ohio Valley. Soon the footpaths were not adequate to support the increased traffic to western Pennsylvania. They were widened to accommodate packhorses.

Most of the fur trade was organized by chartered English companies. As trade expanded these companies found that their rights to land in western Pennsylvania overlapped with the territorial claims of French fur traders. Both factions appealed to their home countries for aid in expelling the other from the Ohio Valley.

Now it became a military necessity for the British army to build a road into the wilderness. Horse trails were inadequate for the movement of troops and supplies. Before the army could reach its goal a wagon road had to be constructed over the Allegheny Mountains.

Population pressures, as well as social and economic factors, forced most pioneer families to seek western locations. Braddock's Road, Forbes' Road and the National Pike were all used by settlers heading west. As the settlers advanced beyond the Ohio Valley they wanted a connecting link with families, friends and markets. The rutted, muddy surfaces were no longer adequate. Better roads would permit greater exchange of products which in turn brought a demand for all-weather highways.

An improved network of roads meant time and money to a growing America. People in authority felt the government should become responsible for the construction and maintenance of highways. Laws were passed authorizing the national government to build a pike. Congress designated sums for this use and taxes were levied to maintain the roads. Highways had become a top priority in the life of the young American nation and they would increase in number and size as the country grew.
PLANNING OBJECTIVES

This course of study is designed to:

1. promote an awareness of the important historical role that early paths and trails had upon the development of roads up to 1850.

2. show how economic competition spurred early traders and settlers to establish fortified trading posts and military forts.

3. emphasize the contributions of traders, military personnel and settlers in road development.

4. depict the arduous hardships men encountered while traveling through the wilderness without the benefit of roads.

5. portray the physical difficulties men faced in constructing roads through the wilderness.

6. emphasize that faster and better means of transportation was needed in order for various sections to emerge as a united nation.

7. examine the role the Conestoga wagon played in westward expansion and road development.

8. describe the characteristics of a Conestoga wagon and types of equipment used by a wagoner.

9. describe the beginning of modern road building techniques as used in constructing the federally funded National Road.

GENERALIZATIONS

The following generalizations are explored in this course of study:

1. Transportation develops in direct relation to the demands of a society. The more advanced a society, the more complex its transportation network.

2. Roads satisfy a basic need of man to move from one place to another. Roads help man satisfy some of his physical, economic, military and social needs.

3. Physical terrain affects the flow and direction of men and goods.

4. Economic competition spurs men to take direct action in road building.
5. Political pressure provides organizational structure and funds for road building.

6. The drive for economic resources expedites the technological expansion of transportation systems.

7. A technologically more efficient method of transportation causes the decline of a less efficient means of transportation. (i.e., The locomotive supplanted the Conestoga wagon around 1850.)

BACKGROUND OF THE CONFLICT BETWEEN THE FRENCH AND ENGLISH

The discovery, exploration, and settlement of the New World were the direct results of social, religious, economic and political situations in Europe. This brief outline of events gives the teacher background information of historic happenings preceding the French and Indian War.

BASIS OF FRENCH CLAIMS IN THE NEW WORLD

The voyage of Giovanni Verrazano, financed by King Francis I, in 1524 gave France its first claim. Verrazano sailed along the Atlantic coast from the Carolinas to Nova Scotia and entered the harbor of New York. This exploration encouraged France to consider opposing Spanish power in North America. Spain had prior claims based on the voyages of Columbus, De Leon and others.

Francis I commissioned Cartier in 1534 to follow-up the voyage of Verrazano. Cartier was to seek a route to the Far East by water and then to start a settlement. He explored the Saint Lawrence River area but did not succeed in his other assignments.

Then in 1603 Champlain, a pilot and experienced seaman, was appointed by the French king to sail with others to the New World. He became one of the dominant figures in the history of New France. Champlain convinced his superior to make the rock of Quebec the stronghold of French power. This site was far from the English settlements and controlled the Indian trade around the Saint Lawrence and Great Lake water system. Through the explorations of Champlain and his followers the French influence reached from the lands of Labrador to as far west as Wisconsin. Their journeys went as far south as the Mohawk and Hudson Rivers.

The explorations of Jean Nicolet, Pere Marquette, Joliet and others provided France with her claims to the Mississippi River and Gulf of Mexico area.

BASIS OF ENGLISH CLAIMS IN THE NEW WORLD

Probably the Norsemen preceded Cabot to the Newfoundland waters and the Spanish Basque undoubtedly fished here prior to his voyage. However, Cabot's records present the first documented discovery on the North American continent.
With the voyage of John Cabot in 1496, the English joined other European nations in their attempts to find a route to the Orient by sailing westward. England also entered the search for wealth in the New World. Cabot landed somewhere near Cape Breton Island.

The "War of the Roses" and the need for the Tudor kings to consolidate their power retarded English interest in developing its claims in the New World until Elizabeth I occupied the throne. England, under the reign of Elizabeth I, envied the power and prestige of Spain in the New World. Soon Britain would challenge Spain's power.

**JUSTIFICATION OF CLAIMS**

Only a few sections of the New World had been crudely mapped by the exploring parties. Both nations had but vague concepts of the boundaries of the land they claimed. A look at parts of the charters of two trading and colonizing companies, one for the English and one for France, showed how conflicts could arise.

In a review of the 1606 charter granted by King James to a British trading company, Cheyney (1904, pp. 148-149) commented, "The region to which the grant applied was the territory stretching four hundred miles along the coast, north and south from Chesapeake Bay, and 'Up into the land from sea to sea westward and northward.'"

Likewise, he (1904, p. 157) provided a description of the boundaries contained within the charter of 1628 given to the company of Canada by France's Louis XIII with these statements:

The region to which they extended was 'the fort and settlement of Quebec, with all the country of New France, called Canada.' It was described as extending along the Atlantic coast from Florida to the arctic circle, and from Newfoundland westward to the sources of the farthest rivers which fell into the St. Lawrence.

These indefinite boundaries were certain to bring a confrontation between the two countries. Yet the first struggles between Frenchmen and Englishmen started many years before at the Newfoundland fishing ground with the Devonshire Cod Fisherman on one side and the Basques and Bretons on the other.

There were three major conflicts between the French and English, both in America and Europe; Queen Ann's War, King George's War and the French and Indian War. The outcome of the French and Indian War determined that the language, customs and social characteristics of the New World would be predominately English.

**QUEEN ANNE'S WAR**

The defeat of the Spanish Armada was directly responsible for the decline of Spain as the leading world power. The French and English would contend for Spain's former position.
The English trade among the Indian tribes of the Ohio and upper Great Lakes had become a serious matter to the French. The Saint Lawrence colony had pleaded with its home government for support against the intruders. However, France was in no position to aid the colony. The French king, Louis XIV, had died. The War of the Spanish Succession, called Queen Anne's War in the New World, had just ended. The French nation was impoverished. France had lost the war and under the terms of the Treaty of Utrecht in 1713 gave all of Nova Scotia, also termed Acadia, to Great Britain. This treaty embittered the French colonists. Soon they were claiming the term "Acadia" limited the English to the peninsula of Nova Scotia. This boundary dispute led to continued fighting. The French started to involve the Indians in this dispute between the two nations. Both English and French colonists distrusted each other and used many ways to harass the other side.

**KING GEORGE'S WAR**

In Europe the French and English were again rivals in the War of the Austrian Succession, 1744-1748. This was was called King George's War in the New World.

The largest so-called military engagement between the French and English colonists was the attack by the English on Louisburg, the French fort on Cape Breton. There was much to question about the performance of all sides in this battle but the outcome was the surrender of Louisburg.

The French made two later attempts to harass the New England coast with a fleet of ships. The first reached American waters and was destroyed by a storm. The second was defeated by English admirals off the coast of Rochell, France. British supremacy on the seas was established.

The rival fur traders continued the struggle. There were skirmishes initiated by both sides. A bloody border war was in progress along the international frontier between Canada and New England. There were raids by the French and Indians and reprisal raids by the British and their Indian allies. In 1748, France and England agreed to end this devastatimg war that seriously weakened their countries. All conquests achieved during this war were restored.

**AREA OF BRITISH INFLUENCE AT START OF FRENCH AND INDIAN WAR**

The English settlements were confined to the Atlantic coastline partly because of the difficulty crossing the Appalachian Range to the East. Consequently, there was pressure for expansion among the coastal colonists because of increased population and the continuous arrival of immigrants. Most of these new arrivals desired land of their own. Since the best land along the coast had already been claimed more territory was needed to meet this demand.

The Scotch-Irish had joined forces with some of the English colonists in penetrating the frontier. These men and their families pushed their way through the passes of the Blue Ridge and Allegheny Mountains. They had very little military support in their efforts to settle the frontiers of Pennsylvania and Virginia. Also the British government was not too concerned as most of their military efforts were directed to maintaining their position on the European continent. The colonists who were already established in business or owned large plantations had no desire to aid these less fortunate pioneers.
THE AREA OF FRENCH INFLUENCE AT THE START OF THE FRENCH AND INDIAN WAR

Furs were the most important export of New France. It was necessary for French traders to range over great distances to supply this demand. The eastern area of New France was increasingly less productive in pelts because of over-hunting. The French voyageur had to search for new sources. He traveled by waterways to the interior lands between the Alleghenies and the Rockies. His canoe had traversed most of the tributaries and rivers flowing into the mighty Mississippi. The Ohio Valley had become part of his trading ground. The French in America were thinly spread over a large area.

The Frenchmen who explored the New World knew that the land must be settled if it was to remain a French possession. Those in authority sent appeals to France for men and supplies. They met with little success because France was having difficulties in holding her position as a world power in Europe. She could spare neither men nor funds.

THE COLONISTS

The nationality of the British colonists was predominately English with Swedes, Dutch, Finns and Germans forming minority groups. The English jails were often emptied of all but those convicted of serious crimes to supply settlers for America. Protestant and Catholic groups came to the New World to escape persecution. This diverse group formed the British Colonies.

New France was settled almost entirely by Frenchmen. This provided uniformity of religion and national background. Many of these settlers quickly adopted the Indian way of life and became excellent traders and explorers. All the enterprises in New France were the property of the king and his nobles.

THE FINAL

The military action in Pennsylvania during the French and Indian War is briefly dealt with in the pupil's booklet. After General Braddock's retreat, the Ohio River was for a time French territory. Other English reversals included the destruction of the English forts William Henry and Oswego. The plans for the capture of Quebec and the attack on Fort Louisbourg failed. The years 1756 and 1757 showed the French in command of their possessions in the New World. However, the British had learned from their failures.

In England William Pitt became prime minister and he was convinced that England's death blow to the French colonial efforts around the world could best be accomplished by defeating them in the New World. His strategy followed that previously used but with different generals in command. There was to be an attack on Louisbourg and an expedition against the Hudson River-Lake Champlain forts.

General Forbes was to lead an attack on Fort Duquesne in the Ohio River Valley. Forbes started over the Allegheny Mountains from Fort Bedford in the summer of 1758. His army built a new military road to the vicinity of Fort Duquesne keeping supply lines open and consolidating resources. Near the fort, the French launched two successful attacks. But the damage to the superior English forces was minimal.
By November, the French position was less than tenable. Ligneris, the French commander, had only 300 men to defend the fort. He was not receiving supplies and reinforcements from Canada. In addition, his Indian allies had returned to their villages for winter hunting. Rather than see the English capture Fort Duquesne, Ligneris ordered the stockade demolished and the buildings burned. The French retreated to Fort Machault.

There were some reverses, but the French strongholds of Quebec, Fort Frontenac and Louisbourg finally fell to the English. On September 9, 1763, the war ended and this area of conflict gave its allegiance to England.
These notes are intended to give additional information. You might want to place them on a cassette tape.

1. In order to get prime pelts like this deerskin, traders journeyed to western Pennsylvania and beyond. Fringed buckskin jackets and moccasins were made from deer hides. The pelts of beaver, fox and weasel were usually shipped to Europe. There they brought a good price on the market. This demand for furs would be one reason some footpaths gradually changed to wagon roads.

2. A footpath was a trail made for those who were walking. It usually took the most direct route from one place to another. Some trails climbed steep mountains, passed through narrow gaps or moved through thick forests.

3. This path was never cleared of fallen leaves or twigs. Because the footpath was often used, brush and grass were worn away. A well-traveled path was easy to follow.

4. The trunk of this fallen tree was not removed. Travelers just stepped over the log. If the obstacle was a big rock or a large branch they went around it.

5. As the fur trade increased men found that horses formed in pack trains were a better method for transporting goods. It was easy to see hoof prints on the trail.

6. Usually widened horse trails developed from footpaths. However, the pack trains would have to by-pass parts of the trail too steep or narrow for loaded horses to use.

7. After rains, water collected in low places on the trail. Loaded horses were led through these wet areas. The pack trains could not forge through the thick brush at the sides of the path. This deepened the places where the water lay.

8. The trails crossed many creeks. Fording creeks was not difficult in the summer or fall. After the snow melted or spring rains fell, the streams became swollen and dangerous to cross. This was one reason travel was restricted to summer and fall.

9. Better transportation was needed as the fur trade expanded and the settlers needs increased. Horse-drawn wagons replaced the pack train. Wagons could not travel over all parts of horse paths. Changes were made on the trails. Again they had to be widened. Obstacles were removed and muddy places corduroyed on wagon roads. Wagons went around steep grades. Gradually these changes were made.

10. Wagon roads between eastern towns and trading posts were well traveled. All this travel caused the surface ground to wear away leaving a firmer roadbed. However, in some places rocks were exposed which jolted the wagons.

*This filmstrip can be ordered from: College Bookstore, Shippensburg State College, Shippensburg, PA 17257
11. Larger wagons were used on the roads when settlers joined the traders in the westward movement. Soon these settlers in the Ohio Valley were sending their products to towns in eastern Pennsylvania. There had to be space where two wagons could pass. Roads were improved to meet new demands.

12. A dependable, heavy wagon was needed to haul freight many miles over newly developed roads. Such a vehicle was known as the Conestoga wagon. This wagon acquired its name from the Conestoga River Valley near Lancaster where it was first built by Pennsylvania Dutch farmers.

13. From 1750 to 1850, the Conestoga wagon achieved fame and glory. It was the only practical means of bringing all kinds of merchandise to the people of the outlying settlements in the Ohio River Valley.

14. This wagon could be easily identified. It curved upward and outward at both ends and was patriotically decorated red, white and blue.

15. If you were a barrel of flour looking skyward after being placed in the wagon bed, this is what you would see. Curved ends and homespun linen or hemp cloth protected the trade goods from dust and rain. This tightly woven cloth made the top of the Conestoga wagon almost waterproof.

16. Iron rims were placed around the wooden wheels to make them stronger. Larger rear wheels made it easier to turn the wagon.

17. A driver controlled his team from the left side of the wagon with reins. He used the long iron lever as a braking device to stop or slow his wagon. American drivers operate their cars from the left side. This practice had its beginning with the Conestoga wagon.

18. As the brake lever was pulled towards the ground, large wooden blocks moved to meet the iron rim wheels at the rear of the wagon.

19. Sometimes, wet grass, mud and moisture made the wheels slick and greasy. It took longer to stop this heavy vehicle under such conditions.

20. To help slow the movement of a wagon on a steep, downward slope, rear wheels were chained to the wagon bed. Drag shoes were attached to the tire and the wagon was skidded downhill.

21. Another feature of the Conestoga wagon that extended from the left side was the lazyboard. A teamster did not ride inside his wagon. If he was not walking, he could be found roosting on the lazyboard or...

22. Perched in a saddle on the left rear horse. The reins were at least 25 feet long. They were attached to the left front horse.

23. The toolbox was located near the lazyboard. It contained many essential tools and spare parts such as a hammer, pinchers, nails, bolts and horseshoes. These items were used to keep the wagon in good traveling condition.
24. During a trip, a wagoner had to take care of his team of horses. When it was time to feed the animals, a feedbox kept at the rear of the wagon was removed and fastened to the tongue—a straight piece of oak about twelve feet long, attached to the front axle of the wagon. A wooden bucket was carried so that horses could be watered from a nearby source.

25. A wooden tar pot was hung from the rear running gear. A sticky mixture of pine tar and lard was used to grease the wagon's axles. A wagoner invited serious trouble if he left his tar pot at home.

26. To grease an axle, a wheel had to be removed. To lift several thousand pounds, a wagon jack was needed (as seen above the toolbox). The jack was stored inside the wagon among the goods that were being hauled. Can you identify the other wagon equipment?

27. Here is a front view of the running gear on the Conestoga wagon.

28. A team of horses was harnessed in pairs.

29. A Conestoga team had its own warning system. Brass bells were fastened to a wrought iron frame.

30. Each horse had a set of brass bells attached to its harness gear. The sound of bells could be heard many yards ahead on the road.

31. It was a custom of the time for a wagoner to give up his bells with embarrassment if he needed help from a passing teamster to free his wagon from the mud. From this early custom came the American expression, "I'll be there with bells on."

32. This bullwhip, fancier than most, was the trademark of many wagoners. Most bullwhips were all black. Although the stock was made of wood, the main part of the whip (7 feet) was made from one piece of leather. A small piece of skin of eel, called the cracker, was attached to the eighteen inch long lash at the end of the whip.

33. This was a safe fording location during the dry summer season. The same crossing place could be very dangerous during the spring of the year.

34. After traveling an average of fifteen miles a day on rugged roads in all kinds of weather, a weary wagoner found some comforts at a friendly tavern.

35. After the horses were cared for, a wagoner looked forward to a good meal, some drinks, and songs with his friends and an evening of storytelling. If the night was not too cold, he left the warmth of a fireplace to sleep near his horses.

36. After a faster means of transportation was developed, the Conestoga wagon slipped into the shadows of history. It is now a vehicle of the past. It is seen mostly in museums and at local festivals.

37. No one can deny the importance of this vehicle to the many traders and pioneers who settled the frontier regions. The Conestoga wagon era was responsible for the gradual improvement of existing roads as well as for the construction of many new roads. Because of its achievements, the Conestoga wagon is now part of an American legacy. It remains as one very important link in the historical chain of economic progress in the United States.
SUGGESTED PLANS AND ACTIVITIES FOR READING SELECTIONS

INTRODUCTION and PATHS AND TRAILS

Materials:

Overall Concepts:
1. People living in North America before Europeans came had a well-defined system of trails.
2. These inhabitants made their trails for the same purposes roads are built today—economic, military and social.

Content Outline:
1. Hunting path: hidden path; located near game; used by hunters; traveled quietly and cautiously.
2. War path: difficult to travel, well hidden; used only by warriors, traveled quickly and cautiously.
3. Trading path: easily traveled; open; used by groups carrying trade articles.
4. Visiting path: wider path; used by individuals or families; accommodations often located along trail; traveled leisurely.

Purpose: Students will:
1. explain the relationship between a type of path and its social, economic or military purpose.
2. read a map of main Indian trails in Pennsylvania with understanding.

Suggested Activities:
1. Read and discuss the selection. Review geographic concepts such as North America, north, south, southwest, etc.
2. Complete the activities on pp. 4-6.
3. Invite a backpacker to demonstrate his equipment and show his supplies. Make a comparative study of the weight and quality of canned foods and freeze dried foods. Compare food and equipment used by hikers today with the supplies an Indian took when he traveled a trail.
4. Work with outdoor skills used by hikers, i.e., identifying and understanding trail markers and compass reading.
5. Write to a State Park for maps locating trails in your area. Then organize a hiking field trip.
6. Make dioramas of scenes along Indian trails.
7. Locate Indian trails in your area and find out if there are legends associated with them.
WIDER TRAILS

Materials:

Overall Concepts:
1. As settlers claimed more of the Indians' hunting grounds, the tribes were forced to migrate to the Ohio River Valley.
2. Originally Indians brought their furs to trading places along the Eastern coast. Now traders were forced to follow them across the mountains to get pelts.
3. Fur trading became very lucrative and rivalry developed among the trading companies for pelts.

Purpose: Students will explain:
1. the effect of increased trade to and from Indian settlements and trading posts on trail improvements.
2. how the Indians' way of life was affected by increased trade.

Suggested Activities:
1. Read and discuss the selection.
2. Develop the concept of exchanging. Create a language experience chart of items your students have exchanged.
3. Show the filmstrip "Early Paths and Trails to Conestoga Roads," frames 1-11. Use the script to further explain the transition from footpaths to wider trails. (Review the filmstrip when needed.)
4. Complete the activities on p. 9.
5. Explain how increased fur trading brought about changes in footpaths:
   a. in relation to paths:
      1. less undergrowth
      2. wider
      3. well-defined, easier to follow and locate
      4. muddier in spring and dustier in summer
   b. in relation to fur trade:
      1. more horses follow the trails
      2. more packhorse trains with heavier loads
      3. trading posts erected along the trails
6. Study the value and abundance of some fur-bearing animals trapped today. Related questions: How did John Jacob Astor become famous? How did Indians trap animals? What are some recent trapping techniques?
7. Discuss how fur trade was changing the Indians' way of life—
   a. the ecological problem stemming from over-hunting
   b. Indians leaving their tribal hunting grounds as traders open the way for settlers
   c. Indians wanting certain trade items such as rifles, kettles, metal and knives

8. Sequence the picture cards about the fur trader. (The cards visually present a story about the steps it took to get pelts from the American frontier to Europe.)

   Variation: Write short statements describing each picture card. Direct your students to match each descriptive statement with its respective picture card.

9. Have interested students select topics such as ways of trapping, corduroy roads, macadam roads, etc. to present to the class.

TRAILS TO FORTS

Materials:

Overall Concepts:
1. In the New World, representatives of the French and English nations were striving to gain exclusive monopoly of the fur trade with Indians in the Ohio Valley. All factions realized that military force would be necessary to settle the issue.
2. Prior to a military confrontation, supply routes needed to be established.
3. Only a small part of the New World had established Colonial ties with either the French or the English nations.

Content Outline:
1. The French:
   a. used the water ways and portages to reach western Pennsylvania. This worked well for small numbers of traders.
   b. soon faced the problems of transporting large numbers of men and supplies from their main base at Quebec on the St. Lawrence to the Forks of the Ohio.
   c. had extreme difficulties at the two footpath portages—Niagara Falls and Presque Isle to Fort LeBoeuf on French Creek.
2. The English:
   a. heard about the French fortifications and realized their claim to the Ohio Valley was being challenged.
   b. responded in two ways:
      1. prepared for the conflict by fortifying trading posts.
      2. stated their position and claim to the French.
   c. soon learned that the existing paths over the Allegheny Mountains were inadequate.

Purpose: Students will:
1. recognize both the English and French nations and Colonials had economic interests in the Ohio Valley.
2. explain and trace the English and French routes into the Ohio River Valley.

Suggested Activities:
1. Read and discuss the selection.

2. a. Use a large map to locate places mentioned in the selection or in "The French Struggle on the Portages."
   b. Make word cards of geographic names and have students place each card by its proper location on the map.
   c. Develop and/or reinforce some map reading skills (cardinal and intermediate directions, scale) by constructing an activity sheet to accompany the map on p. 13. Sample questions might be:
      1. What lake is located north of Presque Isle? ________________
      2. In which direction is Lake Ontario from Lake Erie? ________________
      3. About how many miles is it from Fort Machault to the Forks of the Ohio River? ________________

3. a. Develop the concept of portage. In a simplified version, record important concepts from "The French Struggle on the Portages" onto cassette tape (or present the material in story form).
   b. Make a language experience list of different words and their meanings using "port" as the root word. Some words could be: transport, transportation, porter, portress, portable, import, export, portfolio, deport, carport, airport, etc.

   Variation: Create a bulletin board visually depicting some of the "port" words.
   c. If a canoe of French traders arrived at a portage, what must they do in order to get to the other side.


5. Find out if a fort was ever built in your locality. See if your students can pinpoint its location and can determine reasons why the site was chosen. (creative inquiry) Discuss the types of paths and/or roads that linked the fort to the area.
6. Are there many traces of the French people in the Ohio River Valley? Make a tally sheet of the French names of towns, rivers and natural features.

7. Have students make puzzles using vocabulary from the reading selections and "Words to Know." (on-going)

"The French Struggle on the Portages"

France handed the task of maintaining her territorial claims in North America to the Marquis Duquesne. The French possessions stretched from the Saint Lawrence Valley to the mouth of the Mississippi River. The Marquis envisioned a chain of forts linking these areas with a strong fort at the Forks of the Ohio River.

Duquesne appointed two men to help him accomplish this task. To Captain Charles Pean he gave the problem of securing the transporting supplies. The post of field operations was given to Captain Marin. The Marquis began collecting his forces and by the early spring of 1753 he had an army of 400 regulars, 5000 militia and 600 Indians ready to move towards the Ohio Valley.

The harbor of Presque Isle on Lake Erie was chosen by Duquesne to be the first fortified supply depot. Captain Marin went ahead of Pean's supply force. By June his troops had joined the French engineers at Presque Isle. They had already laid the foundation and with the help of Marin's troops the walls of the stronghold went up rapidly.

Back at Quebec, Pean started the enormous task of moving 2000 men, equipment, supplies and armament over five hundred miles of stormy water to Presque Isle. The first land barrier to overcome was Niagara Falls.

A steep, rocky descent made the portage path around Niagara Falls very treacherous. Because the troops arrived in the storm-ridden month of February the trail was even more dangerous. Blizzards obscured the path. Many men were forced to carry burdens of ninety pounds down the slippery path to bateaux, special boats, waiting several miles below the Falls. Smashed legs and broken arms were every day happenings. Hungry soldiers deserted at this terrible portage. They chose the howling wilderness to the chance of a slow death from injury. Even the penalty of being chained and sent to overseas galleys as oarsmen did not stop the desertions.

After the canoes and bateaux were loaded below the Falls the long journey began over Lake Erie. Frequently this lake was whipped by storms that struck with little warning. Often the weary troops had to interrupt the journey and pull for their lives to some shelter along the shore. It was already late summer when Presque Isle was reached. This journey had taken too long by the timetable Duquesne had established. He had planned for his troops to be at the Forks by late September.

The warehouses at Presque Isle were stocked with barrels of flour, hard biscuits, lyed corn, wine and ammunition. Now Captain Marin must transport this huge supply dump over a twenty-mile portage to Fort Le Boeuf, the next step in the route to the Ohio Valley.
There was trouble at the start of the journey to Fort Le Boeuf. The horses requisitioned to transport the heavy bake ovens and smithies had died enroute or had become too weak for the job. Their burdens had to be carried by the weary troops. Among Marin's men were Canadian fur traders who could backpack two ninety-pound sacks over difficult trails. Even these hardy Canadians dropped on the portage trail.

Gnats in the area plagued the troops, continually stinging the hands and faces of the men. Constant use of the trail through swampy areas soon transformed these places into quagmires. The soldiers often sank to their knees in mud. The Indian problem was always at hand. At any time the "friendly" Indians might break their alliance and attack. Poor food and impossible conditions soon brought on scurvy and dysentery. Every day victims were buried by the trail. Fever raged through the ranks. In spite of all these trials Marin brought his army to Fort Le Boeuf. Here disastrous news met the Captain.

Marin had planned to canoe his troops down French Creek to Venango. But the hot summer that failed to dry swampy places on the portage trail had lowered the creek bed. French Creek's waters were not navigable. Marin tried another way. He bargained with some Indians to carry his army's supplies. The Indians loaded their horses with the supplies and then disappeared into the wilderness. There was nothing for the Captain to do but return to Presque Isle. His ravaged troops could never continue to the Ohio River.

The terrible ordeal of the past months had reduced the men to a pitiful sight. Inadequate food and shelter made the men easy victims of an epidemic. Even Duquesne was shocked when he saw the tattered remnants of the army that struggled back to Canada. The Marquis would have to postpone his plan of operation.

Because Duquesne could not obtain his goal in the fall of 1753, France's plan for the control of the Ohio Valley would be seriously hampered.

WILDERNESS TRAVEL

Materials:

Overall Concepts:
1. The mode and rate of travel were directly dependent on the conditions of the route.
2. Written and verbal communications between the coastal colonies and the frontier required days to deliver. Road conditions determined the speed of communication.

Purpose: Students will:
1. Identify physical hardships encountered by travelers during the early stages of road development.
2. Understand the relationship between travel conditions and the time involved in delivering communications.
Suggested Activities:
1. Read and discuss the selection.
2. Complete the activity on pp. 16-18.
3. Make phrase cards describing the events that Washington and Gist experienced on their trip to Fort Le Boeuf for students to classify. For instance,

<table>
<thead>
<tr>
<th>EVENTS THAT HAPPENED</th>
<th>EVENTS THAT DID NOT HAPPEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. fell into freezing water</td>
<td>7. made apple cider</td>
</tr>
<tr>
<td>4. snowy weather</td>
<td>10. caught in a bear trap</td>
</tr>
<tr>
<td>8. frozen feet</td>
<td></td>
</tr>
<tr>
<td>9. forded streams</td>
<td></td>
</tr>
</tbody>
</table>

4. Develop the concept of diary. Allow each interested student to keep a diary.
5. Compare and contrast the different preparations needed for summer and winter travel during colonial days with those needed today.
6. a. Discuss with students how weather conditions can interrupt communications and travel today.
   b. Allow them to relate their experiences of how snowstorms, hurricanes, floods, etc. affect the afo-mentioned.
7. Develop the concept of frontier. Have your students identify some of today's frontiers. Compare them with the colonial frontier to find similarities and differences.

A ROAD IS NEEDED

Materials:

Overall Concepts:
1. When the economic interests of nations collide, they turn to military means to support their interests.
2. A military campaign involves the movement of troops and supplies. Military roads become a basic necessity.
3. When the need for a road is established, the road will be built regardless of difficulties.

Purpose: Students will begin to prepare a list of the hardships encountered by men in building a military road.
Suggested Activities:
1. Read and discuss the selection. Differentiate between a fortified trading post and a fort.
2. Continue to locate places mentioned in the selection (see Activity 2, "Trails to Forts").
3. Complete the activity on p. 21.
4. Keep a record of the hardships men faced in building a military road over the mountains* (see Activity 3c, "Across the Mountains").
5. Let interested students (or groups) construct a model fort (or fortified trading post). Each one should design a fort so as to give a military advantage over his opponent.

*Activities in relation to road building are suggested in "First National Road."

ACROSS THE MOUNTAINS

Materials:

Overall Concepts:
1. The Allegheny Mountains represented the greatest obstacle Braddock encountered in moving his troops, supplies and heavy artillery to Fort Duquesne.
2. Building the road across the mountains was the worst "enemy" Braddock's forces faced.

Purpose: Students will:
1. identify and categorize the hardships faced by men in building a military road.
2. realize the impact a wagon road over the Allegheny Mountains had upon the western movement of settlers.

Suggested Activities:
1. Read and discuss the selection.
2. Complete the activities on pp. 24-25.
3. a. In simplified form, present the important concepts from "Braddock's Forces Against the Mountains" (see Activity 3a in "Trails to Forts").
   b. Continue with Activity 4, "A Road Is Needed."
c. Make phrase cards for your students to categorize into one of three major areas of difficulty that Braddock and Washington encountered as their men built a road over the mountains.* (Some hardships may be categorized into more than one realm.) For instance,

<table>
<thead>
<tr>
<th>Transportation Problems</th>
<th>Geographical Problems</th>
<th>Physical Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. heavy wagons</td>
<td>2. mountains to cross</td>
<td>1. fever</td>
</tr>
</tbody>
</table>

4. Allow interested students to report on topics such as:
   a. What kind of field gear was carried by soldiers during the 1750's?
   b. How did the fighting style of the French differ from the fighting ways of the British on the frontier?

*Activities in relation to road-building are suggested in "First National Road."

"Braddock's Forces Against the Mountains"

The British government appointed General Braddock to remove the French from the Ohio Valley. Braddock left England with some troops and sailed to America where he assumed command of the combined Colonial and British armies. By the time he arrived at Fort Cumberland Braddock was aware of the many difficulties facing him in transporting his army over the Allegheny Mountains without benefit of roads. Here is an account of the transportation difficulties, the geographical problems and the physical hardships endured on the journey.

In preparation for the conflict with the French, Braddock brought from England heavy siege guns, eight-inch howitzers, twelve pounders, six pounders, many smaller cohorn mortars and a special type of vehicle called the "King's wagon." Braddock now had his artillery and army but he had to gather from the countryside enough food for the campaign.

The Colonies were to furnish most of the food supplies. For various reasons the supplies were limited and of poor quality. The main diet of the troops was salt pork, usually carried on wagons. However, on this journey all the wagons were needed for military supplies. The salt pork was taken from the barrels and packed on horses. The sweating horses gave the pork an unpleasant taste. A few live cattle were herded along the route. These quickly lost weight, and when slaughtered, were so tough that the men could hardly eat the meat. Flour was soon replaced by mouldy Indian corn. This bread was baked in holes in the ground and eaten covered with sand and dirt. The exhausted men slumped on the ground after a hard day's march. Because of the poor diet the men had lost their endurance.

The horses supplied for hauling proved unfit for the job. The supply of fodder brought along was not enough to feed them properly. Most of the work horses died or became too weak to carry loads. Braddock thought he had gotten all the spavined, wind-broken, and crippled beasts in the Colonies. It was no wonder the horses were unable to do their jobs since the American breed was too small to pull the King's wagons.
It was a Herculean task for horses to pull the heavy English artillery over the steep mountains on a newly-built road. Soldiers and horses had to work together to accomplish this feat.

Over most of the one hundred and ten mile route the builders encountered geographical difficulties. Gullies had to be filled, wet spots corduroyed, brush cleared, and trees chopped. Even at the start of the journey an entire day was required to move all the troops over one mountain, a distance of two miles. The soldiers had to help push the heavy wagons up the steeper ascents and brake them on the descents. Sometimes the men lost their hold on the wagons. Then the vehicles rolled down the mountain and were shattered on the rocks below. The horses hitched to them were dragged to their death.

Siege guns were hoisted by rope and pulley over the ranges. Rafts had to be built to ferry supplies over river crossings. The constant passing of men and supplies over the new road-bed raised clouds of dust in dry weather. Hard rains mired the roads. At wet spots tramping feet quickly turned the road into a mudhole. Almost every foot of the way laurel slick, brush and brambles closed around the men. In these places the soldiers were fearful of an ambush. The food privations and the geographical difficulties seem small compared to the physical hardships the troops suffered.

The men had to endure much bodily discomfort on this march to Fort Duquesne. Almost every man, including the officers, had the "bloody flux," a type of dysentery, as a result of the salt pork diet. Months of sleeping in the open without proper bedding gave many soldiers a burning fever. There were a number of typhoid cases in the camp from polluted water. All the men had to drink from untested springs and brooks. There was an outbreak of scurvy among the men from lack of fresh fruits. Swift thunderstorms drenched the soldiers and their clothes had to dry on their backs. Bugs and insects made life miserable for all. These bites became inflamed or ulcerated from constant scratching. The road passed by rocks where poisonous snakes sunned themselves, and men were bitten. These bites took a toll of lives. Under these adverse conditions it was a major feat of endurance for Braddock and his men to have arrived within sight of Fort Duquesne.

After this tremendous struggle over the mountains the General was certain of victory. But the battle turned into a complete rout and the army retreated. However Braddock's road showed the settlers that a way could be opened to western Pennsylvania. Transportation lines could be established and the Ohio Valley reached by settlers.

WAGONS ON FORBES' ROAD

Materials:

Overall Concepts:
1. With the French military threat removed from North America, English settlers slowly accumulated in the frontier regions surrounding the Ohio River Valley.
2. Packhorses were not able to adequately supply the needs of growing settlements.
3. Improvement of existing roads to accommodate Conestoga wagon traffic was triggered by social and economic pressures rather than military priorities.

**Purpose:** The students will recognize that growing settlements leading to the Ohio River Valley increased the need for a more adequate means of transportation and stimulated road development.

**Suggested Activities:**
1. Use a wall map to trace the route of Forbes' Road. Help students to locate other places indicated in this selection such as Conestoga River Valley, Lancaster and Philadelphia.

2. Review with students the transition from walking trails to Conestoga roads. Stress that instead of roads being built for military reasons, they were now being built to serve rapidly growing settlements leading to the Ohio River Valley.

3. Complete the activity on p. 27.

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**THE STURDY CONESTOGA**

**Materials:**
3. Teacher's Guide—Drawing of "The Conestoga Wagon," p. 71 (from which a thermofax ditto or transparency can be made).

**Overall Concepts:**
1. The beautifully designed Conestoga wagon was a practical, sturdy vehicle with many distinct characteristics.
2. Existing road conditions required a vehicle that possessed the Conestoga wagon's design and durability.

**Purpose:** Students will understand:
1. the function of various features and equipment associated with the Conestoga wagon (which made it the most practical vehicle of its time for transporting supplies).
2. how road and travel conditions required a vehicle that possessed the Conestoga wagon's design and durability.

**Suggested Activities:**
1. Show the filmstrip "Early Paths and Trails to Conestoga Roads," frames 12-37. Use the script to explain and discuss the various characteristics and features of the wagon. (Review the filmstrip when needed.)
2. Read and discuss the selection. Complete the activities on p. 30.

3. Using a transparency of "The Conestoga Wagon," have students orally identify specific features and objects located on the wagon.

4. As a reinforcement activity, students may make a learning center:
   a. Use the transparency to draw a large picture of the Conestoga wagon. Number the different parts and features of the wagon.
   b. On a set of cards, write the names of the parts. Provide a method by which the student can place the card next to the appropriate part on the large picture.
   c. For self-correction, number code the reverse side of each word card to correspond with its respective Conestoga part.

5. Encourage students to use the "Conestoga Wagon Data Sheet" to answer factual questions and to gather data for interpretive questions.

6. Point out differences between the Conestoga wagon and its modified relative the prairie schooner (covered wagon).

7. Take a field trip to a museum that displays Conestoga wagons.

   **Museums That Display Conestoga Wagons (see Shumway and Frey):**
   1. Pennsylvania Farm Museum of Lancaster
   2. The National Geographic Society of Washington, D. C.
   3. Fort Bedford Museum in Bedford, Pennsylvania
   4. Pennsylvania Dutch Folklife Museum in Oley, Pennsylvania
   5. Hershey Museum of Hershey, Pennsylvania
   6. The Smithsonian Institution of Washington, D. C.
   7. Oglebay Institute of Wheeling, West Virginia
   8. Hagley Museum of Wilmington, Delaware
   10. Historical Society of York County in Pennsylvania
   11. Valley Forge, Pennsylvania
   12. Ponderosa Museum of New Providence in Lancaster County, Pennsylvania
   13. William Penn Memorial Museum in Harrisburg, Pennsylvania
   15. National Highway Museum of Zanesville, Ohio
   16. Fort Ligonier Museum in Ligonier, Pennsylvania
Sturdy Conestoga Wagon
THE CONESTOGA HORSE

Materials:

Overall Concepts:
1. The Conestoga horse became a very important investment for the farmer, businessman and wagoner.
2. It took a special breed of animal with tremendous pulling power to haul trade items over many miles of crude road.

Purpose: Students will:
1. realize the importance of the Conestoga horse in hauling trade supplies over rough road to and from western settlements.
2. describe the Conestoga horse.

Suggested Activities:
1. Read the selection.
2. Develop discussion questions with students.
   a. How were Conestoga horses used?
   b. Why was the Conestoga horse such an unusual breed? What made it so different from other breeds of horses?
   c. Why is the Conestoga horse extinct today? (Belgian horses, smaller in weight and height than the Conestoga horse, are shown in the filmstrip.) Review the concept of extinction.
   d. What was the height and weight of an average sized Conestoga horse? How much did each Conestoga horse cost? What was the cost for a team of horses? Would you consider the cost to be too expensive? (Use the "Conestoga Wagon Data Sheet.")
   e. Allow students to measure and compare the heights (in hands) and weights of other people or items with the average height and weight of a Conestoga horse (possibly, a learning center activity). Measure and compare a car, refrigerator, stove, walls or a home, other classmates, parents, etc.
3. Complete the activities on p. 32.
4. Have students compose a list of ways horses are used by people (experience chart). Perhaps some pupils would like to compare and contrast other breeds of horses with the Conestoga horse.
5. Allow a resource person ("old-timer," museum curator, etc.) who is familiar with horses and harness equipment to relate his experiences as a youngster. He/she can demonstrate how a team of horses is harnessed, identify and explain the function of each piece of harness gear, etc. Ask students why a team of horses was harnessed in the manner shown on p. 32. (Ans. for maximum pulling power)
"The Conestoga Horse"

Because many members of society looked upon record keeping with disfavor during Revolutionary times and because much information became entangled in contradactable historical accounts, there is a lack of "hard evidence" establishing the emergence of the Conestoga horse as a distinct American breed.

To be sure, the story of the Conestoga horse is not based upon flimsy conjecture. This animal was described as being a well mannered, muscular bay with long legs and a small head. It weighed on the average of 1700 pounds and stood on the average of 14.5 hands (one hand = 4 inches) in height. It was a well built animal with incredible stamina and strength.

The Conestoga horse was a very useful creature to Pennsylvania farmers. It was expected to do light and heavy farm work and to serve as a saddle horse for riding and hunting. However, this breed of horse gained historical prominence for its long distance hauling of the Conestoga wagon.

The Conestoga wagon and horse compiled an impressive record in a one hundred year span. But the emergence of the iron horse and canal systems ushered into the annals of transportation a technologically more efficient means of carrying trade goods to and from western settlements which, in turn, expedited the Conestoga wagon's departure from the American scene. As for the durable animal that had done so much to move these famous vehicles many arduous miles, its remarkable development came to an even more abrupt halt.

THE CONESTOGA WAGONER

Materials:

Overall Concepts:
1. Wagoners were a distinctive group of men with hardy qualities.
2. They faced many daily hardships and dangers in hauling trade supplies to and from western settlements.

Purpose: Students will:
1. describe the functional appearance of a wagoner.
2. identify some of the hardships and dangers a wagoner encountered.

Suggested Activities:
1. Read the selection. Discuss the appearance of a wagoner. Encourage pupils to indicate how a wagoner's clothing helped him to do his job.
2. Enhance comprehension of other concepts in the reading through a discussion and/or a worksheet.

   a. What is pig iron? How many pounds are in one half ton?

   b. What two job names were given to a wagon driver? 1. 2.

   c. What kinds of problems did the wagoner have with his wagon and team on muddy ground during winter weather?

   d. How did a wagoner stop or slow his wagon on a level road?

   e. Wagoners could not use their brakes going down a steep hill. Why? How did they slow their wagons going downhill?

   f. What was the weight of an empty Conestoga wagon? Of a wagon full of goods? (Use "Conestoga Wagon Data Sheet."

   g. Why was a Conestoga wagon carefully packed?

   h. Name two ways wagoners crossed rivers. and

   i. What tool did a wagoner use to move his team of horses faster?

3. Explore with your students ways in which travelers and wagons crossed rivers. Stress that as vehicle traffic increased, there was greater demand for more adequate ways to cross rivers.

   a. Discuss the concept of fording.

   b. Review Washington's crossing of the Allegheny River on a hand-made raft ("Wilderness Travel").

   c. Discuss how a ferry operates. Stress that during a time of few bridges, ferrying wagons across rivers was very practical and safe. If possible, have your students relate their experiences with ferryboats.

4. Review the hardships and dangers of travel during the Conestoga wagon era.

5. Complete the activities on pp. 34-35, 39 and 46.

6. Construct murals depicting some facet of wagonering.
7. a. Wagonering was a definite occupation. Have the class make a list of other occupations related to transportation during the Conestoga era. Compare this list to one of jobs related to "modern day" forms of transportation (for example, wheelwright, blacksmith, stable owner versus auto mechanic, service station attendant, tire salesman, etc.).

   b. In addition, explore the qualifications and/or skills needed to perform the various jobs.

MIND YOUR P'S AND Q'S

Materials:

Overall Concept: The Conestoga wagon era contributed a rich folklore of interesting customs, sayings and life style to our American heritage.

Purpose: Students will:
1. learn about the colorful life style of wagoners.
2. learn about several old customs and sayings that were started during the days of the Conestoga wagon.

Suggested Activities:
1. Begin by discussing what customs and sayings are. Compose a list of familiar customs and sayings. (This could serve as a basis for further study.)

2. Ask students if they have ever heard the saying "Mind your p's and q's." Discuss what it means. Read the story to find out how this saying first began.

3. Discuss the story. Ask literal and interpretive questions such as:
   a. literal—What was the name of the tavern owner? In what year did he open his inn for business?
   b. interpretive—If Barney was halfway to Pittsburgh on a trip which began at Harrisburg, in what town did he stay for the night? (Use the map on p. 40.)

4. Cite other American customs and sayings that were begun during the Conestoga days (review the script for "Early Paths and Trails to Conestoga Roads," numbers 17, 29-31).

5. Locate a resource person who knows the intricacies of a blacksnake bullwhip. Allow him/her to demonstrate how the whip works. Perhaps students could try to operate it with supervision.
6. Complete the activity on p. 37.

7. a. Using visual devices, explain that road and geographic conditions determined the distribution of inns. That is, a wagoner could travel on an average of 15 miles a day if road conditions permitted. However, mountainous land, rutted roads or rainy weather slowed wagon travel to an average of 8-10 miles a day. In mountainous areas, inns were located at much closer points along the route.

b. Trace on a relief map one or more wagon routes shown on p. 40. Students could indicate desirable locations for inns based upon geographic features. For instance, a tavern might open its doors for business near a fording location.

In addition, list other factors that would encourage the establishment of an inn.

c. Compare the average distance a Conestoga wagon traveled in a day to the average distance a tractor trailer covers in a day.

FIRST NATIONAL ROAD and A STORY WITH NO ENDING

Materials:
2. Map showing the United States during the early 1800s.

Overall Concepts:
1. The first national road resulted from an urgent need to unite the eastern and western sections of the expanding nation.
2. It represented the first time the Federal Government was involved in the planning and financing of a road.
3. It was the first major road built using modern construction techniques.

Purpose: Students will:
1. exhibit an awareness of how the move toward modern road technology in America was a result of expanding social and economic demands.
2. compare modern road building techniques with those of past periods.

Suggested Activities:
1. Use a map of the United States to show the growing areas of settlement west of the Appalachian Mountains in the early 1800s.

2. Read and discuss the selection. Complete the activities on pp. 43-45.

3. Make a mural showing the traffic and life style related to the Old Pike.
4. Add additional occupations to the list from Activity 7, "The Conestoga Wagoner."

5. Make a large flow chart in which students compare present day road building factors with those of the past. Use the time periods: 1) Braddock's military road, 2) First national road, and 3) Roads of today. What does one need to know in order to build a road? Some possible factors for comparison are:
   a. Determine need
   b. Surveying route
   c. Methods of acquiring materials
   d. Tools and equipment used
   e. Construction techniques
   f. Terrain problems and how to handle them
   g. Road surface
   h. Effects of weather
   i. Accommodations for workers
   j. Amount of land used
   k. Cost and method of financing

6. As a resource person for Activity 5, invite a highway engineer to speak to the class about present day road construction.

7. a. Prepare a time line bulletin board/center at which students can sequence main events from early paths to modern highways. Some events are:
   1. 1751—Nemacolin established his path.
   2. 1754—Lt. Washington led his troops to the Great Meadow.
   3. 1755—Braddock's forces chopped out the first military road across the mountains.
   4. Early 1800s—Forbes' Road became a major route for settlers to the Ohio Territory.
   5. 1811-1821—The First National Road was built.
   6. 1850s—Increased traffic moved westward on the railroads.
   7. 1890s—Traffic declined on the National Road; the Old Pike was in bad need of repair.
   8. Post World War II—The route of the Old Pike became part of the first coast-to-coast highway.
   
   b. Other appropriate events may be revealed as a result of student research and may be added to the time line, i.e.:
   1. 1845—First plank road was built between Syracuse and Oneida Lake (New York).
   2. 1893—First brick surface was laid between Cleveland and Wooster (Ohio).
   3. 1903—First concrete road was built in Wayne Co., Michigan.

8. a. Challenge students who are involved with projects "For the Extra Curious" to substantiate or refute the hypothesis: A more efficient system of transportation replaces a less efficient system.

   b. A group could explore present transportation problems as they relate to the hypothesis.
Procedures for Construction

The following questions are designed to reinforce concepts and skills for this course of study. You may choose to add or delete questions.

1. Make question cards by cutting and mounting them onto sturdy oaktag.
2. Design and construct a thematically appropriate gameboard.
3. Provide students with directions for playing this academic game.
4. The answer key found on pp. 83-84 may be placed between two pieces of acetate to be used by a monitor at the game center.

1. What word means to wade or drive a wagon across a stream at a shallow place?

2. Name at least three kinds of trails the Indians made.

3. What did the Indians build along visiting trails to help them during long trips?

4. What is the word which means a narrow way between two mountains?

5. Animal skins are called ____________________.

6. What does the word exchange mean?

7. What does the word macadam mean?

8. What happened to the furs the trading companies collected from trading posts?

9. When traders could no longer carry enough goods to settlements on one horse, they formed ____________________.

10. Why did not wagons travel to and from trading posts during winter months?

11. Why did not wagons travel to and from trading posts during the early spring months?

12. What is a word that means to carry boats and supplies over land between two waterways?

13. The French and the English got to the Ohio River Valley by different ways. Describe these basic different ways.

14. In what way did the French prepare to defend their claim in the Ohio River Valley?

15. In what way did the English prepare to defend their claim in the Ohio River Valley?
16. Why was it so difficult for the English and Colonists to get to the Ohio River Valley?

17. Why did the English and French fight for control over the Ohio River Valley?

18. From which direction did the French come to the Ohio River Valley?
   a. north  b. south  c. west  d. east

19. From which direction did the English come to the Ohio River Valley?
   a. south  b. east  c. north  d. west

20. Which river is not part of the Ohio River system?

21. Which river is located farther east?
   a. Susquehanna  c. Ohio  b. Delaware  d. Monongahela

22. Which Great Lake borders Pennsylvania?
   a. Erie  c. Superior  b. Ontario  d. Huron

23. Did the French travel up stream or downstream when they headed to the Ohio River Valley from Quebec?

24. Which British trading post was located farther east?

25. Which word best described wilderness travel into the Ohio River Valley region?
   a. pleasant  c. speedy  b. miserable  d. happy

26. Who did the Governor of Virginia send to Fort LeBoeuf to ask the French to leave the Ohio River Valley?

27. Which words best described Washington's trip to Fort LeBoeuf?
   a. cold winds  d. snowy  b. icy  e. rainy  c. dry

28. Which words best described Washington's trip to Fort LeBoeuf?
   a. muddy  d. sunny  b. swift moving streams  e. cloudy skies  c. fording

29. A man by the name of Captain Trent was commissioned by the Governor of Virginia to ____________________________

30. After the French took over Trent's settlement, they changed its name to ____________________________

31. A British fort was located where Nemacolin's Path began to cross the Allegheny Mountains to the west. Name it.

32. Washington's men chopped the first road over the mountains to the Ohio River Valley, what happened to them?
33. What General was ordered by the British King to force the French to leave the Ohio River Valley?

34. Name at least three hardships Braddock and Washington had in moving their men and supplies over the mountains.

35. What was the name of the mountains the English and Colonial army crossed in getting to the Forks of the Ohio?

36. Why did Braddock's army lose to the French forces in their battle for control of the Ohio River Valley?

37. What word means to move backwards?

38. What was the name of the English General who opened another military road soon after Braddock's defeat?

39. Who won the French and Indian war?

40. Why did not the British and Colonials travel to the Ohio region by waterways?

41. Which road was the best one for settlers to use in moving to western Pennsylvania for thirty years after the French and Indian War? (1763)

42. Why did the English want to control the waterways in the Ohio River Valley?

43. What structure was built around an English trading post to protect its settlers from Indian raids?

44. What was the main difference between a fortified trading post and a fort?

45. What was the name of the group of people who first built the Conestoga wagon?

46. Where was the Conestoga wagon first built?

47. Why was the Conestoga wagon so important and famous?

48. Why was the body of the Conestoga wagon curved upward and outward at both ends?

49. What is another word for wagoner?

50. What colors were painted on the Conestoga wagon?

51. What material was used to protect the goods inside the wagon?

52. Why were iron rims placed around the Conestoga's wooden wheels?
53. If a driver pulled down on an iron lever on the left side of the Conestoga wagon, what happened?

54. True or False – The driver sometimes rode in the Conestoga wagon.

55. Which word is most out of place?
   *driver*  *teamster*  *pike boy*  *wagoner*

56. When a man tired of walking, he rode on the ____________.

57. What item on the wagon carried wheel axle grease?

58. Where were the spare parts kept?

59. What tool lifted heavy weights?

60. Why were iron bells placed on the harness gear of Conestoga horses?

61. Why did the Conestoga wagoner use a blacksnake whip?

62. What word means items to sell or trade?

63. How many horses were harnessed in a team?

64. Which Conestoga horse was the lead one?

65. Why was the lead horse so important?

66. Which Conestoga horse was the saddle horse?

67. The long rein connected to the bit of the lead horse was known as the ____________.

68. The high black boots that wagoners wore were called ____________.

69. What did wagoners do in order to stop their wagon wheels from freezing in the mud during cold nights?

70. Why were wagons packed so carefully?

71. Name at least two ways a teamster slowed his wagon on a steep downhill slope.

72. A place where wagons were floated across rivers was called a ____________.

73. Name the correct order which identifies ways wagons traveled across rivers.
   a. fording, ferrying, bridging
   b. bridging, ferrying, fording
   c. ferrying, fording, bridging
   d. fording, bridging, ferrying

74. Which item was not part of the Conestoga wagon?
   a. wooden wheel  c. lever
   b. toolbox  d. stogies
75. Which item was not part of the Conestoga horse?
   a. bells  c. harness gear
   b. lazyboard  d. saddle

76. Which item was not a tool used by the wagoner?
   a. 'tongue  c. axe
   b. jack  d. hammer

77. Which item was not part of a wagoner's gear?
   a. broad-rimmed hat  c. stogies
   b. whip  d. running gear

78. Name at least two customs which had their beginnings with the Conestoga wagon.

79. Name the President who signed a bill into law which provided money to build the first national road.

80. Name at least two ways in which the first national road was better than other roads.

81. Name at least three states through which the first national road was built.

82. Place these kinds of routes in the order they were used by traders.
   1. footpaths  4. animal paths
   2. macadam roads  5. military roads
   3. packhorse trails

83. What invention "drove" the Conestoga wagon out of business?
ANSWER KEY TO GAMEBOARD QUESTIONS ON EARLY PATHS AND TRAILS TO CONESTOGA ROADS

1. ford
2. hunting, visiting, fighting or trading
3. shelters
4. pass
5. pelts
6. to trade an object or item for another one
7. smooth, hard-surfaced road
8. They were sent to England or Europe to be made into clothing.
9. packhorse trains
10. Roads were frozen ruts.
11. Roads were too muddy.
12. portage
13. The French came to this area mostly by waterways from the North. The British had to make roads into this area mostly from the East.
14. They built forts.
15. They fortified their trading posts.
16. There were no roads or navigable rivers leading to this area.
17. Both countries claimed this area. They thought this rich fur region belonged to them.
18. north
19. east
20. c - Susquehanna
21. b - Delaware
22. a - Erie
23. downstream
24. d - Harrisburg
25. b - miserable
26. George Washington
27. all but c - dry
28. all but d - sunny
29. build a fortified trading post at the Forks of the Ohio
30. Fort Duquesne
31. Fort Cumberland
32. They retreated to Great Meadows and built Fort Necessity and were defeated by the French.
33. General Braddock
34. thick forests, mosquitoes, brambles, stumps, tired soldiers, weak horses, mud, dust, poor food, etc.
35. Allegheny Mountains
36. The British fought the European way. The French fought like the Indians.
37. retreat
38. General Forbes
39. British and Colonials
40. There weren't any navigable rivers.
41. Forbes' Road
42. to stop the French fur trade and to settle the region
43. fort
44. The French built forts for military reasons—to defend their claim with soldiers. The English built trading posts for economic reasons—for trade and for settlers. Later, they took steps to make these posts stronger.

45. Pennsylvania Dutch farmers

46. Lancaster, Pennsylvania

47. At the time it was the only wagon strong enough to carry supplies over rough roads to settlers.

48. to keep the dust and rain out of the wagon

49. teamster (or driver)

50. red and blue

51. homespun linen or hemp cloth

52. to make them stronger

53. Wooden blocks would rub against the rear wheels to slow or stop the wagon.

54. false

55. pike-boy

56. lazyboard or saddle horse

57. tar pot

58. in the toolbox

59. the jack

60. to warn travelers of an approaching wagon

61. to make the horses move faster

62. merchandise

63. six

64. the left front horse

65. The wagoner could control the rest of the team through the reins and by giving commands to this horse.

66. left rear horse

67. jerk line

68. stogies

69. They drove their rigs onto wooden logs.

70. so the heavy weight would not shift and break a wagon's axle

71. a. put drag shoes on the rear wheels of the wagon
   b. jammed tree poles into the rear wheels
   c. chained rear wheels to wagon bed

72. ferryboat crossing

73. a – fording, ferrying, br'ing

74. d – stogies

75. b – lazyboard

76. a – tongue

77. d – running gear

78. a. Mind your P's and Q's.
   b. I'll be there with bells on.
   c. American cars are driven from the left side.

79. President Jefferson

80. 1. crushed stones
     2. wider road
     3. ditches for draining
     4. stone bridges

81. Pennsylvania, Maryland, Ohio, Indiana, Illinois, West Virginia

82. animal paths, footpaths, packhorse trails, military roads, macadam roads

83. iron horse or railroad
ANSWER KEY FOR STUDENT'S ACTIVITY BOOK

"PATHS AND TRAILS"

Equipment for the Trail—p. 6
I = bow, arrow, spear point
O = canteen, watch, cheese, sleeping bag
XX = electric toaster, glass, gas can

Pick a Trail—p. 6
1. fighting
2. hunting
3. hunting
4. visiting or trading
5. trading
6. fighting
7. visiting or trading

Map Work About "Main Indian Paths of Pennsylvania"—p. 4
1. Venango
2. Nemacolin's
3. Pine Creek
4. North
5. West
6. North-South
7. East-West
8. Southeast—Northwest
9. Northeast—Southwest
10. Conestoga
11. Catawba
12. Forbidden

"TRAILS TO FORTS"

Map Work of "French and English Claims to the Ohio Valley"—p. 12
2. Allegheny, Monongahela

"A ROAD IS NEEDED"

Fill the Ax—p. 21

<table>
<thead>
<tr>
<th>Down</th>
<th>Across</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. fort</td>
<td>2. posts</td>
</tr>
<tr>
<td>3. Duquesne</td>
<td>6. urgent</td>
</tr>
<tr>
<td>4. seventeen</td>
<td>7. recruit</td>
</tr>
<tr>
<td>5. jut</td>
<td>8. Cumberland</td>
</tr>
<tr>
<td>7. Redstone</td>
<td>9. route</td>
</tr>
<tr>
<td>9. rut</td>
<td>10. axes</td>
</tr>
<tr>
<td>11. Trent</td>
<td></td>
</tr>
</tbody>
</table>

"ACROSS THE MOUNTAINS"

Fifteen Problems on the Way—p. 24
forest, dust, briars, Indians, heat, mud, ruts, swamp, mountains, trees, rocks, rain, brambles, mosquitoes, stumps

Tired Men—p. 24
broken axles, rough roads, defeated men, heavy cannons, dense forests, dull axes, jutting stumps

Map Work on "Military Roads Across the Allegheny Mountains"—p. 24
2. twice or 2 times
3. Fort Necessity
4. No
5. 110 miles
6. Allegheny and Monongahela

"WIDER TRAILS"

Map Work of "Early Trading Posts"—p. 9
3. From the east—Harrisburg, Carlisle, Shippensburg, Bedford, Ligonier, Pittsburgh

Sequence Cards—p. 10
5, 2, 3 and 6
"THE STURDY CONESTOGA"

Equipment for a Conestoga Wagon—p. 30

Activity 1

A-1 blacksmith whip
A-2 iron rimmed wheels
A-3 homespun cloth
A-4 wooden blocks
B-1 lazyboard
B-2 brake lever
B-3 bells
B-4 bucket
C-1 tar pot
C-2 wooden hoops
C-3 feed box
C-4 jack

Activity 2

A-2
B-4
C-4
C-2
A-3
B-1
C-1
A-1
B-2
A-4

"THE CONESTOGA HORSE"

Find the Secret Word—p. 32

1. merchandise
2. whoa
3. wagoner
4. strength
5. six
6. Lancaster
7. lead horse
8. gee
9. haw
10. Conestoga

"THE CONESTOGA WAGONER"

Some Jobs Are Still the Same—p. 35

motel
tires
driver
eengine
brakes

gasoline and oil
steering wheel
seat
jack
bridge

Which Does Not Belong—p. 33

1. taverns
2. lazyboard
3. trout
4. bedroll
5. saddle
6. bells
7. jack
8. reins
9. tongue
10. harness

Even a Wagoner Needed to Know How to do 'Rithmetic—p. 39

Hard
1. no
2. 300 miles
3. not really
4. 2 feet
5. 160 yards

Harder
1. $1450
2. 17
3. 16 days
4. depends on car's length
5. depends on student's height

Hardest
1. 91 sq. ft.
2. between 145 months or 12 years to 181 months or 15 years
3. $2.58
4. $26.42

"FIRST NATIONAL ROAD"

Pike Problems—p. 43

1. 6 ears
2. 270 passengers
3. $164
4. $365 provided he worked all year
5. $221
6. stage coach
7. 12.9 or almost 13 miles per year

Map Work on the National Road—p. 45

1. 260 miles
2. Washington, Pennsylvania
3. 812 miles

What Might a Traveler See—p. 45

Conestogas, ditches, horses, wagoner, milepost, mail, sheep, pike boys, caravan, bridge, tavern, hogs, coach, mule, pass, cattle


