Muncie History

A Handbook for Fourth Grade Teachers About Muncie History
Muncie residents have played important roles in the history of the state. Noteworthy people lived and worked in our community, and significant events occurred here. Unless we learn these stories and pass down our history, residents will lose something they should claim with pride. Muncie residents can be proud of who they are and how far the community has come.

Heritage Education helps connect people to a community and creates a sense of place which is a critical component of the quality of life and community development.

The Heritage Education Project is a ten-year endeavor by the Muncie Public Library and the Center for Historic Preservation, Department of Architecture, at Ball State University to raise the levels of awareness and perception about our history and built environment. One of the most fundamental ways to raise awareness and interest is to engage our children in the past around them. We have therefore over the past three years, in partnership with the Ball State Teacher’s College, Burris Laboratory School, and Minnetrista developed a curriculum unit for fourth grade students in Muncie on local heritage.

This handbook can serve both as a curriculum unit and as a guide to Muncie history for teachers at the fourth grade level. The book is divided into seven time periods, and each period introduces children to multiple aspects of people’s lives: events, businesses, buildings, transportation, fashion, music and entertainment. There are vocabulary words and hands-on educational activities suggested to make each period come alive. The activities can meet the Indiana State Standards for fourth grade education, and many of the activities can be used to teach multiple subjects, such as Indiana history/social studies, language arts, and mathematics.

It is our hope that Muncie teachers will use the handbook as a source for information and curriculum ideas for using local heritage in all the subjects they teach.

We also hope that the handbook will be of interest to older students and their teachers in finding local illustrations of trends and events in American history and to the families of the fourth graders who learn about Muncie heritage through the curriculum unit.

The project was supported and funded by The Muncie Public Library, The Community Foundation of Delaware County, Inc., and the Building Better Communities Fund of Ball State University.

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Acknowledgments

This handbook is based in part on a manuscript about Delaware County history prepared in the early 1990s by a Delaware County History Text Committee to provide a resource on local history for schools in Delaware County. The manuscript was prepared by local historian Wiley Spurgeon and local teacher James Greiner.¹

In the fall of 2003, the Muncie Public Library and Graduate Program in Historic Preservation at Ball State began to prepare for developing further a curriculum in heritage education for fourth graders at Burris Laboratory School. It was decided to use the Delaware County manuscript as a starting point, focus on the history of Muncie, develop seven time periods, and to emphasize a range of topics of interest to children in each period: events, businesses, buildings, transportation, fashion, and music and entertainment. Holly Beach Ravesloot, Michael Galbraith, and Matthew Farragher, graduate assistants for the heritage education project, have researched and written the handbook and made revisions and expansions over the past two years.

In the spring of 2005, a handbook review committee made up of Hurley Goodall, Rebecca Holmquist, Ruth Swetnam, Nancy Turner, and Karen Vincent reviewed the draft handbook and made many valuable editorial comments and suggestions for improvement, and we are grateful for all of their assistance. Thanks are also due to Susan Smith, Dick Cole, and Diane Barts of Minnetrista for their many helpful corrections and suggestions.

Jim Glass, Virginia Nilles, and Susan Lankford have reviewed the revisions and supervised the work of the graduate assistants as the handbook has taken shape.

¹ The Delaware County History Text Committee members were as follows: John Wean, Chair; Hurley Goodall, Joy Grady, Thomas A. Sargent, Patricia Schaefer, Ruth Swetnam, and Nancy Turner. An advisory board for the project included the following persons: Nick Clark, Director, Minnetrista Cultural Center; Terry Conner, Teacher at South View Elementary School; Larry Cooper; Mayor David Dominick; Hurley Goodall; Joy Grady, Teacher, West View Elementary; James Greiner, Teacher at Morrison-Mock Elementary; Jeff Harris, Director, Delaware County Historical Alliance; Marcia Johnson, Teacher, Garfield Elementary School; Kevin Kyle, Principal of Royerton Elementary School; Co-chair Helen Marsh, former Muncie Community Schools administrator; Thomas A. Sargent; Patricia Schaefer, former director of Muncie Public Library; M. Kay Stickle, Professor of Elementary Education at Ball State; Ruth Swetnam, Director of Curriculum, Muncie Community Schools; Sue Templin, Teacher, Garfield Elementary School; Geri Tetrick, Teacher at Daleville Elementary School; Nancy Turner, Archives and Special Collections at Bracken Library; Co-chair, John Wean, former assistant superintendent of Muncie Community Schools; and Rick Kaufman, Teacher.
We welcome comments from readers on errors and omissions in the handbook. We want to improve it as it is used and tested in the classroom. Please feel free to contact Virginia Nilles with your comments at the Maring-Hunt Library, 2005 S. High Street, Muncie, IN 47302.
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Indiana Department of Education Fourth Grade Curriculum Standards 103–135
Chapter 1
Settlement - 1865

The Beginning of Munseetown and Delaware County
**Muncie History: Settlement to 1865**

**Events:**

The Revolutionary War ended in 1783, and the **Treaty of Paris** was signed, bringing peace between the British and the new American nation. The **Northwest Ordinance** was passed by Congress in 1787. This Ordinance allowed for the land gained under the Treaty of Paris, which included all of Indiana, to be surveyed and opened to settlement. Slavery was not permitted in the Northwest Territory, and settlers had to respect existing Native American claims to the land. This Native American possession was, however, subject to negotiation, treaty, or payment. In 1795 the United States began negotiating treaties with Native American nations to make land available for citizens. White settlers rushed into the fertile new lands, some of which still belonged to the Native American tribes. This caused the Miami and Delaware tribes living in Indiana to attack. After early success, Little Turtle, chief of the powerful Miami tribe, and Buckongahelas, chief of the Delaware, were defeated in battle, and the **Treaty of Greenville** in 1795 opened up southeast Indiana for settlement. Native American leaders were forced to sign these treaties, though many tribal members were reluctant to give up their land. In 1811 **Tecumseh**, a Shawnee Chief, led a confederation of Indians opposed to further white settlement in a battle against William Henry Harrison, governor of the Indiana Territory. This battle, the Battle of Tippecanoe, was at the Indian village of Prophet’s Town (named after Tecumseh’s brother) near present day Lafayette, IN. The Indians were defeated. The defeat set the stage for the 1818, **Treaty of St. Mary’s**. Under this treaty the federal government purchased most of the Indian land south of the Wabash River. The Delaware Indians gave up their land and were forced to leave Indiana and move westward. In 1820 Delaware County was opened for settlement.

![Figure 1. The Hackley Reserve from an 1821 Survey](https://example.com)

On January 26, 1827, Delaware County was organized with roughly 1000 residents. After the county was organized, the village of **Munseetown** (later Muncie) was named county seat.

In the following decades, Muncie grew as a village. By 1860 the population was more than 1,782. Despite the 1851 Indiana Constitution that greatly limited the rights of African Americans, there were 16 African Americans living in Muncie in 1860. Neighborhoods started to develop as the town grew. In 1865 **Muncie** was incorporated as a city, with John Brady as the first mayor.
The sectional conflict that had simmered for decades between the agrarian, slave-holding South and the industrial, non-slave owning North erupted into the Civil War in 1861. The larger, more populous North deprived the South of supplies by blockading their ports and eventually triumphed on the battlefield. The *Emancipation Proclamation* of 1863 freed the slaves of the South. The war touched all aspects of America. Almost one in seven men in America fought in the armies. Indiana contributed many soldiers for the Northern cause and people in Muncie strongly opposed slavery.

**People**

Native Americans played an important role in the early settlement of Muncie. The Delaware, also known as the Leni Lenape, were prominent in East Central Indiana after being pushed out of the East and through Ohio. The Delaware tribes settled along the White River, called “Wapahani.” One of the significant villages along the river was named Buckongahela's Town or “Woapicamikunk.” This was the village of the Munsee or “Wolf” clan of the Delaware. The modern Minnetrista campus is located at the same site.

An early tract of land mapped out in Delaware County was the **Hackley Reserve**, owned by **Rebecca Hackley**. She was the daughter of William Wells, an Indian agent known as the “White Indian,” and granddaughter of Miami Chief Little Turtle. The Hackley Reserve was 672 acres located in the bend of the White River. In modern Muncie, its boundaries are Hackley and Reserve Streets, Centennial Avenue, and a line midway between Main and Washington Streets. Hackley probably did not live on this plot.
Hackley sold her plot of land to trader Goldsmith Coffeen Gilbert, reputed to be the first permanent white settler in the area. Gilbert was born in New York in 1795; he moved to Delaware County in 1823 and established a trading post in the northern part of the county. A group of Indians burned his trading post, and the federal government gave him $960 as payment for the damages. In 1825 he used the money to buy the Hackley Reserve. Gilbert constructed two log cabins in the southern part of the reserve—one was used for his trading post and the other was his residence. He donated the rest of the land to the county to be sold, and with the funds raised, the village constructed a new courthouse.

With the establishment of the county seat, more people moved to the area, including professionals like doctors and lawyers. Some of the doctors who moved to the area were Dickinson Burt in 1829, who was also the postmaster, and Levi Marshall. David Gharkey started the first newspaper. In 1831, Dr. Samuel P. Anthony started his practice. Not only did he practice medicine, but he also played an active role in the business life in Muncie. The first permanent African American residents, Edward and Maria Scott, arrived in 1845.

During the Civil War, Indiana supplied many troops, both white and African American, for the Northern cause. Eighty African Americans from Indiana served in the 54th Massachusetts, the first “colored” Regiment and the subject of the movie “Glory”. One of the volunteers from Muncie was Enoch Fletcher. He was an African American soldier who served in Company F, 12th Regiment U.S. Colored Heavy Artillery. He is one of the few early African American settlers who are buried in the Beech Grove Cemetery, along with other early settlers like Goldsmith Gilbert.

Businesses

In 1833, the Indiana Gazetteer reported that “Muncietown is a post town and the seat of justice of Delaware County…It contains 300 inhabitants, three mercantile stores, a saw mill, and the state road from the Ohio State line passes through this place.” As the county seat of Delaware County, Muncie became the leading commercial center for the county. In 1837, Muncie began its growth period, with the addition of a post office, a printing shop, four physicians, six mercantile shops, three taverns, three groceries, and a variety of other small shops and services that were essential for a growing town.

As an early settler, Goldsmith Gilbert played a key role in this process; he constructed the first gristmill in Muncie, milling grain to make bread. He also built a distillery and a woolen mill. These were the main manufacturing interests of Muncie for several years.
Delaware County also had seven newspapers that circulated throughout the settlement time period: the Muncietonian, Muncie Journal, Indiana Signal, Delaware County Democrat, Muncietown Yeoman, Muncietown Telegraph, and the Village Herald.

**Buildings**

Since Muncie was the county seat, public buildings played an important role in the town. The first two public buildings constructed were the county Courthouse and a jail, both built in 1832. The Courthouse was a wooden frame building made of poplar. A fireplace heated the rooms. The jail was located next to the courthouse; it was divided into two sections, one part was the sheriff’s residence and the other was for criminals. This was a two-story structure constructed of hewn logs, faced with brick.

During this period other significant new structures included homes. An example of such a residence was the home of Dr. Samuel P. Anthony, constructed in 1843. It was a two-story frame house with clapboard siding. The house was used as a home and an office, which was common for settlement areas. Another residence was the Kirby house, built in the Federal Style by Thomas Kirby during the 1830s. This two-story brick residence located on East Jackson Street is perhaps the oldest remaining house in Muncie.

Other buildings built in this period included many churches. One of the first religious organizations in Muncie was the Baptist Church (1859).
The Christian First Lights Church at 600 W. Jackson Street, built in 1863 and currently known as the St. Peter’s Rock Church of God in Christ, is a wonderful example of early churches built in Muncie. It has its original stained glass and appears to be modeled after Greek or Roman temples even though it uses pointed arches more prominent in Gothic Revival.

A school was built on the outskirts of the town of Muncie in 1840. During the 1840s, Muncie constructed the Beech Grove Cemetery on what is now Kilgore Avenue.

Transportation
Delaware County grew slowly at first due to lack of roads, but this changed as roads were built in the 1830s and 1840s. In the early 1850s the first turnpike opened linking Muncie to Cambridge City. A second major impact on the growth of Muncie came from the railroad, starting in 1852. The Indianapolis and Bellefontaine Railroad connected local agricultural products with markets in the South, and the population of Delaware County soon doubled. Small towns started to pop up all over the county along the rail line. With the railroad, the town’s connections to the outside world improved dramatically. Passengers could quickly travel to other cities and towns, and Muncie’s goods could be shipped more quickly as well. The mail could be delivered overnight instead of taking weeks. In 1852, the first telegraph came to town, enabling Muncie residents to receive and send messages in a few minutes. The railroad had a huge influence on Muncie; the town soon became the major trading center for the county. By 1854, Muncietown was incorporated as a town and became Muncie.

Fashion
Ordinary people didn't have the large wardrobes we expect today. They made do with one outfit for everyday, one for Sunday best, and perhaps one other for seasonal change. Even wealthy people didn't necessarily have lots of clothes, although their money allowed them to purchase ready-made items.

Figure 8. St. Peter’s Rock, Church of God
(Matt Farragher, 2005)

Figure 9. Men’s Waistcoat worn about 1835-1850
(www. Historyinthemaking.org)
from the storekeeper, or to hire custom sewing done outside the household, or by a temporary live-in seamstress.

There was a great variety of fabrics available for making clothes in the 1830s. Wool and linen were most common, with cotton and silk scarce and more expensive. Early colors were made from plants and minerals: leaves, stems and blossoms of flowers; roots, barks, nuts and other parts of trees; berries and fruits; mosses, lichens, and fungi as well as animals, such as insects and shellfish.

For men, everyday clothing consisted of a linen pullover shirt, made with full sleeves, deep-buttoned cuffs, a generous collar, and very long tails to tuck into trousers.

Shoes were leather boots of various heights for every day use, and slipper-like dancing shoes for more formal occasions. Stockings were usually hand knit of wool or linen, but machine-knit fine stockings were also available from New England mills through local merchants.

Women wore full or ankle length dresses of wool, silk or cotton. Day dresses were apt to be made in a serviceable dark color—especially winter garments. Laundering clothing was difficult and not done very often; it was a full day’s job to wash your clothing. Aprons were always worn to protect the skirt during work, though often simple there were also fancier options depending on the occasion. The aprons were usually linen, though some were made from sturdy fabrics like denim. Fancy dresses usually opened down the back, and were also closed with hooks and eyes.

Under these garments women wore shifts, or chemises, of linen or cotton. They were simply made, with short sleeves and necklines that could be gathered up on a drawstring. There was no waistline, but the shift was gathered by the dress worn over it. Over the shift a woman wore corsets. These were constructed of heavy cotton, and were

![Figure 10. Men’s Frockcoat worn about 1835-1850](www.Historyinthemaking.org)

![Figure 11. Women’s day dress and mantle fashionable in about 1860](Kay Gnagey)
seamed and boned with whalebone to achieve the desired shape. The construction of dresses was planned with corsets in mind. Every woman was expected to wear a corset, summer and winter.

Farmers’ wives and daughters often wore a simple work boot when they needed shoes. More fashionable city women wore lightweight kid leather slippers, black for every day, but pastel colored to match their party frocks. Some of the shoes had ribbon ties. During this period, the heels were very low. Just like their male equivalent women's stockings were knit of wool, cotton and linen. Thinner and finer gauges of the yarn were more expensive and dressier. Sometimes the stockings were decorated with knit designs along the sides, either in colored threads, or as a pattern stitch. The hose were about knee high, and were either black or white.

**Entertainment**

During this time period people had to entertain themselves. Card games were popular among adults. Three popular card games during this time were *whist*, *euchre*, and *piquet*. Whist was a fifty-two-card game that centered on capturing tricks; it is similar to today’s bridge. The French introduced euchre, a thirty-two-card game played with four people, two on each team. Piquet, another game introduced by the French, is similar to euchre and was usually played for fun, although it sometimes involved gambling.

Adults also entertained themselves by reading. Books published during this era were *Sense and Sensibility* (1811), *Pride and Prejudice* (1813), and *Emma* (1815) by Jane Austen; *Shadows on the Rock* (1831) by Willa Cather; and *Moby Dick* (1851) by Herman Melville. *Harper's Weekly* was a national magazine published along with the Muncie newspapers.

Children tended to play tag, hide-and-seek, and hopscotch during the warmer months. They also played games such as pick-up-sticks and word games. Other ways children entertained themselves were with puzzles, games, and spinning tops. Most toys were homemade, although occasionally special toys were ordered from a store.

Another form of entertainment for the whole family was music. People during this time sang popular patriotic tunes such as “Hail Columbia,” “The Star Spangled Banner,” and “Yankee Doodle.” Because church was such a central place in the lives of the people the songs sang there were also popular with the family at home.
Vocabulary

**Beech Grove Cemetery** – The first public cemetery for whites in Muncie, laid out in the 1840’s.

**Buckongahelas** – Chief of the Delaware Tribe during the settlement of Indiana.

**Clapboard siding** – The wood boards that cover the outer walls of many houses.

**Corset** – A heavy cotton undergarment, often with hard whalebone inserts, which laced up and was used to “shape” a woman’s figure, creating a smaller waistline.

**Delaware Tribe** – One of the predominant Native American tribes living in Indiana at the beginning of the 1800s. The Delaware and the Miami joined forces to try to stop settlers from claiming land after the passage of the Northwest Ordinance.

**Emancipation Proclamation** – This ruling officially freed the slaves of the South during the Civil War.

**Enoch Fletcher** – An African American soldier from Muncie who served in the Civil War.

**Euchre** – A thirty-two card game played with four people, introduced by the French and still played today.

**Federal Style** – A style popular in the Eastern United States between about 1790 and 1860. Characteristics in Muncie included a symmetrical arrangement of windows on the façade on either side of a central entrance and a gable or hipped roof.

**Gilbert, Goldsmith Coffeen** – The first permanent white settler in the Muncie area, Gilbert purchased the Hackley Reserve and built a trading post. He also donated much of the reserve to the county.

**Gothic Revival Style** – A popular architectural style in the United States and Europe from the 18th to the 20th century that imitated early Gothic designs such as pointed arches, decorative spires and stone buildings. Particularly popular for churches and universities.

**Gristmill** – A mill that grinds grains such as wheat and corn into flour, animal feed corn, or meal.

**Hackley, Rebecca** – The daughter of William Wells, an Indian agent. Rebecca owned the Hackley Reserve.

**Hackley Reserve** – A 672-acre parcel of land purchased in 1826 that became the center of present day Muncie.

**Kirby House** – Built in the 1830s by Thomas Kirby, this is possibly the oldest remaining house in Muncie.

**Mercantile stores** – A general store that sold food items, fabric, tools, and other items.

**Muncie** – In 1865, Munseetown officially became Muncie, and was incorporated as a city.

**Munseetown** – The county seat of Delaware County, officially organized in 1827 with a population of approximately 1000 residents.
Northwest Ordinance – An agreement passed by the new U.S. Congress in 1787 establishing a system of government in the Northwest Territory.

Piquet – A 15th century French card game played between two people. Using 36 cards to play. The object is to try to outscore your opponent by acquiring three card sequences.

Ready-made – Clothing not made at home, but purchased.

Shifts – Plain slips that went under women’s dresses. Also called a “chemise.”

Tecumseh – Chief of the Shawnee that led the Battle of Tippecanoe against William Henry Harrison, governor of the Indiana Territory, in 1811.

Telegraph – A quick communication system where messages were sent by a series of dots and dashes.

Treaty of Greenville – The agreement that ended the battles between settlers and the Delaware tribes. This allowed for the settlement of Southeast Indiana.

Treaty of Paris – An agreement between the British and the newly formed United States that ended the Revolutionary War in 1783.

Treaty of St. Mary’s – An agreement made in 1818 that allowed the government to purchase most of the Indian land south of the Wabash River.

Whist – An English card game particularly popular during the 18th and 19th century where two teams of two face off with one another. The goal is to try and score tricks, or to have the highest card of a certain suit (Hearts, Diamonds, Spades and Clubs).

Woolen mill – A mill that turns raw wool into fabric or yarn.

Activities

The Indiana State Standards that apply are noted at the end of each activity.

1. Have the students create a diorama of what Delaware County might have looked like when the first settlers arrived here over 200 years ago. Use magazine pictures of animals found in the region. Paint or color the White or Mississinewa Rivers inside the diorama. Include plenty of trees.

   Indiana Standards: Social Studies 4-1-3, 4-1-6

2. Have students pretend they are keeping a diary of their migration into the area now known as Delaware County. Have them record their thoughts about the land and its surroundings. Have them write a journal entry with a date of nearly 200 years ago. Tell them to be creative and use descriptive words.

   Indiana Standards: Social Studies 4-1-6, 4-5-6; English 4-5-1, 4-5-3

3. Chart the weather for the spring together with the class. Record the temperature changes on a graph. Notice drastic changes in the weather. How would early settlers deal with these changes? What would they have to do to adapt?

   Indiana Standards: Social Studies 4-1-3,
4. Challenge the students to locate as many French-named places in Indiana as they can. Then ask the students how many Native American named places they can come up with. Reward the students who come up with the most places. (Use an atlas or state map to find relevant names.)

Indiana Standards: Social Studies 4-1-6, 4-3-4

5. Have students pretend they were soldiers sent to the Northwest Territory to make it "safe" for the settlers. Have them write letters home about a battle they participated in where the Indians were defeated. Tell how they felt about the battle. How do they feel about the treatment of the Indians and their removal? You can also turn this around and have the students imagine that they are Native Americans in the area. What do they think of the new settlers coming into their area?

Indiana Standards: Social Studies 4-1-1, 4-1-2, 4-5-6; English 4-5-1, 4-5-3

6. Take a trip to Beech Grove Cemetery. Visit the oldest section, which includes the graves of Goldsmith Gilbert, Minus Turner, Enoch Fletcher, and other early pioneers in Delaware County history. The cemetery staff is very helpful and will assist you in your field trip. Using chalk, make rubbings from these early graves. Have students write historical fiction essays about the life and death of their person, keeping in mind what kinds of things might have contributed to their individual's death, including diseases, farm accidents, horse and carriage accidents, etc., not machine guns or plane crashes! Attach the stories to their rubbings and display in the classroom or hallway.

Indiana Standards: Social Studies 4-1-6, 4-1-7, 4-1-15, 4-5-6; English 4-5-1

7. Have the students further research the plight of the Indiana Native-Americans being moved out of the area to make room for more white settlers. Possible ways to expand on these activities include:
- Journal entries
- Map activities where the students can examine where the natives were settled before, during and after the settlements of the white man.
- Discuss the different Native American groups around Indiana, especially Delaware County.

Indiana Standards: Social Studies 4-1-1, 4-1-2, 4-1-5, 4-3-9, 4-5-6; English 4-5-1, 4-5-3

8. Venture to the History and Genealogy Center of the Muncie Public Library to find information on "Indian" Jim Musco and share some of the interesting tales with the students. Have students read sections of these books to their classmates and/or have students summarize the writing.*
- What did the people think of Jim?
- How did he adjust to living with the white settlers?
- What sort of impact did he have on Muncie and Delaware County?

Indiana Standards: Social Studies 4-1-5, 4-1-15, 4-5-6; English 4-1-1, 4-3-2, 4-5-2, 4-5-4
9. Have students research and write short biographies on some of the important individuals in the settlement period of Indiana, Muncie or Delaware County and present their findings to the class.

Indiana Standards: Social Studies 4-1-3, 4-1-6; English 4-5-3

10. Since this chapter covers such a long period of time, have the students construct a timeline of events in the area. Pay special attention to those events from Delaware County and those impacting the area. This would also be a good project to repeat in other chapters. You could use one per chapter or create a large collective timeline for major events throughout Indiana’s history.

Indiana Standards: Social Studies 4-1-13

11. Visit Minnetrista and use some of the many resources available there related to Muncie in the settlement period including school tours, exhibits, and artifacts. The Local History and Genealogy Center at the Muncie Public Library also has valuable resources for local history information.

* Some of the books containing tales of Jim Musco include *Jim Musco* by D. Hamilton and *The Lewis and Mary Rees Family of Delaware County, Indiana* by E. McVickers. Available at the Local History and Genealogy Center.
Notes:
Chapter 2
1865 - 1887

The Growth and Development of the City
Muncie History 1865-1887

Events

The Civil War ended in 1865, the same year that Muncie became a city. Also in 1865, voters elected the first mayor and city council. To house these officials, the city constructed a city hall in the 1870s. The original City Hall also housed the fire department, the marshal’s office (police), and the public library. The building served the city until the 1920s.

During this time coal was discovered in southern Indiana and proved to be an efficient fuel source. In 1876 a geologist began drilling for coal in Delaware County. During a dig in Eaton, a small town north of Muncie, the geologist discovered a bizarre gas emerging from the ground. He was upset because the substance wasn’t coal. The hole was plugged quickly. Ten years later natural gas was re-discovered in Eaton, which set off the natural gas boom in East-Central Indiana.

Figure 13. Boyce Block about 2000 (Muncie Walking Tour Brochure, Downtown Muncie.)

As new inventions became popular in America, Muncie also experimented with innovations. On December 19, 1885, the Boyce Block (building) and H. Klein’s jewelry store were illuminated by electricity. Muncie was one of the first cities in Indiana to have an electric generating plant.

In response to repeated fires, Muncie built its first water works, completed in July 1885. A permanent fire department was formed with a crew of 10 full-time paid members, and several volunteers. In the 1880s, Muncie boasted one of the first telephone systems in the state.

As the city continued to grow, sanitation problems increased, resulting in diseases. For many years, sewage was dumped directly into the White River, and not much was done to monitor drinking water supplies to make sure they were safe. Farms with chickens, cows, hogs and horses surrounded Muncie, and the run-off waste from farms polluted streams in Muncie and throughout Delaware County.

People

Politics became more important in Muncie during this time period. John Brady was elected the first mayor and won by a landslide. During the second election Brady defeated Job Swain by a narrow margin of 177 to 130. Other mayors during this period were William F. Jones (1877-1879, 1881-1883), Charles W. Kilgore (1879-1881), and Frank Ellis (1883-1891).

Muncie’s African-American political strength was growing as well. Influential abolitionist pioneer Frederick Douglass came to Muncie in 1880. So many people came to hear him speak that the organizers, an African-American political club, The Garfield and Porter Club, had to find a bigger space for the lecture. The first African-American sat on a Muncie jury in 1876, and the first African-American graduated from Muncie High School in 1880.

One of the most influential people during this period was James A. Boyce. He was the leading local entrepreneur during the period following the Civil War. Boyce organized two companies in Muncie, a bag-making company and a farm handle factory. His firm was the largest employer in Muncie with over 100 employees. As an advocate
for improving Muncie, Boyce played a role in pushing for gas works, municipal sewers, and electricity. He built two office buildings downtown.

**Businesses**

At the end of this period, more factories began to locate in Muncie, but much of its economy was still based on agriculture and manufacturing. Manufacturers focused on the home or farm and produced washboards, farm tools, furniture, wagons, and buggies. Wood and coal were the major fuels for factories. Other businesses in the downtown area were banks, dry good stores, groceries, markets, and blacksmith shops. Many African-Americans were barbers. One of the first wholesale grocery firms in Muncie was Joseph A. Goddard’s store, located at Walnut and Adams. The first phase of this building was constructed in 1886. This phase only included the ground level, and later a second story was added. The Kirby House Hotel was one of the first hotels in the area, and provided a place for visiting businessmen to stay. Throughout the city were commercial stables, which were like modern day parking garages for horses.

**Buildings**

Buildings constructed in the area included residences, schools, churches and commercial buildings, all located in what is now the downtown area. Popular styles for houses at this time were Italianate and Carpenter Cottage. The **Italianate style** (1860-1880) was one of the most popular styles of the 19th century. It featured a projecting cornice along the edge of the roof, supported by ornamental brackets.
Most often Italianate houses had **hipped roofs** with shallow pitches. Windows were often grouped together in pairs or threes. An existing example of the Italianate style is the **Eiler House** at 403 W. Charles Street that was built by lawyer John C. Eiler in 1876. Eiler had an insurance office and was the president of Muncie Savings and Loan Company. He also began the *Sunday Morning Times*, serving as editor and publisher and was appointed postmaster of Muncie.

Houses built in the **Carpenter Cottage style** (1865-1910) tended to be smaller, with only one or one and a half stories. Such cottages were usually wood frame structures with compact plans and moderate use of decorative trim. Typically, a carpenter or builder constructed these homes using standard plans from pattern books. These homes often had L- or T-shaped floor plans. A surviving example of this style is the Young-Willard House at 123 E. Charles Street.

**Transportation**

People tended to travel by horse, horse and buggy or wagon during this time period. The police department had a “**paddy wagon**” that they used to carry law-breaking citizens. Usually travel from Muncie to other cities was aboard **steam railroad trains**.

Road conditions during this time period were poor, they were not paved and were merely dirt. The dirt roads were difficult to travel in buggies and wagons after rain when they became muddy. The roads were also troublesome when dry, because dust from the road would rise and make travel hard, whether by buggy or on foot. After the Muncie water works was constructed, the fire department would dampen the streets during the dry season to minimize dust in the air. Another solution to this problem was building **toll roads** of gravel, which were regularly maintained, though travelers had to pay a toll or fee to use them.

*Figure 18. Paving dirt streets with brick in an undated photograph (Historic Muncie Inc.)*

The Young family, which owned a lumberyard, built the house from 1876-1879 and lived in it until 1886. This small two-story carpenter cottage has a gabled roof and wood siding. The reconstructed front porch features simple posts and intricate Italianate wood lace.
Fashion

Businessmen and clerks wore trousers and a jacket with a shirt and tie. There were slight variations in what they would wear depending on if it were formal or everyday attire. The style tended to focus on fitted clothes. Black was usually only for formal wear. Lighter colors and materials were worn in the summer. Typically material of men’s clothing was woolen cloth with a smooth dress surface. Ties were important to men’s attire. Working men who were employed in factories wore denim pants and denim colored shirts.

For women, dress fashions followed what was happening in London and Paris. Better communications by mail, telegraph, and trains enabled women in Muncie to see the new dresses.

By 1867 a dress with the fabric bunched up to the back of the skirt became fashionable. Trains were very heavily ornamented with frills, pleats, ruffles, braids, and fringing. The newly invented sewing machine simplified sewing.

In the 1870’s, the new bustle dress had a different look. It had minimal drapery compared to the former and a slimmer more fitted severely tailored bodice, with a much flatter front. What drapery there was, was tidily arranged at the front of the dress as a small apron.

Entertainment

As the population continued to increase, the city began providing places of entertainment. Beginning in 1852, the Delaware County Fair was held each summer in Muncie. Not only did the fair act as a social event, but it was a place for commerce. Local farmers used the fair to showcase their livestock. The circus also visited Muncie regularly during this time period. People in the vicinity began forming clubs like the Literary Fireside Club. This was a book club where adults got together to discuss books. People formed clubs that considered politics, such as the Garfield and Porter Club, which was for African-Americans, or fraternal lodges like the Odd Fellows or Masons. Muncie had a skating rink that entertained the young, and skating became a common church activity. Churches grew as major gathering places for locals who would worship and sing there. The first African-American church was founded in 1868. Theatrical productions were held as another form of entertainment. This was also the beginning of a sports-as-entertainment era. An African-American semi-professional baseball team began playing in 1884.

Reading was a popular form of entertainment. Publications during this period included: Alice’s Adventures in Wonderland by Lewis Carroll published in 1865, Little Women by Louisa May Alcott published in 1868, The Adventures of Tom Sawyer by Mark Twain (1876), Anna Karenina by Leo Tolstoy (1877), and The Adventures of Huckleberry Finn by Mark Twain (1884). A major newspaper, The Washington Post, began publication in 1877.

Popular songs during this time consisted of: “The Little Old Log Cabin in the Lane” by William Shakespeare Hays (1871), “Silver Threads Among the Gold”

City Hall – A building used to provide offices for city officials, such as the Mayor. Muncie’s first City Hall was built in 1876 and also housed the police station, fire department and library.

Commercial stables – Parking garages for horses, so one could conduct business while in town.

Douglass, Frederick – One of the leading abolitionists (or person in favor of rights for African-Americans) of the day, he visited Muncie in 1880.

Dry good stores – A store that sold food products, fabric, tools, etc.

Eiler House – Built in 1876 by lawyer John Eiler, this is an example of Italianate style.

Hipped roofs – A roofing style where the roof projects upward from all walls of the building to meet at a hipped rafter.

Italianate style – An ornate style of homes featuring wooden trim work, windows grouped in twos or threes, usually two stories.

Kirby House Hotel – One of the first hotels in Muncie.

Landslide – Term used when someone wins an election by a very large margin of votes.

Literary Fireside Club – A Muncie club that would discuss books.

Natural gas – Fossil fuel found in abundance near Muncie 1876.
Muncie History 1865-1887

Paddy wagon – Police wagon drawn by horses.

Residences – Buildings used as homes.

Steam railroad trains – Railroad trains pulled by steam powered engines.

Toll roads – Roads built by individuals or government requiring a fee to use them.

Activities

The Indiana State Standards that apply are noted at the end of each activity.

1. Have the students compare the Delaware County maps from the settlement period and more recent 20th and 21st century maps*. How are they different? Lead students in a discussion about differences and why they may have occurred. Possible topics could be:
   - How have the construction/location of roads affected settlement?
   - Why the shift or growth of populations in certain areas?
   - What sort of geographic barriers have there been to development? How has geography shaped our county?
   - How have the waterways been influential in development?
   - How have advances in transportation affected the development of our county?

   Indiana Standards: Social Studies 4-1-9, 4-1-11, 4-3-4, 4-3-8, 4-3-9, 4-3-10, 4-5-6

2. What similarities/differences are there between the main characters in Adventures of Tom Sawyer and characters of Bears of Blue River? How are the students’ lives similar/different from those characters?

   Indiana Standards: English 4-5-2

3. Mr. Enoch Fletcher was a part of “The Colored Brigades” during the American Civil War. Have the students watch some of the acceptable excerpts from the motion picture Glory to see what the experience of the African-American soldier was like during this war. The students can also look for more information on this branch of the armies during the Civil War. How was their experience different from their white counterparts? How did they impact the war? Have students compile this information into short reports to share with the class.

   Indiana Standards: Social Studies 4-1-8, 4-5-3, 4-5-6; English 4-4-1, 4-4-3, 4-5-3

4. There were more and more social organizations being formed in the Muncie area during this time period. Contact some of these groups that are still active today, such as the Masons and Knights of Pythias, and find out what the groups do for the community and what their clubs are all about. Another way to expand on this project would be to look through old city directories at the Ball State University Archives, Minnetrista or the Muncie Genealogy Center and compare what groups you find listed with those that are currently active.
Muncie History 1865-1887

Indiana Standards: Social Studies 4-1-11, 4-1-15, 4-5-1, 4-5-2

* For more resources contact or visit the Muncie Public Library, Minnetrista or the Geospatial Center and Map Collection at Ball State University’s Bracken Library.
Muncie History 1865-1887

Notes:
Chapter 3
1887 - 1901

The Gas Boom
Events

In 1886 residents of Muncie discovered that Delaware County was part of the Trenton Natural Gas field that spanned across northwest Ohio and East-Central Indiana. The discovery of natural gas made it possible for the city to attract manufacturers that needed high temperature furnaces and inexpensive fuel. The businessmen and promoters of the city believed that the supply of natural gas would last forever. They built pipelines to bring the gas into towns and cities, and shipped it as far away as Indianapolis, Fort Wayne, and Chicago. Industries like glass-making and steel-making use very high temperatures to make their products, and the abundant supply of natural gas helped them to lower their manufacturing costs. Glass and steel factories came to town and with these industries came the need for a larger and more skilled work force. Between 1887 and 1900, Muncie’s population increased rapidly from about 5,500 in 1886, to 11,345 in 1890 to nearly 27,000 in 1900. African Americans came to Muncie in large numbers in the late 1800s as well, with an increase from 48 in 1870 to 739 in 1900. The **Ball Brothers Glass Manufacturing Company** of Buffalo, New York decided to take advantage of the natural gas and built a glass jar and **zinc cap** plant in Muncie. The Ball Brothers Company made glass fruit jars, and became the largest producer of fruit jars in the world by 1900. The company also had an enormous local impact with the employment of hundreds of people in the area. Other factories were built to make window glass, bricks, strawboard, paper, nails, iron and steel bars, and corn planters. As Muncie doubled in population, the business district expanded rapidly, and many new working class, middle class, and well-to-do neighborhoods developed. Many of the buildings we see downtown and in the oldest neighborhoods of Muncie are from this time.

![Figure 21. The Ball Brothers (Minnetrista Heritage Collection)](image1)

The **Panic of 1893**, a nationwide economic depression, caused factories to close temporarily and many people lost their jobs. By 1895, the Gas Boom and new industries helped the local economy to recover. Waste and overuse, however,
exhausted the supply of natural gas and by 1901 the Gas Boom was over.

Muncie entered the 20th Century with three daily newspapers, streetcars and interurbans, streetlights, fire and police departments, a few paved streets, and even some five-story buildings. The first African-American fireman was hired by 1896 and the first African-American policeman by 1899. Delaware County had several schools and churches, and many people were active in lodges or social organizations. A new courthouse was built in the 1880s and served the county for more than eighty years.

With the increase in job opportunities in Muncie, more and more people with varying ethnic backgrounds moved to the city. In the 1900 census, 739 African-Americans were reported living in the city. In the period just before the Gas Boom, from 1882-1886, 24 immigrants took the U.S. citizenship oath in Muncie. More than half (16 of 24) were from England, Ireland, or Germany. During a similar period in the middle of the Gas Boom, 1892-1896, the number taking the citizenship oath at Muncie had increased to 206. These immigrants came in large numbers from England (44), Canada (34), Germany (32) and Ireland (19). They also came from Belgium (18), Austria-Hungary (11), Holland (10), Wales (9), Russian Poland (9), and France (8).

Growth was not without its problems; increased business and industry meant pollution, sanitation problems, labor disputes, transportation obstacles, child labor, and other social challenges. Although representing 3.7 percent of the population of Muncie in 1890, African-Americans faced much of the same discrimination that they were experiencing in other parts of the United States. They were given jobs demanding the least skills, which were the lowest paying jobs. They also found it difficult to get decent housing.

African-Americans lived in integrated neighborhoods like Industry, (also known as “Cross-town”) or segregated neighborhoods like Whiteley. These neighborhoods were on the south and east section of Muncie, near the industrial center and factories. Many aspects of Muncie’s society was segregated. Many white lodges and clubs refused to open their membership to blacks, so African-Americans formed their own. Unlike other cities, Muncie schools were always integrated for students.

Figure 23. J. Ottis Adams (Muncie at the Millennium)

People
James Boyce, the richest man in Muncie before the Gas Boom, persuaded the Ball Brothers and the owners of three other glass factories to come to town. Boyce and other civic leaders offered the brothers seven acres of land, five thousand dollars, and free access to a natural gas well. Frank C. Ball, the president of Ball Brothers, decided to move their glass fruit jar factory from Buffalo, New York to Merriweather Avenue on the south side of Muncie. His four brothers soon joined him.
George F. McCulloch founded the Muncie Street Railway Company in 1895 and laid miles of track for the electric streetcars. The company also placed hundreds of miles of interurban track connecting Muncie to nearby cities and towns. According to Bill Spurgeon’s book *Muncie and Delaware County*, at one time Muncie was the third largest interurban center in the entire United States. There is a large park north of downtown Muncie named for McCulloch.

Emily Kimbrough, a famous author from Muncie, was born in a house on East Washington Street that is now a museum. J. Ottis Adams, a member of a group of Indiana painters known as the “Hoosier Group,” painted scenes and portraits of people in Muncie.

Some of the mayors of Muncie during the Gas Boom were Frank Ellis (1883-1891), Arthur W. Brady (1891-1895), George Cromer (1895-1899), and Edward Tuhey (1899-1902). These men guided the city through some its most exciting and turbulent years. They dealt with the expansion of business during the boom and the circumstances that occurred when the wells dried up.

**Businesses**

The local business atmosphere changed drastically during this period. Boyce was still in business with his Boyce Handle Factory that made handles for farm machinery. The Indiana Bridge Company made iron bridges for crossing creeks and rivers, making transportation easier. Banks were constructed downtown.

With the expansion of Muncie and the increase in population and wealth, neighborhoods were developed. Grocery stores were built in these neighborhoods to accommodate the residents who walked to work and to shop. Drug stores followed the same pattern as grocery stores in downtown and neighborhoods. Dry goods stores located downtown carried clothes, shoes, toys, carpets, telephones, and other goods.

**Buildings**

Buildings began to serve one function, with separate houses, stores, churches, schools and factories. Styles of some buildings were Queen Anne and Romanesque Revival. The Queen Anne Style was popular in America from 1880 to 1900. These houses were designed not just as rectangles and squares as older houses had been. They were often painted with three or four different colors of paint and had lots of “gingerbread” details added to them. These structures often had bay windows, towers, and tall thin chimneys.
An example of the Queen Anne style in Muncie during this era is located in the Emily Kimbrough Historic district. The **Templer-Williams House** at 723 East Main Street belonged to James Templer, a well-known attorney in Muncie. It is a two-and-a-half story Queen Anne brick residence with a rock-faced stone foundation. A two-story rounded wooden **turret** adjoins the east side of the structure. The first-floor porch features decorative “gingerbread” details and porch railings.

Another style that was popular at this time was Romanesque Revival. The style looks very massive and weighty, with large arched windows and rock-faced stone or brick used for walls. Other details include **cornices**, which are decorations near the roof, and sometimes arches composed of wedge-shaped stones. An example of a Romanesque Revival business building is the Anthony Block. This building was constructed by Charles H. Anthony in 1887. It initially housed the offices of one of the major real estate companies laying out new suburbs around the edge of Muncie during the Gas Boom. Romanesque features found on the structure are the heavy brownstone masonry walls, massive round arches, and a corner tower.
The St. Lawrence Catholic Church, 820 E. Charles Street, was built in 1893-1895 for growing numbers of immigrant workers and their families during the gas boom. It is built in the Gothic Revival style, a popular style at this time used for churches and similar buildings.

**Transportation**

With the increase in population and industry, people who worked at the factories tended to live close in order to walk to work. It was a pedestrian age in which most citizens could walk from their homes to work, church, stores, and entertainment. Road conditions in the rural parts of Delaware County were not good. Since there were toll roads all over the county, the county decided to buy up the roads and tax the citizens for road upkeep. Some families traveled around by horse and buggy. Businesses hauled their supplies and their products to buyers and customers by horses and wagons. Many people traveled from home to work on electric streetcars.

To go to other towns, they used the fast inexpensive interurban. For a penny a mile you could travel round-trip from Muncie to Indianapolis. Rural residents could easily come into the city and shop the local markets and business. The Muncie streetcar lines continued to serve local residents until newly formed bus routes became available during the 1920s and 1930s. Lots of people took the steam trains from Muncie Union Station to travel to other cities or towns.

**Fashion**

There was great interest in fashion, with changing styles originating in London and Paris. Some women remade older dresses to reflect the more modern trends, altering sleeves, replacing pleats with gathers or vice-versa. It was not uncommon for a dress to be remodeled a half dozen times, finally to be entirely re-cut and made into a garment for a child.

Children’s clothes were similar for boys and girls until about the age of six. Both wore dresses of cotton or wool around the house. Occasionally, a boy’s dress would be worn over “drawers” to match, which showed beneath the dress. Little girls often wore pantalettes peeking beneath their dresses. As children grew into their pre-teen and teen years, their clothing more and more resembled that of adults. Often they wore hand-me-down clothing from parents or older siblings, including shoes.

**Entertainment**

As mentioned before, the church played a central role in the lives of Muncie’s families. Members of the congregations would sing in choirs and perform plays put on by churches. Patriotic songs like “Columbia, the Gem of the Ocean” or the “Battle Hymn of the Republic,” were learned by children in schools. Community orchestras and bands performed on the Fourth of July and other special occasions. Visiting acting groups would stage plays in
local theaters, and *vaudeville acts* would perform singing, dancing, acrobatics, and comedy. Children played games with each other that were handed down over many generations and with homemade toys made by their parents. Girls played with homemade and store-bought dolls and boys with wagons made at home or purchased. Fraternal lodges, such as the Masons, Odd Fellows, and Knights of Pythias, provided a place for entertainment for both African-Americans and whites. The rituals and programs were based on both myths and history. They also served as mutual aid societies in which members would take care of each other during illness or misfortune.

**Figure 29. Knights of Pythias Lodge “Welcome” Cast about 1916**
*(Archives and Special Collections, Bracken Library, Ball State University.)*

**Vocabulary**

**Adams, J. Ottis** – One of a group of Indiana painters known as the “Hoosier Group.”

**Anthony Block** – Romanesque Revival building constructed in the late 1800’s on Walnut Street. It now houses Pazol’s Jewelers.

**Ball Brothers Glass Manufacturing Company** – The glass fruit jar manufacturer that moved to Muncie from Buffalo, New York.

**Ball, Frank C.** – President of Ball Brothers at the time they moved to Muncie.

**Boyce, James** – Wealthiest man in Muncie prior to the Gas Boom, who urged Ball Brothers and other factories to come to Muncie.

**Cornices** – Details or decoration usually at the top of a wall, door, column or window.

**“Drawers”** – The pants that would be worn under the dress of a young boy, that were the popular fashion during the late nineteenth century.

**Electric Streetcars** – Rail cars powered by electricity that traveled through town on tracks in the street. Used for travel within a town.

**Fraternal Lodges** – Clubs for men that provided entertainment as well as support in times of needs.

**“Gingerbread” details** – Elaborate decorative wood carvings that adorned many types of building styles popular during this era; examples being on Queen Anne, Victorian and Gothic Revivals.

**Indiana Bridge Company** – A Muncie company that built iron bridges.

**Interurban** – Electric trains that allowed people to travel from town to town. The interurban connected Muncie to Indianapolis.

**Kimbrough, Emily** – Famous author from Muncie.
Panic of 1893 – An economic depression leading to temporary closure of factories and many job losses.

Pantalettes – Bloomers that young girls wore under their dresses.

Queen Anne Style – A style of home popular between 1880 and 1900. These homes used lots of different colors of paints and incorporated “gingerbread” details.

Romanesque Revival – A style of buildings that looks massive and heavy, using large arched windows and rock-faced stone or brick.

Steam trains – Trains pulled by steam locomotives. Boilers fueled with coal produced steam that powered the locomotives (engines).

Templer-Williams Home – An example of Queen Anne Style in Muncie on Main Street.

Turret – A small tower projecting from a structure.

Trenton Natural Gas – A field of natural gas that allowed the city to attract manufacturers.

Vaudeville Acts – Shows that included a variety of short acts, such as singing, dancing, skits, comedy, and acrobatics.

Whiteley – A small neighborhood of Muncie largely populated by African-American families.

Zinc cap – The special metal caps made from zinc that were in use at the time.

Activities

The Indiana State Standards that apply are noted at the end of each activity.

1. Compare Sanborn Fire Insurance Company maps for downtown Muncie* from the 1886 and 1901 editions. How did the type of businesses along Walnut Street change? Visit Walnut Street today and compare to the businesses there today.

Indiana Standards: Social Studies 4-1-9, 4-1-15, 4-3-10

2. What buildings from the Gas Boom are still standing today? (See The Gas Boom of East Central Indiana, by James Glass and David Kohrman, available at Minnetrista, pp. 97 – 103.)

Indiana Standards: Social Studies 4-1-9, 4-1-15, 4-4-1, 4-4-5

3. How were the Ball Brothers significant during the Gas Boom and where is there evidence of their importance today? Visit the Minnetrista Cultural Center and its Archives to find more information.

Indiana Standards: 4-1-9, 4-1-15, 4-4-1, 4-4-7

4. Obtain some of the walking tour brochures produced by the Muncie Public Library and the Ball State Graduate Program in Historic Preservation on historic architecture of Muncie and discuss some of the buildings included from this period.**You could also expand this into a field trip to these areas or have
the students do a picture scavenger hunt of the buildings included. You could then compile these photos for a display or presentation in class.

Indiana Standards: Social Studies 4-1-9, 4-1-15

5. The Gas Boom was a time of great economic prosperity in the area. Examine some of the 1890’s city directories at the Local History and Genealogy Center of the Muncie Public Library to see some of the businesses in the area. You can take this information and see which types of companies are still operating in the area today. Ask the class why they think some types of businesses are still operating, while others no longer exist.

Indiana Standards: Social Studies 4-1-9, 4-1-11, 4-1-15, 4-4-1, 4-4-5, 4-5-5

6. Ask a librarian at the Local History and Genealogy Center of the Muncie Public Library to help you obtain some copies of paintings from the “Hoosier Group” of artists. As artists, they painted what they saw around them. Why do you think they chose the scenes that they did? What do these paintings tell us about life during this time period?

Indiana Standards: Social Studies 4-1-15, 4-5-4

** These are available at a number of places including the Local History Center and Genealogy Center of the Muncie Public Library and Minnetrista. You can also contact the Ball State University Center for Historic Preservation at 650 W. Minnetrista Blvd.

* Available at the Local History and Genealogy Center of the Muncie Public Library; Periodicals section, Bracken Library, Ball State University; or at Minnetrista Archives.
Chapter 4
1901 - 1918

Glass, Automobiles, and War
Events

In Muncie’s previous years industrial development occurred at a rapid pace due to the availability of natural gas. Unfortunately Muncie’s convenient fuel source would not last. In 1901 most of the natural gas in East Central Indiana ran out. The overuse and waste of natural gas ended Muncie’s Gas Boom. By the time people realized that the fuel was going to run out, it was too late. Since most of Muncie’s factories used natural gas, many of the companies closed. The city suffered losses in the economy, but the town would recover with the development of a new manufacturing industry: automobiles.

The automobile had gone into heavy production and now was priced reasonably enough for most citizens to be able to purchase. This invention would change the nation. It would make it possible for individuals to go wherever they wanted, when they wanted. People would no longer be dependent on public transportation. Due to the Gas Boom, Muncie’s manufacturing capabilities, presence of skilled workers, and sizable population helped to attract automobile factories to the area. Muncie played a role in making automobile parts as well as building entire vehicles.

Figure 31. Isaac “Brother” Wingfield, a World War I soldier from Muncie about 1918 (Archives and Special Collections, Bracken Library, Ball State University.)

The early twentieth century saw many changes for Americans. In 1917 the United States entered World War I. The United States sided with Britain and France, which were known as the Allies. Germany and other countries formed the Central
Powers. The war between the Allies and Central Powers began in 1914. The Americans sided with the Allies because of attacks by Germany on American shipping. There were, however, many Americans with German backgrounds. Many non-German Americans felt negatively towards these German-Americans and reacted accordingly. For example, the teaching of the German language was banned at Muncie High School during the war years. In Indianapolis, streets named after Germans were given patriotic or English-sounding names. Hundreds of men from Delaware County, including more than 150 African-Americans, served their country and some gave their lives in this Great War. County farms helped feed the many fighting men overseas. The struggle ended in November, 1918, changing America forever. Europe had been devastated by four years of war, and the United States was now considered one of the most powerful nations in the world.

People

The population of Muncie continued to increase as people came from rural areas, other parts of Indiana and other states. In 1900 the population of Muncie was 20,942 and only 20 years later in 1920 there were 36,524 people living in the city. Many people came to Muncie to work in factories. There were also many jobs available in the stores and offices in the downtown area. Large numbers of African-Americans came to the city with the hopes of finding factory jobs. Some found jobs; however many were employed in lower paying service industries, such as domestic and janitorial work. The population of African-Americans doubled between 1910 and 1920 going from 1005 to 2054. African-Americans continued to experience racial discrimination and segregation.

Despite the fact that Indiana supported the Union during the Civil War, Muncie often had a Southern social leaning. This was because a large percentage of the population, both white and African-American, came from the South to take factory jobs during the Gas Boom and automobile industrial expansion of the early 20th century. Many of Muncie’s original settlers before the Civil War had migrated from the Appalachian regions of the Upland South. When the Gas Boom hit Muncie in 1887, hundreds of the relatives of these settlers came north in search of well paid factory jobs to join their families in Muncie.

Local African-Americans generally resided on the southeast side of town near the factories, or northeast of the downtown area in a small suburb known as Whiteley. Whiteley was named for a family who opened a foundry and reaper works during the Gas Boom era in Muncie. The family laid out the Whiteley area to house their employees. The location later developed into a mostly African-American residential area. African-Americans in that neighborhood attended the Longfellow School, located on the corner of Highland and Broadway. They went to a neighborhood community center called Campbell’s, where concerts, dances,
and roller-skating were popular activities. The Muncie Police Department hired some black officers that only patrolled the Whiteley neighborhood or other areas with black populations. A longtime assistant superintendent of Home Hospital, one of the first hospitals in Muncie, was Samuel Bethea, an African-American doctor. Muncie Mayors during this time period were Edward Tuhey, 1899-1902 and 1910-1914 (for whom Tuhey Park was named); Charles W. Sherritt, 1902-1906; Leonidas A. Guthrie 1906-1910; and Rollin H. Bunch 1914-1918 and 1918-1919.

Businesses

The years from 1900-1920 saw many changes in Muncie’s manufacturing makeup. The manufacture of automobile parts began to dominate the local economy, where glass and steel had been the main industries just a few years earlier. Some glass factories became automated and others closed. The Ball Brothers’ factory continued to be the largest fruit jar producer in the world and turned out hundreds of glass products. Another glass company that stayed in business without the abundance of gas was the Hemingray Glass Company, which made electric wire insulators. The steel industry moved to cities closer to Lake Michigan in order to receive iron ore and coal on large boats.

Thomas Warner opened Warner Gear in the early 1900s, producing parts for automobiles such as starters, transmissions, gearboxes, and wheels. It was originally located just south of the railroad line on Seymour Street between Hackley and Penn Streets. Its present location is on Kilgore Avenue. There were also a few factories that produced entire automobiles. In Muncie and nearby Albany there was the Interstate Motor Company who made complete motorcars. The company was bought by General Motors and later was sold to W.G. Durant. At the end of the gas boom in 1901, the Kitselman Brothers opened two plants in Muncie that manufactured wires for fences. The Kitselmans became very successful, rivaling the Ball family in wealth and influence by the 1920s.

Buildings

During this period the city of Muncie began annexing small towns around the area into the city limits. The city grew not only with new factories and businesses, but also...
with houses, downtown offices, libraries, churches, and schools.

In 1915 Muncie built a new high school, later called Muncie Central, located on High Street between Adams and Charles Street. The school building served the community for nearly sixty years. Because of the shifting population, rural schools around Muncie were being consolidated, and students were picked up by hacks, large horse drawn wagons with seats. Buses eventually replaced these hacks.

Figure 35. Muncie Central High School about 1966
(Archives and Special Collections, Bracken Library, Ball State University.)

By 1920, most homes and buildings were wired for electricity. Electricity was uncommon in rural areas unless people happened to live near the Interurban line. Interurban companies would sell electricity to those in small towns along the line.

Popular architectural styles during this time period were Neo-Classical, Beaux Arts, Georgian Revival, Renaissance Revival, Gothic Revival, Tudor Revival, Arts and Crafts/Prairie, and Four Square.

The Neo-Classical style (1893-1930) is based on the architecture of ancient Greece and Rome. A Neo-Classical façade was symmetrical and featured Greek or Roman columns, and other classically inspired ornamentation. Sometimes the style included the use of a dome. The Muncie Public Library was built in 1903 with funds provided by Andrew Carnegie. In the financial agreement, Carnegie stipulated that the library must be well maintained, a tradition still upheld today. Carnegie Library is a very well-proportioned Neo-Classical building. It is an equal combination of Greek and Roman architecture, blended as a whole. The building exterior has a Greek inspired portico (porch), above which is a Roman Classical dome. The library is located on Jefferson and Jackson Streets.

Figure 36. The Carnegie Library about 1915
(The Postcard History Series: Muncie, Indiana in Vintage Postcards.)

The Georgian Revival style (1895-1930) is seen in both American homes and commercial buildings of the early 20th century. Georgian Revival architecture usually had symmetrical façades, and generally had windows with six-over-six or nine-over-nine window sashes and flat brick arches with stone keystones over the windows. An example of a combination of the Georgian Revival and Neo-Classical styles is the Over-Vatet house located at 825 East Washington Street and built between 1902 and 1904. The
building has been home to two of the more prominent individuals in the Gas Boom era of Muncie. Charles Over, who owned and operated the C. H. Over and Co. glass manufacturing plant, built the home and lived there with his wife Matilda until 1907. When they moved out Eugene and Nellie Vatet took up residence in the home. Eugene was a prosperous local merchant who owned The Fair, a store that specialized in dry goods but also sold carpeting and cloaks. The house is a mixture of two styles that were popular during the era it was constructed. Two architects were commissioned to work on the project, Alfred Grindle and E.M. Grammer. They designed the two story red brick with a Georgian Revival façade, and a lovely four column Neo-Classical portico.

The Renaissance Revival style (1900-1930), based on architecture of the Italian Renaissance, is seen in many early 20th century commercial and government buildings. Its features include round-arched windows, classical cornices, and a symmetrical arrangement of windows and other details on either side of a central entrance. An example of the Renaissance Revival is the Freund Building located on Walnut and Charles Street. In 1903 Ella A. Jones (Seitz) constructed the Freund Building on land that had been her father’s farm. The structure did not become known as the Freund Building until 1946, when William F. Freund bought it.
designs. The stone structure also features a prominent copper dome and arched stained glass windows.

Popular with middle-class and wealthy families in the early 20th century, the Arts and Crafts style (1900-1915) incorporated a low roof with projecting eaves and exposed rafters. These houses are typically long and extended, with little ornamentation or detailing added.

Occasionally the Arts and Crafts and Prairie style were combined. Arts and Crafts details included end-facing gables with projecting eaves and supporting brackets. Prairie-style features included horizontal orientation, and stucco and timber materials. An example of these styles is the Morrison House located at 714 East Washington Street built in 1911. Peter K. and Luella A. Morrison built this house. Peter owned the P.K. Morrison Insurance Company and was co-owner of the Johnson Insurance Company. He also served as president of the B.W. Bennet and Company, a brick company. Architect Cuno Kibele, who lived in the Emily Kimbrough District, designed this two-story structure. The porch and projecting gable come from the Arts and Crafts style. The horizontal band of second-story windows and hipped roof were influenced by the Prairie style.

The Four Square house (1900-1930) was often cube shaped and two stories high with a low-pitched, hipped roof, a front attic dormer, and wide enclosed eaves. This common house type also usually included a one-story porch spanning the front façade. An example of this style is the Retherford House at 905 East Adams Street built in 1915. This home was designed by Muncie architect Cuno Kibele for Clarence and Jane Retherford. Mr. Retherford was a very involved member of the Muncie community. He worked the family business managing the Buck Creek Estates and also the Retherford Brothers Co. that produced lighting fixtures. He served the community by being involved in the Board of County Commissioners and the Muncie City Council. He used his training received at the Agricultural College of Purdue University to work for the U.S. Agricultural Department in various ways. The home is a fine example of the American Four Square style. It is primarily constructed of brick but uses wood in various ways such as in the details of the windows and full length porch. The red clay
tile roof and the single dormer window are common features of this style of home.

**Transportation**
Steam railroads continued to dominate the economy at the turn of the century in carrying both freight and passengers. Streetcars were a close second in passenger service. The interurban also acted as a fast mode of transportation between cities, although people still traveled with horse and buggy or wagon, especially from rural areas. Automobiles became more and more popular during this period as well.

**Fashion**

In women’s fashions tailored suits were firmly established by 1900. Women entering commercial workplaces found them to be useful all-purpose outfits.

Between 1890 and 1910, Charles Dana Gibson satirized society with his image of “The New Woman” who was competitive, sporty and emancipated as well as beautiful. Home dressmakers did their best to emulate “Gibson Girl” blouses, and they used fine pin tucks, fine embroidery, and appliqué insertions of lace, pleats, and trim in order to get good effects. During this time it was still usual to make dresses in two pieces, the bodice piece was heavily boned.

This era from 1905 to 1915 was particularly important in changing attitudes of dress. Women’s clothes got shorter during the First World War out of practical necessity. Waistlines were also quite high, following the style.

In men’s fashions after World War I the sacque suit, which had been popular since the mid-1800s, constituted appropriate "day" dress for gentlemen.

With suits, colored shirts of putty, peach, blue-gray and cedar were worn. Shaped silk ties in small geometric patterns or diagonal stripes were secured with tiepins. Black bowler hats completed the ensemble. The tailcoat was considered
appropriate formal eveningwear, along with a top hat. Starched white shirts were expected with the tailcoat. Tuxedos were increasing in popularity, but were not yet completely acceptable. Black patent-leather shoes were popular during this era and often appeared with formal eveningwear.

People shopped in stores on Walnut Street, which had become the principal shopping street by 1900. The grandest department store was McNaughton’s at Charles and Walnut. Another popular store for clothes was The Fair, located at Walnut and Jackson.

**Entertainment**

Books published in the United States during this period were: *Lord Jim* by Joseph Conrad (1900), *Up From Slavery* by Booker T. Washington (1901), *The Call of the Wild* by Jack London (1903), and *The Jungle* by Upton Sinclair (1905).

Jazz. John Phillip Sousa, a composer of March music, and his band toured the United States, Europe and the world almost constantly from 1892-1917. The developments of Ragtime, Jazz and March music were a milestone in the development of a truly “American” musical language.

Automated – When a factory uses machinery to aid in the production of goods instead of using manual labor.

Central Powers – The name given to group of countries who aligned against the Allies during World War I. Countries that were a part of this group include Germany, Austria-Hungary, Bulgaria, and Turkey.

Dormer – A projecting structure built out from the slope of a roof that usually houses a window or opening for ventilation.

Durant, W.G. – The man who played a role in the founding of General Motors and later purchased Interstate Motor Company.

Eaves – The lower edge of a roof that hangs out past the wall line of a building.

Emancipated – To be set free.

Façade – The prominent front or face of a building.

Four Square House – A style of house, often shaped like a cube, and featuring two stories with enclosed eaves. Often these homes have a one-story porch across the front. An example is the Retherford House, 905 East Adam Street.

Georgian Revival Style – A style of architecture similar to Neo-Classical style, with symmetrical facades, and flat brick arches with decorative stones over the windows.

Gibson, Charles Dana – The creator of the “Gibson Girl,” a new style for women which was sporty, competitive, and outspoken.

Hemingray Glass Company – A factory that made electric wire insulators.

Vocabulary

Allies – The name given to the group of countries who aligned against the Central Powers during World War I. Some of the countries that were a part of this group were Britain, Russia, France, Belgium and the United States.

Annexing – When a city takes the action of making an adjoining parcel of land become a part of their expanding incorporated area.

Arts and Crafts Style – A style of house, popular with middle-class and wealthy families in the early 20th century, with a low roof with projecting eaves and exposed rafters, or beams.
**Interstate Motor Company** – A company that made automobiles.

**Jazz** – A blend of African influences, and improvisation as was used to pass the time on plantations, this singularly American musical style began to take form with such artists as Louis Armstrong, Billie Holiday, and others.

**John Phillip Sousa** – Known as the “March King,” his music was highly popular and heard round the world. One of his most famous marches is “Stars and Stripes Forever.”

**Kitselman Brothers Factory** – A plant that made machines for producing wire fences.

**Keystone** – The middle stone in the center of an archway, it is often decorated or of a different size in order to make it stand out from the others.

**March** – An Americanized style of music primarily for marching bands to perform.

**Neo-Classical Style** – A style of architecture based on ancient Greece and Rome, featuring a symmetrical façade and Greek or Roman columns.

**Over-Vatet House** – An example of Neo-Classical and Georgian Revival style, located at 825 East Washington Street.

**Portico** – An open or partially roofed space on the front or façade of a building covering the entrance, usually the centerpiece of the façade.

**Prairie Style** – Another popular style of home, featuring strong horizontal lines, and usually covered with stucco and timbers. An example is the Morrison House at 714 East Washington.

**Ragtime** – Made famous by Scott Joplin, this music mixed “European classical style” with African-American roots. This highly rhythmic music moved into the dance halls for both white and African-American audiences, and led the way for jazz, and its influence on American culture.

**Renaissance Revival Style** – An architectural style based on the Italian Renaissance, often used in many early 20th century commercial and government buildings. An example is the Freund Building, located on Walnut and Charles Street.

**Sacque suit** – The appropriate day time dress for men from the 1850s-1920s, not acceptable for more formal occasions. It is similar to present day men’s suit, and could be considered an early model. It was usually accessorized with a collared shirt and tie, and sometimes with a bowler-type hat.

**Warner Gear** – A factory that produced parts for cars.

**World War I** – “The war to end all wars,” it began in 1914 with the U.S. joining the fight in 1917, it pitted the United States, France and England against Germany and other nations. President Woodrow Wilson explained the purpose of the Allies in fighting the war was to “make the world safe for democracy.” Germany and the Central Powers were undemocratic countries.

**Activities**

*The Indiana State Standards that apply are noted at the end of each activity.*

1. Visit the Local History and Genealogy Center of the Muncie Public Library and
look up advertisements and listings for Warner Gear and Hemingray Glass Company in a Muncie City directory from the 1910-1918 period.

Indiana Standards: Social Studies 4-1-9, 4-1-15, 4-4-1, 4-4-7

2. Have the students compare a streetcar schedule of this time period to a present day MITS schedule*. Why do you suppose there are differences?

Indiana Standards: Social Studies 4-1-9, 4-1-15, 4-3-10, 4-5-5; Math 4-6-1

3. Visit Minnetrista, a community resource that can provide teachers and students with materials for use in the classroom and research. Among the resources available on the 1901-18 period are exhibits, school tours of the Oakhurst historic home, artifacts and research materials.

Indiana Standards: Social Studies 4-1-9, 4-4-1, 4-4-7

4. Have the students imagine that they are reporters for a local newspaper and have them write an article on an event during this time period. Use the information in this text and others as a base for these articles. Possible subjects could include:

- Soldiers departing for or returning from World War I.
- The lives of women and civilians on the home front.
- A band performance of popular music.
- Major businesses coming to or leaving the area.
- The influx of new citizens to the Muncie area from outside Delaware County.
- The rising popularity of automobiles.
- The construction of new buildings downtown.

(You can find old editions of newspapers at the Genealogy Center to use as examples of what was being written about during this time.)

Indiana Standards: Social Studies 4-1-10, 4-1-11, 4-1-15, 4-5-5, 4-5-6; English 4-4-1, 4-4-2, 4-4-8, 4-7-10

5. Have the students imagine that they are overseas during World War I (soldiers, nurses, sailors in the merchant marine) and have them write letters home on their experiences. Have them discuss what they have seen, what they miss about home or what they want to know about events back home.

Indiana Standards: Social Studies 4-1-10; English 4-4-1, 4-4-2, 4-5-1

6. A trip to the Carnegie Library to see an example of Neo-Classical architecture and some of the buildings around it. This could be combined with a trip to the Local History and Genealogy Center to take advantage of some of the many local history resources they have on file pertaining to Muncie and Delaware County.

Indiana Standards: Social Studies 4-1-9

* Available at Archives and Special Collections, Bracken Library, Ball State University and The Geospatial Center and Map Collection at the same Library. One can also find many other types of transportation related maps from the present and past here.
Notes:
Chapter 5
1918 - 1930

The “Roaring Twenties”
Events

After World War I ended, sociologist Robert S. Lynd chose Muncie as a city for a major study. Lynd wanted to show how thirty years of industrialization had changed people’s values and priorities. Lynd and his wife, Helen Merrell Lynd, lived in Muncie for a year during the study. Their findings were published in 1929 as Middletown. This volume quickly became standard reading for sociologists and many other Americans. When he returned to Muncie in the 1930s Lynd recorded the impacts of the Depression in a book called Middletown in Transition. Through the two studies Muncie gained a nationwide reputation as “typical America.”

With feelings of nationalism, a strong economy, and a sudden ease of mobility, the people of Delaware County entered the 1920s with a renewed sense of hope and optimism. They believed that after the horrible war the world would have peace forever. Factory work was plentiful, wages were good, and people began to buy products on credit, such as the popular and now affordable automobile. This overconfidence and the fearless approach to life by people of this time gave this decade the nickname “The Roaring Twenties.”

In 1919, the 18th Amendment was ratified, prohibiting the making and selling of alcoholic beverages. Those who fought for its passage, the Prohibitionists, believed alcohol contributed to many of the ills of society at the time. Others thought that an amendment outlawing alcohol and its sale could not be enforced. During the 1920s, Prohibition became increasingly unpopular. In Muncie several semi-secret taverns called speakeasies opened in the city. Several individuals made money from making and bootlegging alcohol.

In 1920, the 19th Amendment to the Constitution was ratified giving women the right to vote. Since the formation of the United States in 1776, women had not had the right to vote for public officials, including the president.

With all the social and cultural conflicts igniting during the 1920s, Indiana saw a resurgence of the Ku Klux Klan (KKK, or ‘the Klan’). The KKK started in Tennessee after the Civil War. A group of former Confederates organized to terrorize free blacks and keep them from voting,
owning property, or seeking the same rights as whites. They burned crosses in yards, held huge rallies, beat or even killed African-Americans and whites that associated with them. In the 1920s the Klan also became a strong political force in the Midwest, particularly in Indiana. The revived Klan believed in white Protestant supremacy and directed their hatred toward African-Americans, Jews, and Roman Catholics in Indiana. Members of the Klan included prominent city and county officials, lawyers, doctors, judges, and even law enforcement officers. The group dressed in white robes and masks and often paraded through towns in East Central Indiana, including Muncie. In 1922 and in 1924 the Klan paraded through the streets of downtown Muncie, with the Mayor leading the way in the 1924 march.

The 1930 lynching of two young black men in Marion sparked a near riot in Muncie when a local African-American undertaker and minister, Reverend J. E. Johnson embalmed the two boys and gave them a proper burial. Muncie and Indiana’s racial strife was increasing, but this tragic episode marked the beginning of political unification for African-Americans in Muncie.

People

Other significant figures in Muncie during this time were factory owners like the Ball Brothers. They played an influential role in Muncie’s economy, and others from the automobile and other industries joined them.

In 1924, America’s “public enemy number one” came to Muncie. Gerald Chapman was wanted for a murder in Connecticut. The Muncie Police Department gained nationwide notoriety by arresting him in January, 1925.

Muncie mayors in the 1920s included: John R. Kelly, 1919-1922; and John Quick, 1922-1926.

Businesses

Ball Brothers Glass continued to thrive in this period, and like many other
industries in Muncie, had their own factory band. Warner Gear, a leading manufacturer of transmissions, became part of Borg-Warner Corporation in 1928. Other businesses in Muncie during this period were retail and educational. By the 1920s Muncie also was becoming a medical center.

**Home Hospital** on South Mulberry Street was the largest facility in the area. Muncie physicians had a good reputation. The hospital became public in 1920 when founder George Andrews retired. It soon outgrew its space and needed a new facility.

In the mid 1920s, the Ball family led the effort to organize a larger hospital, and **Ball Memorial Hospital** was established. It was built near what was then called Ball State Teacher’s College so that the two institutions could share heating plants and cut operating expenses. The hospital had rooms for 140 patients, which were easily filled by beginning of the 1930s.

In the twenty-year period 1898-1918, the new **Normal**, or teaching, college west of Muncie closed and reopened several times because of financial failures. In 1918, members of the Ball family purchased the property and the few buildings and gave them to the state of Indiana for a Normal school (teachers college). Later it was called the **Ball State Teacher’s College**. During the 1920s the college continued to grow, aided by contributions from the Ball Brothers. Ball Gymnasium was added in 1924. Later a science building, library,
and assembly hall, and finally a second dormitory were constructed. The first African-American from Muncie to graduate from Ball State was Jessie May Nixon, who graduated in 1925.

In 1929 a laboratory school, where people learned to teach by observing others, opened near campus. It was named Burris Laboratory School, in honor of one of the first presidents of Ball State, and it was agreed by the college and city school system that it would be a neighborhood school. It served grades one through twelve.

Muncie newspapers began to spread their circulation efforts to people outside the city limits. The *Muncie Morning Star* and the *Muncie Evening Press* were delivered to cities and towns up to fifty miles away. Though not printed in Muncie, the *Shining Star*, was an African-American paper popular in the area at the time. Merchant ads in these papers drew consumers from all over East Central Indiana to Muncie. Streets were crowded in the downtown area on Saturday nights. Another way businesses could advertise in Muncie was with the radio station. In 1926, Don Burton co-founded Muncie’s first radio station, WLBC. The studios are located on East 29th Street and are still in operation.

This was a time of growth for hotels. The Delaware and the Roberts hotels were constructed during this era. Auto manufacturers such as Willys-Knight and Durant expanded during this time as well. The increased production of automobiles enabled local entrepreneurs to “shuttle” individuals around in their vehicles for a small fee. The nickname given to these early passenger cars was a “jitney.” A typical ride in a jitney cost a nickel. The jitney ride was an early taxi service.

**Buildings**

The Gothic Revival style (1895-1930) in Muncie refers primarily to churches designed in the early 20th century. Common features include a floor plan in the shape of a cross, pointed-arch windows, and buttresses (supports) between the windows. Most of the Muncie Gothic churches had stone exteriors. An example is the First Baptist Church on Jefferson and Adams Street.

The congregation of the First Baptist Church built the present building in 1929. It was the third church built by the group, which grew rapidly during the gas boom. In dedicating the new church, the congregation thought it appropriate to place the 1890 cornerstone in the new building, giving it two cornerstones. The style of the church is from the late medieval period of Gothic architecture, which is distinguished by pointed arches over the altar and in the vaulted ceiling, leaded-glass windows, and the hammered-bronze binding on the...
main church doors. The church also features large stained-glass windows. The **Tudor Revival** (1905-1930) style drew from English architecture of the Elizabethan era during the 16th century. The style characteristics were high-pitched gable roofs, projecting gables, and exposed stucco and timber framing. An example of the Tudor Revival style is the Rose Court building located on Mulberry and Charles Streets. Fredrick D. Rose, a prominent Muncie banker, built the structure in 1926. The style makes it a very versatile structure and it has been home to many businesses over the years in downtown Muncie. Muncie architects Kibele and Garrard designed the Rose Court.

Another popular building style during this time period was the **Collegiate Gothic style**, as seen at the Ball State Teacher’s College. In 1925 Ball Gymnasium, designed by Cuno Kibele, was built in the Collegiate Gothic style. In 1926, the North Quadrangle Building, originally known as the Library and Assembly Hall was constructed in the Gothic style. Then in 1927, Lucina Hall joined the campus as a women’s dormitory. Architects Snyder and Babbitt and George Schreiber designed the building in the Tudor Gothic mode, styled to match the Library and Assembly Hall. In 1928-29 the Collegiate Gothic style Burris School was built, designed by the architectural firm of Snyder and Babbitt.

**Figure 55. First Baptist Church**
(Matt Farragher, 2005.)

**Figure 56. Rose Court about 1964**
(Archives and Special Collections, Bracken Library, Ball State University.)

**Figure 57. Ball Gymnasium in 1925**
(Archives and Special Collections, Bracken Library, Ball State University.)

**Transportation**
During the turn of the century, the Ford Model T was one of the most affordable cars on the market, but the 1920s ushered in a wider variety of more affordable cars. The growing popularity of
the automobile led to increased congestion, with streetcars, horses, and automobiles all on the city streets at the same time.

Air travel also expanded during this era. Towards the end of the 1920s, Delaware County had two small, privately owned airports. One was located on South Hackley, and the other was west of the city near Yorktown. In the early 1920s, Abbott L. Johnson, a local businessman, talked to city officials about having a city airport, and tried to donate land to the city. At first the city did not accept his offer. In the early 1930s other prominent members of the community, including Edmund F. and Frank E. Ball, convinced officials that Muncie needed a larger aviation center. The Muncie Airport opened in 1933.

Fashion
The stereotypical woman of the 'Roaring Twenties' is likely to be the image of a flapper. A flapper embraced all things and styles modern: she had short sleek hair, a shorter than average shapeless shift dress with hems just below the knee, wore make-up and applied it in public, smoked with a long cigarette holder, exposed her limbs and epitomized the spirit of a reckless rebel who danced the nights away in the Jazz Age.

High fashion had previously been for the richer women of society. Because making the flapper's dress was less complicated than earlier fashions, it was easier and quicker to produce up-to-date fashions quickly using commercially available dress patterns. The flapper style flourished amid the middle classes, negating differences between themselves and the truly rich.

Casual clothing demanded two-tone shoes in white and tan, or white and black. Lace-up style shoes were most popular. Knickerbockers, later shortened to "knickers," which were short-pants coming just below the knee with exposed socks, were popular casual wear. In 1925 the era of the baggy pants dawned. Clothes for working men continued to be simple, often plain shirts and trousers and work shoes or boots.
Music and Entertainment

With the growth of cities and the rise of the consumer culture, the 1920s were a decade of exciting social change and cultural conflict. Economic prosperity provided Americans new opportunities to raise their standard of living, spending money on cars, appliances, and stylish clothing. Most homes in urban areas had electricity and many had a telephone. The nation’s families spent less of their income on necessities such as food, clothing, and utilities and more on appliances, recreation and new consumer products. As a result newer industries -- appliances, automobiles, aviation, chemicals, entertainment, and processed foods -- surged rapidly. Many American urban centers experienced a new demand for parks and recreation, especially in the industrialized communities. During the 1920s the population of Muncie was roughly 35,000. The city was expanding in size, and people had the convenience of electricity and electric appliances. The city developed into an attractive weekend city for shopping and recreation. New parks were acquired by the city and older ones were landscaped and given ball diamonds and playgrounds.

During the 1920s, American culture evolved with the development of the book club, the radio, the talking picture, and spectator sports. Americans began enjoying entertainment in mass numbers.

As radios became more available, popular music, radio shows, and advertising increased, but the single most significant instrument of mass entertainment was the movies. Movies created a new popular culture, with common speech, dress, behavior, and heroes. The motion picture was an escape from the realities of everyday mundane work. In 1924 the movie “Muncie’s Hero” was filmed in Muncie.

Muncie had several theaters beginning in the early 1900s that showed “silent” movies. There were even some outdoor theaters with seats set up in vacant lots. According to the Lynd study of 1929, downtown Muncie had a total of nine motion picture theaters in 1923. People in the area had a choice of at least twenty-two different films each week.

By using amusement tax records in Muncie, the Lynds found that over 100,000 people went to see movies one July, the slowest month; in December that same year the attendance was 171,000. The Rivoli Theater, constructed in 1926, outlasted all the other downtown theaters and continued to show first run films into the 1980s. The theater had a prime location on the corner of Adams and Mulberry, directly behind the Delaware Hotel. It also had innovative technology with sound and air conditioning.

Figure 60. Stage of the Star Theater in 1922, now the Muncie Civic Theater. (Archives and Special Collections, Bracken Library, Ball State University.)
As the automobile industry became a major player in Muncie’s industrial development, there was a parallel increase in recreational activity. The downtown area focused on attracting people for recreation with the construction of the Young Men’s Christian Association (YMCA), bowling alleys, amusement parks and motion picture theaters. Most, if not all, of these facilities were separated by race and even by gender.

In 1929, the new Muncie Fieldhouse opened on North Walnut Street. The Muncie Central Bearcats became a basketball powerhouse in the midst of basketball mad Indiana. Basketball became the dominant sport in Muncie and the pride of the citizens of the town. The stars of the team were celebrities in Muncie.

Books published during the 1920s included: F. Scott Fitzgerald’s *The Great Gatsby*; *Alice Adams* and *The Magnificent Ambersons* by Hoosier author Booth Tarkington; *Farewell to Arms*, *For Whom the Bell Tolls*, *Old Man and the Sea*, *The Sun Also Rises*, by Ernest Hemingway; and *Babbitt* and *Main Street* written by Sinclair Lewis. Popular poets were Carl Sandburg, Robert Frost and African American poet Langston Hughes. Locally, Muncie-born author Emily Kimbrough published a popular book, *How Dear to My Heart*, a nostalgic look at her childhood neighborhood east of downtown.
Figure 64. Auto Show at Muncie Fieldhouse about 1926-1930 (Archives and Special Collections, Bracken Library, Ball State University.)

Vocabulary

18th Amendment – Change to the United States Constitution prohibiting the making and sale of alcohol.

Ball Memorial Hospital – The city’s second hospital built near Ball State Teacher’s College.

Ball State Teacher’s College – Founded in 1918 as a teacher’s college, this school is now Ball State University.

Borg-Warner Corporation – A leading manufacturer of automotive transmissions.

Collegiate Gothic – A non-religious application of Gothic style, many designs modeled after early English colleges.

Credit – Buying something now but paying for it over time.

Flapper – A stereotypical female of the 1920’s with short hair, a shapeless shift dress with a hem above the knee, make-up and a long cigarette holder. This image was the epitome of the “jazz age.”

Gothic Style – An architecture style, popular on the early Ball State campus. An example is the Ball Gymnasium, North Quadrangle building, and Burris School.

Home Hospital – Muncie’s first hospital.

Knickers – Shortened name for the short pants popular as casual-wear.

Ku Klux Klan – An organization formed in the South after the Civil War that sought to intimidate African-Americans, as well as other minority groups.

Lynd, Robert S. – A sociologist who chose Muncie for a major study, published as “Middletown.”

Nationalism – Having, and expressing, strong feelings which epitomize one’s nationality.

Prohibitionists – Those who believed that alcohol destroyed people’s lives and created an immoral society.

Ratified – When a piece of legislation or an amendment is passed and will be put into law.

Sociologist – One who studies the way people interact together in a society.

Silent Movies – Early movies that had no soundtrack; the dialogue is printed on separate slides between scenes.

Talking picture – Movies from the late 1920’s and early 1930’s with sound.

Tudor Revival – An architectural style based on English Architecture from the 16th
Muncie History 1918-1930

century, with high-pitched roofs, exposed stucco and timber framing. An example is the Rose Court building on Mulberry and Charles Streets.

Activities

The Indiana State Standards that apply are noted at the end of each activity.

1. After reading the chapters of *A History of Negroes in Delaware County* by Hurley Goodall dealing with the formation of the Whitely neighborhood as an African-American community, have the class visit the Vivian Conley branch library in Whiteley and invite current residents to come and talk about the neighborhood today.

   Indiana Standards: Social Studies 4-1-11, 4-1-15, 4-5-3, 4-5-5, 4-5-6; English 4-1-1

2. Get a history of Ball Memorial Hospital with photographs and discuss with the students how the care of patients has changed since the 1920s*.

   Indiana Standards: Social Studies 4-1-11, 4-1-15, 4-4-1; Science 4-1-7

3. After reading two chapters of *Middletown* and studying the 1920s in Muncie, think of changes that have occurred in Muncie society since the 1920s. Discuss with the students how things are now and the differences. Why/how has society changed or adjusted to the different conditions? The Muncie Public Library has a copy of *Middletown*.

   Another way to expand on the information contained in the *Middletown* series would be for the students to conduct a sociological survey of their own. They could do this by collecting and writing on some aspects of their lives. Some these aspects could include:

   - What their parent(s) do for a living?
   - Where do they do their shopping?
   - What do they like to do for fun? Where do they like to go for fun?
   - What classes do they take in school? Which do they enjoy the most?
   - Where do they live?
   - What sort of shops, businesses and commercial properties are close to where they live?
   - How do their families get around?
   - What sort of family traditions do they have?
   - What is the ethnic background of their families?

   Have them take this information and compile it into a paragraph or two describing their lives and share these with the class. Another follow up to this could be to take all the classes’ answers and collect them together and discuss or write about their findings.

   Indiana Standards: Social Studies 4-1-11, 4-1-15, almost all of 4-5; English 4-1-1, 4-4-1, 4-4-2, 4-5-3

4. Discuss the sort of ignorance about other people and cultures that leads to such groups as the Klu Klux Klan being formed and becoming popular. You can also tie this together with the *Middletown* activity by discussing and appreciating all the diversity there is in the classroom and community. What is the best way to keep these types of groups from gaining popularity today?

   Indiana Standards: Social Studies 4-1-11, 4-1-15, most of 4-5
5. The automobile became very popular during this time period because it was now affordable enough for the average citizen to be able to buy. Discuss with the students some of the changes in Muncie because of the automobile:

- New buildings and services related to the automobile.
- How city streets have changed.
- What would students do or where would they go if they did not have automobile access? How would this affect their mobility?
- How have automobiles affected the Muncie economy?

Indiana Standards: Social Studies 4-1-11, 4-4-1, 4-4-5, 4-5-5; Science 4-1-7

6. Help the students compare the role of women in the life of the community of the 1920s to their roles today. List some of the women who currently serve as leaders in politics, business, and civic affairs and discuss them with the class.

Indiana Standards: Social Studies 4-1-11, 4-5-6

7. During this time period there was a great deal of prosperity and construction around Ball State Teachers College, Ball Memorial Hospital and the Burris School. You can discuss this area or take a field trip to see and talk about how these developments changed Muncie. One way to get a discussion started could be to ask what were some of the things the Ball family did for the community? Some points of interest could be Ball State University, Minnetrista, Ball Memorial Hospital and other institutions that benefited from their contributions. If on a field trip to the University be sure to go to the Old Quadrangle area and see the Beneficence statue and discuss how it portrays the philanthropic spirit of the Ball family**.

Indiana Standards: Social Studies 4-1-15, 4-1-15, 4-4-1, 4-4-7

8. Emily Kimbrough wrote about her childhood experiences in How Dear To My Heart. Find an example of one such story in her book and then discuss some of the things she did in the past. Have the students summarize the subject she is writing on and then write their own stories about what they enjoy doing in Muncie. A way to expand on this would be to collect these stories together in a book of their own.

Indiana Standards: Social Studies 4-1-15, 4-5-4; English 4-1-1, 4-4-1, 4-4-2, 4-5-1, 4-5-2, 4-5-4

* Contact the Hospital, Muncie Public Library and Minnetrista for booklets on the history of Ball Memorial Hospital.

** You can contact these institutions for information or to line up tours and/or presentations. There is a “Historical Walking Tour of the Old Quad” brochure available at the Local History and Genealogy Center of the Muncie Public Library.
Muncie History 1918-1930

Notes:
Chapter 6
1930 - 1945

The Great Depression
and World War II
**Events**

During the twenties, Americans experienced a life of free-spending in which many people invested in stocks. This lifestyle soon came to a close on October 29, 1929, a day known as “Black Friday.” When stock prices dropped to an all-time low, people who invested large sums of money lost their life’s savings overnight. This event was known as the **Stock Market Crash**, and it led to the **Great Depression**. Many banks closed their doors, thousands of jobs were lost, and people became homeless. The economy wasn’t the only thing that was depressed; people had also lost hope.

Fortunately, not many people in Delaware County had invested a great deal of savings in the stock market. However, with overall production of goods low and a general lack of confidence in the economy, it was difficult for individuals to raise enough funds to start new businesses, invent new products, or modernize machinery in already existing factories. Many of the average working families found it hard to feed and clothe their families. Farmers found it difficult to borrow money to purchase livestock, equipment, or even seed crops. African-Americans were hit harder than most, as they were usually the lowest on the economic “totem pole.” Jobs that had once been of interest only to African-Americans were now desired by all.

In response to the twenty percent unemployment rate and the poor economy, President Franklin D. Roosevelt (F.D.R.) began his **New Deal** programs in 1933. As part of the New Deal, F.D.R. began several federal projects. Three of these were designed to get people back to work. These were the Public Works Administration (PWA), the Works Progress Administration (WPA), and the Civilian Conservation Corps (CCC). A number of young men from Delaware County benefited from these programs. They built roads, bridges, and federal housing. There were several federally funded projects in Delaware County as well as throughout the state. In 1936 workers in one of the New Deal programs constructed Tuhey Pool, located in what is now called Tuhey Park. One of the first federally funded housing projects in Indiana, the Munsyanna Homes project of 1939-1940 at Madison Street and Second Street on the South side, was a federal government project to construct subsidized apartments for those who did not have enough money to afford adequate housing. These were two-story concrete buildings that had outdoor gardens and play areas with separate buildings for whites and blacks. These work programs helped many families get through some very hard times, and provided the county with much needed improvement.

Robert Lynd returned to Delaware County in the mid-1930s to see how Muncie was doing amidst the Depression. His second book, *Middletown in Transition*, concluded that the people of Muncie had adjusted well to the hard times. He also corrected an earlier statement in his first
book that the Ball family was not a significant force in the community.

In the last years of 1930s, the attention of Delaware County, like the rest of the world, was on the rising international tension caused by Germany, Italy and Japan. Initially the overwhelming majority of Americans wanted to stay out of World War II, which began in 1939. On December 7, 1941, the Japanese attacked Pearl Harbor, a U.S. naval base in the Hawaiian Islands. Almost 2,400 Americans were killed. Even though Hawaii was not a state at the time, it was an American territory, and Americans were outraged. On December 8th, Franklin Delano Roosevelt asked Congress to declare war on Japan. The other Axis Powers of Germany and Italy then declared war on the United States, which brought the United States into the Second World War.

Delaware County provided men and women to the military services. They volunteered or were drafted for all branches of the armed forces. Americans also served their country on the home front; factories were re-tooled to make the goods needed by the military such as tanks, jeeps, planes, ships and ammunition. No new automobiles were produced during the war. Delaware county farmers also produced large amounts of food items for the war effort.

At first factories were run by men, but as men were drafted, the nation had to rely on women to maintain military material production. Hundreds of women in Delaware County joined the call to work in factories. Women with small children also found it difficult to find adequate day care in the 1940s. After some time, the government began to address this problem and created day care centers for working mothers. In Muncie, eighth graders at Wilson and Blaine
Junior Highs took turns watching younger children while their mothers worked.

Because the Armed Forces needed large amounts of food, the federal government decided to ration some food products such as sugar, coffee, meats, and other products that were already in short supply. Many people started to grow their own vegetables in small gardens known as “victory gardens.” Other things such as rubber, metal, silk and even lard were important materials for the war effort. Instead of throwing away old products containing these materials, people saved their scraps and even had scrap drives in neighborhoods. Muncie children helped collect old scrap metal and rubber by going door to door near their homes. Sometimes government officials would have contests to see which neighborhoods could collect the most scrap.

This scrap was melted down to make tanks, planes, and even bullets. Gasoline was also rationed all over the country. Individuals were given ration cards marked either “A,” “B,” or “C,” depending on the individual’s occupation as it related to the war effort.

On May 8, 1945, Germany surrendered to the United States and its Allies. That same year, on September 2, Japan officially surrendered, and history’s deadliest war was at an end. Nearly 40,000,000 people died during this conflict. In all, 243 men from Delaware County paid the ultimate sacrifice to their country.

**People**

During the national financial crisis of 1933, the Ball family personally guaranteed the safety of Muncie’s banks. This guarantee gave the city an edge over other communities where such stability did not exist. The guarantee was possible because the Balls’ glass canning jar business was booming, even during the Depression. With spending money scarce, canning fruits and vegetables became an economically sound practice for Americans.

Although thousands of immigrants had come to the United States during the years between 1880 and 1940, most ventured to larger cities, although some immigrants from Germany, England, and Ireland settled in Muncie during the Gas Boom. In smaller numbers, immigrants from Eastern European countries like Poland, Austria-Hungary, and Romania also settled in Muncie. Muncie’s population in 1930 was 46,548 a number that remained relatively stable throughout the Depression era. The 1930 census found that Delaware County’s population was still predominantly white, and most were born in America (92.1 percent), although 5.7 percent (2,646) of Muncie’s population was African-American. However, there was a large influx of African-Americans into Muncie during the war years, bringing the number from 2,985 in 1940 to 4,400 in 1950. The city continued to be separated by color, and practiced segregation. Most African-Americans lived in separate neighborhoods like Industry, “Crosstown,” and Whiteley. Besides having
to reside in certain parts of town, African-Americans experienced other types of 
**racism** in Muncie. There were only certain sections of theaters that blacks were allowed to occupy, and these were usually the worst places – such as the highest part of the balcony. Some restaurants refused to serve African-Americans. Tuhey Pool was a public swimming pool, supported by community tax dollars, but unfortunately, African-Americans were not allowed to swim there until the 1960s.

**Figure 69. Tuhey Park Pool about 1950**

(Archives and Special Collections, Bracken Library, Ball State University.)

There were blacks on the police force, but none on the fire department and it would remain this way until 1958. African-American doctors and dentists saw only “non-white” patients.

Even after the war African-Americans were still discriminated against. In Muncie, African-American GIs were refused membership in the American Legion, Veterans of Foreign Wars (VFW) and local fraternal organizations. They had to start their own groups.

The beginning of the 1930s brought poor social and economic conditions. According to the 1940 United States census, one out of five Americans owned a car, one in seven had a telephone, and only fifteen percent of the college-age population attended college. Other statistics revealed that only 75% of American households had a refrigerator or ice box, 60% lacked central heat and three out of four farmhouses were lit with kerosene lamps.

Beginning in the late 1930s, families in and around Delaware County, began leaving farms to come to Muncie looking for factory work. As the 1940s began, residents from the still economically depressed Appalachian areas of Kentucky, Tennessee, and West Virginia moved north, causing a housing shortage in many Indiana communities, including Muncie. For several years, families “doubled up” with new tenants or moved in with relatives. Others rented rooms or parts of houses from strangers. Because of the emphasis on military production during World War II, new home construction had stalled, and there was a shortage of housing.

**Businesses**

Although production was low, Delaware County factories, for the most part, remained open. The 1930s saw the development of a new kind of **labor union**. During the Depression, with jobs scarce and low wages, industrial unions were formed. These were unions representing all the workers in a particular type of industry. The unions worked to achieve progress in the working conditions that prevailed at factories. Things like health insurance, pension plans, and safe working conditions were some of the issues that unions fought to gain for their members.

One such union was the United Automobile Workers (UAW). This union had a strong presence in Muncie because of the city’s large number of automotive industries. The labor unions and other concerned parties were able to lobby for legislation that would give better treatment
to the workers in America. They wanted fair wages, better work hours and child labor regulations. In 1938, President Roosevelt signed the Fair Labor Standards Act into law.

During World War II, Muncie manufacturing plants were forced to convert their operations to military products for the Army and Navy. In Muncie factories such as Ball Brothers, Warner Gear, Owens-Illinois, Indiana Steel and Wire, Muncie Gear, and Brodericks produced bullet casings, gun carriages, tank treads, outboard motors for the Navy, glass land mines, bomb bay doors and a host of other military products.

The war increased production in Muncie and started another “boom” for industry. Because so many men were off fighting World War II, there were more jobs than workers. Women and African-Americans held many jobs previously closed to them, and gained valuable experience as workers and as leaders in the union movement. They learned leadership skills that would later serve them in the Equal Rights and Civil Rights movements.

In the 1930s, a cluster of different stores, now called a “shopping center” opened on University Avenue near the Ball State Teachers College campus in an area known as “the Village.” There was a bakery, restaurants, and other shops. There were even doctors’ offices. This shopping center was away from the downtown area, which was new to the people of Muncie.

Ball Memorial Hospital did not fare well in the early part of the 1930s. Most citizens could not afford the luxury of paying for the kind of quality medical care the hospital provided.
Edmund B. Ball building; before his death in 1925 E. B. Ball had been instrumental in the development of the hospital.

At Ball State Teacher’s College, Frank Elliott Ball financed the construction of the Elliott Apartments, now known as the Academy House. Originally the Colonial Revival structure was used as fifteen apartments for college faculty members. In 1999 the university moved the central portion of the building from McKinley to its current site, and it now houses the offices for the Indiana Academy for Science, Mathematics, and Humanities.

Another structure built during this time period was the Fine Arts Building. The initial plans for this building were drawn up in 1932 but the project was not finished until 1936 through money received by Federal Emergency Administration of Public Works. The style of the building was Collegiate Gothic and was designed by prominent architect George Schreiber, best known for his Scottish Rite Cathedral in Indianapolis.

Another building designed by Schreiber, constructed in 1937, was Elliott Hall, an example of the Tudor Gothic style. This was the first men’s dormitory on campus. Funds to build the hall were provided by the Ball family as a memorial to Frank Elliott Ball, who died in a plane crash in 1936. Sealed in the cornerstone are a picture of him, a copy of his obituary, a Bible, an American flag, and a miniature airplane. In 1940 the college renamed the seventeen-acre arboretum Christy Woods honoring Dr. Otto Christy, the former head of the science department who had been responsible for designing most of the campus landscaping. The tract contains over 300 species of trees, shrubs, and flowers.

Also during this time period an important symbol of Ball State was added to the campus. Beneficence, a beautiful sculpture, was the last commissioned work of Daniel Chester French, best known as the sculptor of the Abraham Lincoln statue in the Lincoln Memorial in Washington D.C. The bronze work was commissioned by the Muncie Chamber of Commerce as a public monument to the generosity of the Ball Brothers, each of whom is represented by
Figure 75. Beneficence in 1967
(University Photo Services)

one of the five Corinthian columns. It was completed in 1930 and installed in 1937.

Residential architecture built during this time period typically followed the revival style patterns such as Colonial, Georgian, and Tudor Revivals. Colonial Revival has a centrally accented front door, normally with a decorative crown or pediment and fanlights above the door. The façade is symmetrically balanced with a door in the center and equal number of windows on each side. This style reminds of American’s newfound pride in their past.

An example of Colonial Revival is the Morris McCormick house located at 2478 W. Warrick Road. It was constructed in 1939 and was designed by Indianapolis architecture firm Burns & James.

Figure 76. The Morris McCormick House
(Matt Farragher, 2005.)

Figure 77. The Joseph Broderick House
before 1956
(Archives and Special Collections, Bracken Library, Ball State University.)

The Tudor Revival style draws from English architecture of the Elizabethan era during the 16th century. The signature architectural characteristics are high-pitched gable roofs, projecting gables, and exposed stucco and timber framing. An example of this style is the Joseph Broderick house located at 2201 West Wiltshire Road built in 1934. The house is brick with sandstone trim, a slate shingled roof, and second floor half-timbering. It was designed by Indianapolis architect Fred Wallick.
Another style that became popular during this time period was the **International**, or **Modern** style. This style rejected all historical stylistic references for clean forms. These structures typically made use of steel and concrete as structural elements, and were surrounded by large expanses of glass. Interiors were simple, open spaces filled with light to allude to the theme of modern architecture that “less is more.” The first international modern home in Muncie was built in 1940 on 2309 West Wiltshire Road called Kennedy House. The house was designed by local architect Frederick Graham.

Some housing constructed during this time was federally funded through New Deal programs. Sewers were also constructed to assist with waste management. During his 1935-1938 administration, with the help of the WPA, Mayor Rollin Bunch had huge sewers built along the White River to intercept the waste coming from the city sewer pipes. The sewage was then transported to a new treatment plant west of the city.

**Transportation**

Transportation improved during the 1930s with the assistance of FDR’s New Deal Programs. The Work Progress Administration constructed five concrete bridges over the White River to replace the outdated iron bridges. They also constructed the Madison Street underpass, under the east-west railroad tracks, just south of...
downtown. The projects also improved the county airport. With the increase and ease of transportation using automobiles, gas service stations popped up around the Muncie area.

**Fashion**

The great Wall Street Crash of 1929 and the subsequent Depression directly influenced fashion of the 1930s. The beginning of the decade saw women sewing more. Clothing was mended and patched rather than being replaced. Fewer ready-to-wear garments were purchased, even though styles were dramatically changing.

A softer, more feminine style replaced the boyish, flapper look of the twenties. By the end of the 1930s padded shoulders were popular. Necklines often had wide scallop-edged or ruffled collars. Skirts featured layers, ruffles, pleats or gathers.

The entertainment industry continued to exert a strong influence over fashion. Movies were one of the few escapes from the harsh reality of the Depression. Movie star endorsements of styles and accessories became common, especially with evening wear. A popular formal look was the empire-waisted gown, with ties at the back. The dress might boast large, puffy sleeves. Furs of all kinds were worn extensively during this era, both during the day and at night. Fur capes, coats, stoles, wraps, accessories and trimmings adorned women’s dresses.

Women’s sportswear was influenced by a more masculine style. Sport suits, leather jackets and slacks became popular. A variety of shoe styles were available during this era. Rounded toes were seen as were wide, thick heels. Pumps and flat shoes were available, and ankle strap styles with moderate heels also appeared.

Washable, easy-care fabrics were introduced during this decade. The first openly synthetic fibers were developed in the 1930s. In 1935 the Du Pont de Nemours Company successfully synthesized nylon. Nylon was introduced for use in stockings during 1939, but World War II interrupted its use in fashion.

In 1941 war goods manufacturing took center stage. The government confiscated all stock of natural fabrics, forcing domestic manufacturers to concentrate on substituting other fibers for domestic garments. The industry geared up rayon production for the war and nylon stockings for civilians all but disappeared in 1943.

During 1942, the War Production Board began severely restricting the amount of yardage used in garments.

In an effort to comply with the restrictions outlined in the regulation, American designers created a new style of suits for women. Skirts were short and straight topped by short jackets of twenty-five inches or less in length. *McCall’s* produced patterns for transforming men’s suits into ladies’ suits and women’s dresses.
into children’s clothing. The women of America were once again sewing their own and their families’ garments.

While the decade of the thirties saw the theme of thrift in purchasing garments, the theme of the forties was a conservative look which would remain fashionable through multiple seasons. Women’s magazines were abundant with articles on proper care of garments for maximum wear. The decade of the 1930s saw dramatic changes in men’s fashion as well, beginning with the great Wall Street Crash of 1929. By 1931, eight million people were out of work in the United States. Less or no work meant little or no money to spend on clothing. The garment industry witnessed shrinking budgets, and going-out-of-business sales were prevalent. Tailors responded to the change in consumer circumstances by offering more moderately priced styles. This period also was a rise in the popularity of the double-breasted suit, the precursor of the modern business suit. The striped suit became a standard element in a man’s wardrobe at this time. Plaids of various kinds became popular around this time.

In 1935, as a result of President Roosevelt’s New Deal, signs of prosperity returned. The rebounding economy demanded a redesign of the business suit, to signal the successful status of the man who wore it. During this time, blazers became popular for summer wear. Blazers are descendents of the jackets worn by English university students on cricket, tennis and rowing teams during the late nineteenth century. The American versions were popular in blue, bottle green, tobacco brown, cream and buff.

**Entertainment**

Despite the problems facing the country economically, the people of Muncie and Delaware County continued to enjoy themselves. Entertainment was highlighted by a significant growth in motion picture theatres. Muncie had several theaters, all downtown. The radio also was popular, and network programs featured comedies, music, and of course news and sports. Muncie citizens had fallen in love with sports, especially high school athletics. The Muncie Bearcats won a second state basketball championship in 1931. In the late 1930s, Walter Fisher, the Central High School football coach, was building a state gridiron powerhouse at the same time his brother, Scott Fisher, was turning Burris into a basketball power. The Muncie Fieldhouse had 7,000 seats, but getting a season ticket, even during the Depression, was almost impossible.

![Figure 82. George Hackett, reporter for the Muncie Star in a double-breasted suit in 1939](Archives and Special Collections, Bracken Library, Ball State University.)
Even Ball State Teachers College was having athletic success. In 1937, Ball State defeated Indiana University in basketball. Indiana promptly hired Ball State’s coach the next year! There was a semi-professional baseball team known as the Muncie Citizens. Sports were both entertainment and a source of pride for Delaware County residents as they tried to deal with the difficulties of the Depression.

Ball State only had a small auditorium, but traveling orchestras played there or in Ball Gymnasium, and occasionally a visiting theatrical troupe would stop to perform. Muncie Civic Theater was formed in 1931 by individuals interested in drama; it staged plays in the Masonic Temple Auditorium. A Community Christmas sing was organized in the 1930s and held at the Fieldhouse.

Over the course of the thirties American taste in music changed dramatically. In the mainstream it moved from the smooth "sweet" sound of Guy Lombardo and the Jazz Age dance bands to the more rhythmically involved and aggressive horn arrangements of the bandleaders of the Swing Era such as Benny Goodman, Tommy Dorsey and many others. Performances recorded during the initial wave of interest in "race records," "hillbilly," and "ethnic" music by major
recording companies that led to the search for "new" performers throughout the Southern and Western states until the economic strain of the Depression precluded such endeavors. The jazz and blues emergence of significant musical forms by pre-swing greats Louis Armstrong and Fletcher Henderson took place about this time. The thirties saw the development of rhythm and blues in works by Duke Ellington, Billie Holiday, Ella Fitzgerald and Cleopatra Brown. The swing era is best remembered with recordings by Tommy Dorsey, Benny Goodman and Artie Shaw. Some stars, such as Judy Garland, Bing Crosby, and Frank Sinatra appeared in both movies and radio programs and sold hit records. The alliance between Hollywood films, the record industry and radio grew in strength and influence as the decade wore on. The trademark sound of the Glenn Miller Orchestra "Moonlight Serenade" has continued to provide this generation with musical memories of American life during the Second World War.

**Vocabulary**

**Allies** – Those on your side. In World War II, the United States’ principal allies included Britain, France, and Russia.

**Arboretum** – A nature park featuring a variety of trees, for example Christy Woods in Muncie.

**Colonial Revival** – An architectural style featuring a centered, decorated front door, a symmetrical front. The Morris McCormick House, 2478 W. Warrick Road is an example of Colonial Revival style.

**Immigrants** – Those born in one country, but who move and settle in a different country.

**International Style** – Also called Modern Style, this architectural style values clean lines, or basic forms, utilizing steel and concrete, with lots of glass. The Kennedy House, 2309 West Wiltshire Road, is an example of International or Modern architecture.

**Labor unions** – Groups of workers who join together in an organization in order to better negotiate terms of their jobs.

**New Deal** – Government programs designed to put people back to work during the Depression.

**Pearl Harbor** – A U.S. Naval harbor in Hawaii which was attacked on December 7, 1941 by the Japanese, triggering the United States entry into World War II.

**Racism** – Discrimination based on race, or racial stereotypes.

**Ration** – During World War II, some items (food, gasoline, metal products) were only available for purchase in small, limited amounts so that there would be ample supplies for the troops.

**Synthetic fibers** – Fabric made of other things than natural fibers such as cotton, silk, or wool.

**Totem pole** – A Native American symbolic pole with images and/or carvings stacked one on top of the other. As it is used in the text: the more important individuals would be at the top with lesser individuals towards the bottom.

**Tudor Gothic** – An architectural style that combines Tudor aspects of decorative wood and stucco, gabled facades and the use of many different materials with Gothic aspects.
of pointed arches over openings and vaulted interiors.

**Union** – A labor organization that wishes to bring about change in the lives of workers in any number of fields by uniting everyone from a certain field or industry. They would institute strikes in order to negotiate demands.

**World War II** – A major war of the 20th century between the Allies and Axis powers from 1939 to 1945.

**Activities**

*The Indiana State Standards that apply are noted at the end of each activity.*

1. What are some of the remembrances of Muncie veterans of World War II? How do they compare with remembrances of the Vietnam War? Desert Storm or the war in Iraq? Invite some veterans from World War II and some veterans from the Vietnam War or a more recent war to compare their experiences for the class.

One way to expand on this activity would be for the children to talk with veterans of these wars in their family and to write down their interviews for simple oral histories.

Indiana Standards: Social Studies 4-1-15, 4-5-3, 4-5-6; English 4-4-1, 4-4-2, 4-4-3, 4-4-7

2. Muncie has suffered with problems of racism before and after this period. Through the years many people have struggled to make life better for the minority populations of the area. Discuss, produce reports or presentations on some of these individuals who have worked to correct this wrong. Also you could look up minorities who have been successful in business, politics and the community. You can find this information at the Local History and Genealogy Center of the Public Library, Ball State University and Minnetrista. This would also be another opportunity to take advantage of the wealth of information in *A History of Negroes in Delaware County* by Hurley Goodall.

Indiana Standards: Social Studies 4-1-11, 4-5-3, 4-5-6; English 4-4-1, 4-4-2, 4-4-3, 4-4-7

3. Go to the Census Bureau website ([www.census.gov](http://www.census.gov)) to get recent information and take advantage of the census records available at the Local History and Genealogy Center and Minnetrista to find information on Muncie. Compare the information from past and present and also to the census info on page 56. How does information from these sections differ and discuss why?

Indiana Standards: Social Studies 4-1-15; Math 4-6-1, you can fulfill any number of math standards by using this information for standards 2, 3, 6 or 7.

4. Visit Minnetrista Cultural Center to see their collection of artifacts from World War II.

Indiana Standards: Social Studies 4-1-11, 4-1-15
Events

The post World War II period, from 1945 to approximately 1960, marked years of economic prosperity, population growth, and steady movement of citizens from the city to the suburbs. It was also a time of great technological advancements with the invention of the television, which had a huge impact on Americans lives.

The end of World War II meant that millions of veterans would be coming home and would need jobs. With the return of the soldiers many women had to give up their jobs, though a few remained at work because they needed the income. Some servicemen took advantage of the GI Bill of Rights. This federal law enabled former soldiers to go to college and receive government financial assistance. Many Delaware County servicemen attended Ball State Teacher’s College. This program triggered a growth in the number of people attending college across the country. Ball State had to set up temporary student housing using former Army and Navy barracks placed on vacant lots. Some of these Quonset huts were also used for offices and classrooms.

In 1950, North Korea, a Communist nation, invaded the separate country of South Korea. The United Nations, which had been formed after World War II, condemned the action and agreed to send troops to defend South Korea. Thousands of Americans, many of whom had signed up for the army reserves after World War II, went to Korea to fight. Many men from Delaware County again served their country; several were killed or wounded in the action.

In 1956, to keep pace with a steadily growing population, the Muncie Water Works Company announced plans to build Prairie Creek Reservoir southeast of the city near Perry Township. This was done by damming Prairie Creek near its confluence with the White River. Although the water company previously had a capacity of several million gallons a day, there were times when rainfall was not sufficient to keep the flow of White River running, and wells drilled near the river were not adequate to provide water for a city with over 70,000 residents. The reservoir became a large fishing, boating, and water recreation area. The water company leased it to the city, which continues to operate it as part of its parks department.

The 1960s began with the election of John F. Kennedy (J.F.K.), the first United States president born in the 20th century. During the election of 1960, soon-to-be President Kennedy visited Muncie. He was welcomed with a rally held downtown on the courthouse steps. On November 22, 1963, President Kennedy was assassinated in Dallas, Texas.
During the 60s, war raged in a far off country called Vietnam. The United States sent military advisors to Vietnam a few years before sending thousands of American soldiers to help the South Vietnamese fight the North Vietnamese in an effort to stop the spread of Communism. Several hundreds of these soldiers were from Delaware County. This conflict was extremely controversial in the United States. Throughout the country there were rallies and demonstrations held to protest American involvement in the war, especially on college campuses. In Muncie at Heekin Park there is a memorial to local Vietnam veterans.

In July of 1965, Muncie celebrated the 100th anniversary of becoming a city with a community celebration. People gathered for a parade and festivities at the Delaware County Fair Grounds.

In the mid to late 1950s, African Americans began demanding their civil rights for equality with whites. In the 1960s, the struggle expanded as African-Americans and others held demonstrations, marches and rallies to gain further public support in the struggle for racial equality.

On April 4, 1968, the Rev. Dr. Martin Luther King, Jr., leader of the civil rights movement, was assassinated in Memphis, Tennessee. Two months later, Robert F. Kennedy, younger brother to the former president, was assassinated while campaigning for the Democratic presidential nomination in Los Angeles. The 1960s was truly a decade of violence and unrest.

In 1969, the United States space program landed a man on the moon. Ball Corporation, which had diversified its products to meet the needs of its customers and respond to new markets, became a leader in aerospace technology during the 1970s and 1980s. Unfortunately for local residents, demand for the manufacture of glass products steadily decreased, and the company closed its remaining Muncie glass...
Muncie History 1945-1970

plant in 1962, with the loss of several hundred jobs. The corporate offices remained in Muncie, however, until 1998, when they were moved to Colorado.

With the “space race” in full swing during the 1960s, the government became increasingly involved in education. A college degree was important and college campuses, including Ball State, began to swell with increased enrollment. In 1965, Ball State Teachers College officially became Ball State University. It offered degrees in many areas of study and established a nationally recognized College of Architecture and Planning in 1965.

People

After World War II had ended, Muncie’s population steadily increased due to the return of the soldiers from the war. Many children were born during this time, and they became known as baby boomers. This group has made up a disproportionately large segment of our population through the years, and are about to achieve retirement age.

In 1952 the first African-American City Councilman, Ray Armstrong, was elected to the Muncie City Council. African-Americans made further slow progress towards equality in the 1950s with the hiring of the first black teachers and principals in the Muncie Public Schools, and the first black firemen in modern Muncie history.

The availability of automobiles meant that more people could drive to work, whereas previous generations had lived closer in order to walk to work. Growth had its problems. Like many cities in postwar America, Muncie did not have a plan, nor was it prepared for such rapid expansion and a shifting population. As the population of Muncie soared, many people needed homes. So in the 1950s, people began moving out of the city center, and suburbs sprung up at a rapid pace. There were houses for nearly everybody, from eight-bedroom mansions on two-acre plots of ground to little look-alike $6,000 boxes on small lots.

Most of the new suburbanites said they left the city in search of clean air, space, greenery, and good schools. They usually got those things, but many had a more elusive goal that they did not discuss as freely: a change in social standing. The largest percentage of individuals moving out

![Figure 89. Ball State University's School of Architecture building about 1983 (Archives and Special Collections, Bracken Library, Ball State University.)](image)

![Figure 90. Levittown about 1960 (www.siena.edu)](image)
of the pre-World War II part of Muncie were white, a problem in many American cities at the time, thus the term “white flight” was coined. As up-to-date suburban schools were being constructed to serve these new residents, many of the older, inner city schools attended by African-Americans and poor white students were left unimproved.

The typical new suburb started from scratch on vacant land sold to subdividers. One of the forerunners in developing the mass produced suburban idea was Bill Levitt with the start of Levittown in Pennsylvania. People who initially inhabited these neighborhoods were not sure of what to make of their new suburban life-style. They carefully tended their grounds to win their neighbors’ approval and held backyard barbecues to socialize. They set up branches of national institutions including, the Girl Scouts, the Little League, the P.T.A. and Cub Scouts.

African-Americans who fought in World War II came home to a different America. Despite risking their lives for their country, many returned home to find the same discrimination, prejudice, and segregation that they left behind before the war. In Muncie, after the war, African-American GIs were refused membership in the American Legion, Veterans of Foreign Wars (VFW) and local fraternal organizations. To compensate, they started their own veteran groups. African-American women who had worked in factories found themselves without jobs. Their husbands, brothers, or fathers had to settle for the same low paying, unskilled work they had done before the war.

Muncie continued to struggle with racial equality and segregation well into the 1960s, along with the rest of the nation. Tuhey Pool remained segregated until the summer of 1956. And, although the Muncie Community Schools had always been integrated for students, they did not have an African-American teacher on staff until they hired Mrs. Geraldine Findley in 1955.

Led by Dr. Martin Luther King, Jr., marches, sit-ins, and protests across the South were held with the hopes of gaining access to lunch counters, securing the right to vote, getting better jobs, and improving the quality of education for African-Americans. The people of Muncie and Delaware County were dealing with these issues as well. Angry students and citizens, led by Hurley Goodall and Reverend J.C. Williams, protested the use of the Confederate flag as a symbol for the new Southside High School. They felt the flag, along with the school nickname “Rebels,” was too closely related to the Civil War and the South, which had once supported slavery. After several community meetings, and a student-led boycott of the school, the Muncie Board of Education voted to discontinue the use of the flag.

Businesses
In the years after the war, the automotive and glass industries still dominated the local economy. However,
Muncie History 1945-1970

Muncie plants also made lawn mowers, bed springs, boxes, air conditioners, outboard motors, aircraft parts, and other appliances. Ball Corporation, General Motors (GM), and Warner Gear, now Borg-Warner Automotive, were big employers. GM subsidiaries Delco-Remy and Chevrolet, which had a plant on Eighth Street, operated around the clock. In 1959, Westinghouse Electric Company, which needed a large transformer manufacturing plant, chose to locate to Muncie because of the adequate supply of electricity available. This huge plant was built on Cowan Road, just south of 23rd Street. It employed hundreds of Delaware County residents. Many smaller businesses were locally owned, particularly companies that designed tools and dies.

Labor unions continued to play an important role in local business. With a strong economy, employees wanted to achieve better pay and working conditions for their members who worked in manufacturing, transportation, and construction. Even those who worked for the city government, such as firefighters, policemen, and teachers, organized for the purpose of collective bargaining.

Many changes took place outside of the city of Muncie as the result of new and better farming practices. Farms were becoming increasingly mechanized by the mid-20th century. They were much larger, yielded more crops per acre, and were often not owned by individuals living in the county. Family farms were dwindling as more and more individuals made their way into the city to work in the factories. Those who continued to farm often worked part-time in the city because modern machinery made farming less time consuming.

Buildings

Before World War II, small communities and their schools in Delaware County were the focal point of social activities. Increasingly after World War II people made their way into the city, and these smaller towns and their schools became less significant. County school consolidations began in the early 1900s and continued into the 1970s. The several township schools that once existed were now part of the larger schools of Delta, Wapahani, and Wes-Del. Students were now spending long hours on buses in order to attend these schools. Because of their increased size, these newer schools were often able to offer more academic courses and produce more competitive athletic teams and extra-curricular groups. The increased population begged for the construction of new schools. So, during the 1950s and 1960s other schools were constructed in the area. Muncie Northside, a high school, was built northwest of town and opened in 1970. It has since become a middle school.

In 1967, amidst much opposition, the county decided to raze its eighty-year old courthouse structure and build a new one. It was obvious that the county had outgrown

Figure 92. James Albert and Clementine Johnson with family in front of cars in 1959. He was first African-American elected to the Muncie City Council as an at large member.
(Archives and Special Collections, Bracken Library, Ball State University.)
As Ball State University continued to grow, more buildings were constructed. The Applied Technology Building was built from 1950 to 1954. It was designed by Walter Scholer in the Collegiate Gothic style. The building housed the business education, home economics, and industrial arts departments. This was the first permanent structure that had been built on the campus since 1938. According to contemporary newspapers accounts, the building contained state-of-the-art facilities and features, including “floating” walls that enabled interior walls to be moved, soundless hardwood floors, and shadowless lighting.

The university also constructed a new student center on campus. The L.A. Pittenger Student Center was built in three stages between 1950 and 1961. Walter Scholer of Lafayette, Indiana, was also the architect for this Collegiate Gothic style building. The original center, now the east end of the building, cost approximately $1.25 million to build. Most of this money was raised through donations from students, alumni, and faculty, staff and community members; no state funds were appropriated for the project. Today the building houses a food court, ballroom, lounges, recreation areas, conference rooms, and organization offices, much as it did when it was first built.

Residential housing in this time-period was generally built on a smaller scale. People desired a more streamlined look and wanted a more manageable home. Popular styles in Muncie during this time were the ranch style, classic revivals, and the modern style.

The ranch style house was perhaps the ultimate symbol of the postwar American dream: a safe, affordable home promising efficiency and casual living. With its open kitchen/living area, the ranch was specifically geared to casual
entertaining. Another key selling point was the desirable indoor/outdoor living promised by the one story layout, which featured sliding glass doors, picture windows, and terraces and patios secluded in the rear yard.

Modern architecture is a term used beginning in the twentieth century to describe a movement that combines functionalism with aesthetic ideals that include rejection of historical design precepts and styles; variations include Art Deco, Art Modern, International Style, and Prairie Style.

Transportation
In 1958 Delaware County had its first scheduled airline service at Johnson Field, expanding the Muncie airport just north of town. Richard M. Nixon, who was Vice-President at the time, came for the dedication ceremony. Construction of Interstate 69, part of a new network of four-lane superhighways that eventually crisscrossed the country, began in 1959. Pressure from local legislators made sure the route from Indianapolis to Fort Wayne went through Delaware County. The project took ten years to finish. With the growth of the
university in the north and west part of Muncie, the reconstruction of McGalliard, once a small two-lane road, into a four-lane major thoroughfare began. Construction of the new Muncie Mall northeast of downtown started in 1969 and it opened on East McGalliard road a year later. Before long, retail stores and fast-food restaurants would line the road.

Fashion
The fifties were a time when people dressed conservatively. Denim dungarees (jeans in the 1950s) were unthinkable for any teen girl to wear out in public. Dungarees were only worn while lounging around the house or when girls played outside with siblings. Dresses were worn every day to school and anywhere where proper ladies might be seen.

When these girls would dress up for church, little white gloves would be worn in addition. Every fashionable girl in the fifties had to own at least one jumper. This became a classic look that girls of that time would learn to love. Even though the look was simple, it could easily be spiced up by varying the blouse color underneath.

Fifties evening wear was soft, romantic, and very feminine. World War II brought mass production of clothing due to the war effort. This production went into the Fifties, allowing everyday women a chance to buy designer inspired evening wear.

In the Fifties, floral prints and bright color were very big in swimwear, recalling the 1950s obsession with Hawaii, which became a state in 1959.

Fifties fashions for men are often thought of in terms how it was portrayed in the TV program “Happy Days” and the 1970s musical “Grease.” Actually men with office jobs had a more conservative look with a gray flannel suit. Men didn’t have many workplace choices for color; dark blue, dark brown and charcoal. There were young men at school who looked just like the “Fonz,” in “Happy Days” but not many.
If you want to know how most high school boys dressed, you need to visualize Ritchie and Mr. Cunningham in “Happy Days,” not the Fonzie. The **cardigan sweater** was a popular style which was used for the "letter" sweater so popular among athletes.

Male fashion was influenced by the dominance of the TV Western. Even Dad wanted to be a cowboy. Although only kids wore the coonskin caps, menswear was adapting nicely to the "home on the range" look. Men wore hats in the Fifties. There was some variation as to style, but no man was ‘dressed’ unless a hat adorned his head.

In the early ‘60s the teen-age world was suddenly hit by the rock-and-roll phenomenon of the Beatles, four long-haired Liverpool musicians whose ‘outrageous’ appearance took youth everywhere by storm. Rushing to imitate all aspects of the lifestyles of their idols, young Americans stopped cutting their hair and started adorning themselves in wild colors. By the end of the decade, the mini-skirt had appeared, pantyhose came in every color imaginable, chains multiplied, and fringe vests and love bead necklaces became popular for both young women and men.

**Entertainment/Music**

By the late 1940s, Muncie residents could watch a new electronic gadget called television. Very few people owned a television in the early days. Sets were small, usually about thirteen inches, and the picture was black and white and fuzzy. By the early 1950s three new Indianapolis stations were picked up in Muncie, and more homes had a television. WLBC-TV, a local station, went on the air in the early 1950s. In 1953, it was a commercial station, located on 29th Street with a huge tower. In 1971, it became WIPB, a public broadcasting station supported in part by Ball State University.

On television, comedies became widely popular in this time period. Perhaps the zaniest and most popular of the decade was “I Love Lucy,” a spoof of married life starring movie actress Lucille Ball and her Cuban-born husband, Desi Arnaz. More people watched Lucy on Monday nights in January 1953 than saw President Eisenhower’s inauguration in the same month, and the show went on to lure an audience of fifty million viewers. Other comedies popular at the time included “Leave it to Beaver,” “Ozzie and Harriet,” “The Honeymooners,” “Father Knows Best,” and “The Phil Silvers Show.” Variety shows, such as Ed Sullivan’s ‘Toast of the Town’ were also popular during this time.

Movies remained popular during the era with many new rising stars such as Rock Hudson, Marlon Brando, Charlton Heston, and Marilyn Monroe. Other popular stars at the time were Cary Grant, Gregory Peck, James Stewart, Clark Gable, and Doris Day. Indiana had a popular movie star and icon during this time period: James Dean. He stared in *Rebel Without a Cause*, in which he played an innocent adolescent fighting a
world of conformity. On September 30, 1955, he was killed in a car crash, and he became a cult hero.

Radio remained popular into the 1950s, however most of the comedies and dramas known as serials were now appearing on television. Music radio stations were most prevalent, with a new kind of music called “Rock-n-Roll.” WLBC-AM & FM began broadcasting from the 29th Street location in the late 1940s. Rock and Roll was a thundering mixture of country-western music with African-American rhythm and blues. One of the most famous rock and roll performers was Elvis Presley. Not only was his style of music a shock to Americans, his presentation of suggestive dance moves excited young people and frightened the older population. Other popular rock and roll stars include Frankie Avalon, Fabian, Little Anthony, Bobby Darin, the Everly Brothers, and Rick Nelson. Rock and roll was mainly popular among teenagers, so traditional radio continued to play artists such as Eddie Fisher, Harry Belafonte, Perry Como, Rosemary Clooney, Tony Bennett, Mario Lanza, Patti Page, Jo Stafford, Jo Stafford, Teresa Brewer, and Peggy Lee.

The racial and political turbulence of the 60s was reflected in the music of the day. In the summer of 1969, on a rented 600-acre dairy farm near the town of Woodstock, New York, an open-air community of 400,000 young people came together for three dizzying days to listen to rock and blues music, express their ideas, talk, sing, dance, and clap hands. Musicians such as Bob Dylan, Jimi Hendrix, the Doors, and the Beatles became popular with their music urging peace.

Sports were also a popular form of entertainment in Delaware County, specifically basketball. Muncie Central won back-to-back state titles in 1951 and 1952 in basketball.

In 1954, with a last-second shot, tiny Milan High School defeated Muncie Central 32-30, the story of which inspired the movie Hoosiers. Muncie Central Bearcats were expected to win the state title every year. County basketball teams like Royerton, Albany, Cowan, DeSoto, Eaton, Yorktown, Daleville, Gaston, Selma, and Center had their basketball fan followings. Three thousand fans would show up for a county
basketball game in a community with only two thousand residents.

People didn’t just watch sports, they also participated. Recreational leagues for all sports were popular in Delaware County in the 1950s.

Miniature golf became a popular leisure activity in Muncie in the 1960s and so did other outside activities. Muncie was also home to two drive-in movie theaters. People also enjoyed drive-in restaurants, where they would have car window service from a waitress, originally on roller skates. Bowling alleys also became popular forms of entertainment during this time period.

**Figure 103. Miniature Golf (Muncie at the Millennium)**

**Vocabulary**

**Baby-Boomers** – Children who were born during the population surge following the end of WWII and troops returning home to start families.

**Barracks** – Simple structures used to house military personnel.

**Cardigan sweater** – A sweater which buttons up the front.

**Civil Rights** – The movement, largely led by Dr. Martin Luther King, Jr. in the 1950’s and 1960’s, that fought for equal rights for African Americans.

**Communist** – A political ideology that strives to get rid of social class and have equality through distributing wealth and property to all.

**Dungarees** – Blue jeans.

**GI Bill of Rights** – A policy that helped soldiers returning from World War II with housing and education.

**Korean War** – The United States joined South Korea in defending against the invasion by communist North Korea.

**Modern architecture** – A style of architecture in which modern materials, such as glass, steel, and concrete are used and no details from historical styles.

**Pediment** – Triangular element from Classical Greek architecture, decorating the top of an entrance.

**Portico** – Porch.

**Quonset huts** – Temporary building made from curved steel.

**Ranch style house** – A one-story home which became popular during this time, stressing ease of maintenance and affordability.

**Reservoir** – A man-made lake used for holding water used by a community.

**School consolidations** – Combining several small schools, into one larger school. This often happened with rural schools, often resulting in long commutes for students.

**Space Race** – Both the United States and the Soviet Union were trying to be the first to get into outer space, spurring an increase in attention to education.
Vietnam – The United States set thousands of American soldiers to help the South Vietnamese fight against the spread of communism. The participation by the United States was a very controversial topic, particularly with the young generation of Americans, largely because many were drafted into the service.

White flight – A term used to describe the massive movement of white Americans from the inner city to the suburbs.

Woodstock – An outdoor music festival that was viewed as not only about the music, but a statement about the large hippie culture, their rejection of the government policy, and peace.

Activities

The Indiana State Standards that apply are noted at the end of each activity.

1. Visit a ranch-style house of the 1950’s in Muncie and note how families lived in such a home—all on one floor, patio and sliding doors extending living space outdoors, large brick or limestone fireplaces in the living room or family room, large front and back yards.

Discuss how the newer homes produced in the 1950s and 60s differ from the kind of older homes and buildings. Why are they different? What are the different materials used? Why was there such a big change?

Indiana Standards: Social Studies 4-1-11

2. Visit a 1950’s residential subdivision in Muncie. Note the curvilinear streets, houses grouped on cul-de-sacs, and neighborhood school. You can find some plans for such subdivisions in architectural and urban planning periodicals from the 1950s in the Architecture Library at Ball State University.

Indiana Standards: Social Studies 4-1-11, 4-3-10

3. Following World War II there was the surge in population known as the “Baby Boom.” Talk to older relatives and friends to see how life changed during this time following the war. Have the students record these stories and report them to class.

Indiana Standards: Social Studies 4-1-11, 4-1-12, 4-1-15, 4-5-5; English 4-1-1, 4-4-3, 4-5-1

4. Make comparisons between the 1945-1970 period and now in regards to:
   - transportation
   - industry
   - new home construction
   - music
   - movies
   - entertainment
   - basic cost of living

Indiana Standards: Social Studies 4-1-11, 4-1-12, 4-4-1

5. Since this is the last chapter on Muncie and Delaware County, encourage the students to continue the telling of the area’s history. There are many ways to do this but one fun way would be to have the students put together a time capsule and put it away for the future generations to enjoy or possibly for them to open at their high school graduation or class reunions. Include stories, letters, photos, articles and artifacts that represent their lives at this time.

Indiana Standards: Social Studies 4-1-12
6. Get a copy of Dick Greene’s *Neighborhood: Muncie, Indiana* from the Muncie Public Library and share some of the stories with the students. This is a great primary document on local history and the people living in Muncie. These individual stories are often overlooked in preference to larger concepts but are essential to understanding our community.

One way to expand on this would be to have the students read some examples from the book, collect local information from this text and other sources and then to write their own newspaper articles on a subject or person from this era.

Another expansion could include them writing an article on a current individual in the community.

Indiana Standards: Social Studies 4-1-11, 4-1-15, most of 4-5; English 4-1-1, 4-4-8, 4-7-10

7. This period was a time of great expansion into the suburbs. Discuss with the students the effects of people moving out of the areas closer to the downtown and how the physical make up of the city is affected by more people living and working outside the downtown area? How has this urban sprawl affected their lives and their hometown? Have the students ask older relatives and friends how the area has changed. Where is the most new construction and development today - in the city or the suburbs? Try to locate some older maps of the area in order to make a comparison to what is there today.

Indiana Standards: Social Studies 4-1-11, 4-3-10, 4-5-5; English 4-1-7
Notes:
References
And
Other Resources

For Your Information


Haimbaugh, Frank D. Editor *A History of Delaware County* Indianapolis, Indiana Historical Publishing Company 1924.


References and Other Sources


**Internet Sources:**

**State Sites to help with Heritage Education:**

Historic Landmarks Foundation of Indiana  
http://www.historiclandmarks.org/help/classroom.html

Indiana State Museum http://www.in.gov/ism/Education/

Indiana Historical Society http://www.indianahistory.org/

**Local Resources for Information:**

Ball State University Archives and Special Collections  
http://www.bsu.edu/library/collections/archives/ Second Floor Bracken

Muncie Public Library http://www.munpl.org/

Delaware County Historical Society http://www.dchsmunciein.org/

County History Preservation Society http://www.countyhistory.com/delaware/

The City of Muncie Indiana http://www.cityofmuncie.com/

Muncie, Delaware County, Indiana http://www.muncie.com/

The Star Press http://www.thestarpress.com/

Muncie Children’s Museum http://www.munciechildrensmuseum.com/

Minnetrista http://www.minnetrista.net

**Heritage Education Sites**

Center for the Built Environment (CUBE) http://www.cubekc.org/

http://www.cr.nps.gov/nr/twhp/

The Heritage Education Network (T.H.E.N) http://histpres.mtsu.edu/then/
**References and Other Sources**

**Other Social Studies Related Sites:**

Digital History: Using New Technology to Enhance Teaching and Research
[http://www.digitalhistory.uh.edu/](http://www.digitalhistory.uh.edu/)


The History Place -- [http://www.historyplace.com/](http://www.historyplace.com/)


GeoTeacher’s Geography Classroom -- [http://home.att.net/~geographyclassroom/home.html](http://home.att.net/~geographyclassroom/home.html)

Teacher’s Corner Geography Resources -- [http://www.theteacherscorner.net/thematicunits/geography.htm](http://www.theteacherscorner.net/thematicunits/geography.htm)

History Matters -- [http://historymatters.gmu.edu/](http://historymatters.gmu.edu/)


Documents for the Study of American History -- [http://www.ukans.edu/carrie/docs/amdocs_index.html](http://www.ukans.edu/carrie/docs/amdocs_index.html)

American Memory -- [http://memory.loc.gov/](http://memory.loc.gov/)


References and Other Sources

Best of History Web Sites -- http://www.besthistorysites.net/

History Links -- http://www.emporia.edu/socsci/journal/links.htm
Photograph and Image Credits


Settlement to 1865
The Beginning of Munseetown and Delaware County

Figure 1. Unidentified Photograph. Archives and Special Collections, Bracken Library, Ball State University

Figure 2. Photograph by Matthew F. Farragher, September 23, 2005.

Figure 3. Helm, Thomas. *History of Delaware County, Indiana with Biographical Sketches of Some of its Prominent Men and Pioneers*. Chicago: Kingman Brothers, 1881.

Figure 4. Spurgeon, Wiley. *Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns*. Muncie: Muncie Newspapers, 1999. Page 17

Figure 5. Photograph by Matthew Farragher, October 12, 2005.

Figure 6. Minnetrista Heritage Collection, Minnetrista Cultural Center.

Figure 7. Spurgeon, Wiley. *Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns*. Muncie: Muncie Newspapers, 1999. Page 16

Figure 8. Photograph by Matthew F. Farragher, September 15, 2005.

Figure 9. [www.Historyinthemaking.org/gallery/waistcoat.jpg](http://www.Historyinthemaking.org/gallery/waistcoat.jpg) Site Accessed 3/22/05

Figure 10. [www.Historyinthemaking.org/gallery/d.b.frockcoat40.jpg](http://www.Historyinthemaking.org/gallery/d.b.frockcoat40.jpg) Site Accessed 3/22/05


Figure 12. [www.nps.gov/fosc/childINFO1.htm](http://www.nps.gov/fosc/childINFO1.htm) Site Accessed 3/25/05. Photograph by Barak Geertsen.
Photograph and Image Credits

1867 to 1887
The Growth and Development of the City


Figure 14. Helm, Thomas. History of Delaware County, Indiana with Biographical Sketches of Some of its Prominent Men and Pioneers. Chicago: Kegman Brothers, 1881. Engraving by Western Biographical Co.


Figure 16. Photograph by Matthew F. Farragher, November 2, 2005.


Figure 20. Twain, Mark. The Adventures of Tom Sawyer. San Francisco: A. Roman and Company, 1876. Page 1

1887 to 1901
The Gas Boom

Figure 21. Minnetrista Heritage Collection, Minnetrista Cultural Center.

Figure 22. Spurgeon, Wiley. Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns. Muncie: Muncie Newspapers, 1999. Page 26

Figure 23. Spurgeon, Wiley. Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns. Muncie: Muncie Newspapers, 1999. Page 35
Photograph and Image Credits

Figure 24. Photograph P8-0595, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 25. Hein, Dawn; Holmes, Maria; King, Misty and Reid, Bronwyn. *Historic Architecture in the Old West End of Muncie, Indiana. Muncie Walking Tour Series #3.* Muncie: Muncie Public Library, 2000.

Figure 26. Photograph P8-0832, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 27. community2.webtv.net/@HH!0B!94!AA48A6C A788A/ijgrant/MyHistoryoftheUnion/page2.html. *Site Accessed 3/11/05.* From a postcard by an unknown photographer.

Figure 28. Photograph by Matthew Farragher. September 15, 2005.

Figure 29. Photograph P20-0440, Otto Sellers Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

1901 to 1918
Glass, Automobiles, and War

Figure 30. Spurgeon, Wiley. *Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns.* Muncie: Muncie Newspapers, 1999. Page 44

Figure 31. Photograph EF2-078, The Other Side of Middletown Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 32. Photograph EF2-047, The Other Side of Middletown Collection, Archives and Special Collections, Bracken Library, Ball State University


Figure 34. Photograph P8-0775, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 35. Photograph P40 X2089, Spurgeon-Green Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University


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Figure 37. Photograph by Matthew Farragher, November 20, 2005.

Figure 38. Photograph P40 X285, Spurgeon-Green Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 39. Photograph by Matthew Farragher, November 20, 2005.

Figure 40. Photograph by Matthew Farragher, November 20, 2005.

Figure 41. Photograph by Matthew Farragher. September 15, 2005.


Figure 43. Photograph EF2-012, The Other Side of Middletown Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 44. Photograph P20-0065b, Otto Sellers Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University


Figure 46. Photograph P8-0770, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

1918 to 1930
The “Roaring Twenties”

Figure 47. Minnetrista Heritage Collection, Minnetrista Cultural Center, Muncie, IN

Figure 48. Photograph P8-0708, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 49. Photograph EF2-009, The Other Side of Middletown Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 50. Photograph EF2-146, The Other Side of Middletown Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 51. Photograph P8-1053, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

98
Photograph and Image Credits

Figure 52. Administration Building File, Archives and Special Collections, Bracken Library, Ball State University

Figure 53. Photograph P8-1367, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 54. Photograph P8-1602, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University


Figure 56. Photograph P40/1342 X1171, Surgeon-Greene Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 57. Photograph P8-0650, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 58. Photograph P8-1204, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 59. www.popdeluxevintage.com. Site accessed 3/11/05.

Figure 60. Photograph P8-0480, W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 61. Photograph P8-0108 W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 62. Photograph P8-1575 W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 63. Photograph P8-1406 W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 64. Photograph P8-1228 W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

1930-1945
The Great Depression and War

Figure 65. Photograph EF2-081 The Other Side of Middletown Collection, Archives and Special Collections, Bracken Library, Ball State University
Figure 66. www.pbs.org. Photo courtesy of Staughton Lynd. Site accessed 9/15/05.

Figure 67. Photograph EF The Other Side of Middletown Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 68. Spurgeon, Wiley. Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns. Muncie: Muncie Newspapers, 1999. Page 92

Figure 69. Photograph P40 X162, Spurgeon-Greene Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 70. Photograph P40/1225 X29, Spurgeon-Greene Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 71. Spurgeon, Wiley. Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns. Muncie: Muncie Newspapers, 1999. Page 85. Photo courtesy of Minnetrista Archives, Ball Memorial Hospital Collection.

Figure 72. Spurgeon, Wiley. Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns. Muncie: Muncie Newspapers, 1999. Page 82

Figure 73. Photograph P40 X0002, Spurgeon-Greene Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 74. Photograph P22/17, Spurgeon-Greene Photograph Collection, Sellers Photographs, Elliott Hall File, Archives and Special Collections, Bracken Library, Ball State University

Figure 75. PSC 22/18, Richard Kerper Photograph dated July 13, 1967, University Photo Services, Archives and Special Collections, Bracken Library, Ball State University

Figure 76. Photograph by Matthew F. Farragher, November 20, 2005.

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Figure 83. Spurgeon, Wiley. *Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns*. Muncie: Muncie Newspapers, 1999. Page 98

Figure 84. Minnetrista Heritage Collection, Minnetrista Cultural Center.

Figure 85. Photograph P8-1339 W.A. Swift Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

1945 to 1970
The Era of Change

Figure 86. Spurgeon, Wiley. *Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns*. Muncie: Muncie Newspapers, 1999. Page 108

Figure 87. Spurgeon, Wiley. *Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns*. Muncie: Muncie Newspapers, 1999. Page 106

Figure 88. Unknown photographer. 
*Site accessed 11/20/05.*

Figure 89. Spurgeon, Wiley. *Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns*. Muncie: Muncie Newspapers, 1999. Page 110. Photo courtesy of Archives and Special Collections, Bracken Library, Ball State University.

Figure 90. [www.siena.edu/mahar.amst450.htm](http://www.siena.edu/mahar.amst450.htm), *Site Accessed 3/24/05*. Photo from *Life* magazine, “Levittown,” 1957.

Figure 91. Spurgeon, Wiley. *Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns*. Muncie: Muncie Newspapers, 1999. Page 112

Figure 92. Photograph EF2-136, The Other Side of Middletown Collection, Archives and Special Collections, Bracken Library, Ball State University
Figure 93. Photograph P40/0390 x241, Spurgeon-Greene Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 94. Photograph P40 x473, Spurgeon-Greene Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 95. Graham, Frederick H. and Patrick, Dawn Lee. Westwood: A 75 Year History, Muncie: Minnetrista Cultural Foundation, 200. Page 93. Photograph by Joel Patrick.

Figure 96. Graham, Frederick H. and Patrick, Dawn Lee. Westwood: A 75 Year History, Muncie: Minnetrista Cultural Foundation, 200. Page 118. Photograph by Joel Patrick.

Figure 97. Photograph by Matthew Farragher, October 12, 2005.

Figure 98. Minnetrista Heritage Collection, Minnetrista Cultural Center.

Figure 99. Photograph P40 x142, Spurgeon-Greene Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 100. Photograph P40 x532, Spurgeon-Greene Photograph Collection, Archives and Special Collections, Bracken Library, Ball State University

Figure 101. www.inicia.es/de/Cinemania/j7.jpg. Site Accessed 3/7/05

Figure 102. www.ihsaa.org/b-basketball/1954BBB.htm. Site Accessed 3/7/05

Figure 103. Spurgeon, Wiley. Muncie at the Millennium: A Look Back at Muncie and Delaware County as a New Millennium Dawns. Muncie: Muncie Newspapers, 1999. Page 119
Indiana Department of Education
Fourth Grade Curriculum Standards
**Social Studies Standards**

*Indiana in the Nation and the World*

Students in Grade 4 study Indiana and its relationships to regional, national, and world communities, including the influence of physical and cultural environments on the state’s growth and development and principles and practices of citizenship and government in Indiana.

The Indiana’s K – 8 academic standards for social studies are organized around five content areas. The content area standards and the types of learning experiences they provide to students in Grade 4 are described below. On the pages that follow, age-appropriate concepts are listed underneath each standard. Skills for thinking, inquiry, and participation in a democratic society are integrated throughout. Specific terms are defined and examples are provided when necessary.

**Standard 1 — History**
Students will trace the historical periods, places, people, events, and movements that have led to the development of Indiana as a state.

**Standard 2 — Civics and Government**
Students will describe the components and characteristics of Indiana’s constitutional form of government; explain citizenship rights and responsibilities; investigate civic and political issues and problems; use inquiry and communication skills to report findings in charts, graphs, written, and verbal forms; and demonstrate responsible citizenship by exercising civic virtues and participation skills.

**Standard 3 — Geography**
Students will explain how Earth/sun relationships influence the climate of Indiana; identify the components of Earth’s physical systems; describe the major physical and cultural characteristics of Indiana; give examples of how the interaction of people with their environment has changed over time and continues to change; and identify regions of Indiana.

**Standard 4 — Economics**
Students will study and compare the characteristics of Indiana’s changing economy in the past and present.

**Standard 5 — Individuals, Society, and Culture**
Students will examine the interaction between individual and group behavior in state and community life; analyze the roles and relationships of diverse groups of people contributing to Indiana’s cultural heritage; and describe the impacts of science, technology, and the arts on Indiana’s culture.
Standard 1
History

Students will trace the historical periods, places, people, events, and movements that have led to the development of Indiana as a state.

Historical Knowledge

American Indians and the Arrival of Europeans to 1770

4.1.1 Identify and compare the major early cultures that existed in the region that became Indiana prior to contact with Europeans.
Example: Angel Mounds (1050 – 1400 C.E.).

4.1.2 Identify and describe historic Indian groups that lived in the region that became Indiana at the time of early European exploration and settlement in the seventeenth century.
Example: The Miami, Shawnee, Potawatomi, and Lenape (Delaware).

The American Revolution and the Indiana Territory: 1770s to 1816

4.1.3 Explain the importance of the Revolutionary War and other key events and people that influenced Indiana’s development.
Example: George Rogers Clark and the Fall of Fort Sackville (1779), U.S. land treaties with Indians, Chief Little Turtle, Tecumseh, Tenskwatawa (the Prophet), William Henry Harrison, the Battle of Tippecanoe (1811).

4.1.4 Explain the significance of key documents in Indiana’s development from a United States territory to statehood.
Example: The Northwest Ordinance (1787) made Indiana part of the United States territory; the 1816 Indiana Constitution established the first state government.

Statehood and Development: 1816 to 1850s

4.1.5 Describe the removal of Indian groups from Indiana in the 1830s.

4.1.6 Explain how key individuals and events influenced the early growth of the new state of Indiana.
Example: Formation of counties, movement of state capitol from Corydon to Indianapolis, canal and road building, the first railroad line (1847), and the Indiana Constitution of 1851.

The Civil War Era: 1850 to 1880s

4.1.7 Explain the roles of various individuals, groups, and movements in the social conflicts leading to the Civil War.
Example: Levi and Catherine Coffin, The Underground Railroad, religious groups, the abolition and anti-slavery groups, the Liberia colonization movement.
4.1.8 Summarize the participation of Indiana citizens in the Civil War. 

**Growth and Development: 1880 to 1920**

4.1.9 Give examples of Indiana’s increasing agricultural, industrial, and business development in the nineteenth century. 
Example: Growth of railroads and urban centers, such as Indianapolis, South Bend, Evansville, Fort Wayne, and Gary; expansion of the educational system and universities; the growth of labor unions.

4.1.10 Describe the participation of Indiana citizens in World War I and the changes the war brought to the state.

**1920 to the Present**

4.1.11 Identify important events and movements that changed life in Indiana in the twentieth century. 
Example: The Great Depression, World War II, African American migration from the South, post-war baby boom, civil rights movements, the Vietnam War, increase in Asian and Hispanic immigration.

4.1.12 Research Indiana’s agricultural and industrial transformation, emphasizing new technologies, transportation, and international connections, in the last part of the twentieth century. 
Example: Use CD-ROMs and Indiana history Web sites to research new farming technologies, development of the highway system, establishment of ports in Indiana, air travel, high-tech industries.

**Chronological Thinking, Comprehension, Analysis, and Interpretation**

4.1.13 Organize and interpret timelines that show relationships among people, events, and movements in the history of Indiana.

4.1.14 Distinguish fact from opinion and fact from fiction in historical documents and other information resources*. 
Example: Identify different opinions on local and state events and issues from documents, cartoons, television, and other media.

* information resources: print media, such as books, magazines, and newspapers; electronic media, such as radio, television, Web sites, and databases; and community resources, such as individuals and organizations
Research Capabilities

4.1.15 Using primary source* and secondary source* materials, generate questions, seek answers, and write brief comments about an event in Indiana history.

* primary source: developed by people who experienced the events being studied (i.e., autobiographies, diaries, letters, government documents)
* secondary source: developed by people who have researched events but did not experience them directly (i.e., articles, biographies, Internet resources, nonfiction books)

Standard 2
Civics and Government

Students will describe the components and characteristics of Indiana’s constitutional form of government; explain citizenship rights and responsibilities; investigate civic and political issues and problems; use inquiry and communication skills to report findings in charts, graphs, written, and verbal forms; and demonstrate responsible citizenship by exercising civic virtues and participation skills.

Foundations of Government

4.2.1 Explain the major purposes of Indiana’s Constitution as stated in the Preamble.

4.2.2 Describe major rights, such as freedom of speech and freedom of religion, that people have under Indiana’s Bill of Rights (Article I of the Constitution).

Functions of Government

4.2.3 Identify and explain the major responsibilities of the legislative, executive, and judicial branches of state government as written in the Indiana Constitution.

4.2.4 Identify major state offices and the duties and powers associated with them — such as governor, lieutenant governor, chief justice, state senators, and state representatives — and how they are chosen, such as by election or appointment.

Relationship of the United States and Other Nations

4.2.5 Explain that Indiana is one of 50 states in the United States and that other countries are also made up of smaller units, such as states, provinces, or territories.

Roles of Citizens

4.2.6 Give examples of how citizens can participate in their state government and explain the right and responsibility of voting.

4.2.7 Define and provide examples of civic virtues* in a democracy.
Example: Individual responsibility, self-discipline/self-governance, civility, respect for the rights and dignity of all individuals, honesty, respect for the law, courage, compassion, reasoned patriotism, fairness, and commitment to the common good.
4.2.8 Use a variety of information resources* to research and write brief comments about a position or course of action on a public issue relating to Indiana’s past or present.

* civic virtues: qualities that contribute to the healthy functioning of a democracy
* information resources: print media, such as books, magazines, and newspapers; electronic media, such as radio, television, Web sites, and databases; and community resources, such as individuals and organizations

Standard 3  
Geography

Students will explain how Earth/sun relationships influence the climate of Indiana, identify the components of Earth’s physical systems, describe the major physical and cultural characteristics of Indiana, give examples of how the interaction of people with their environment has changed over time and continues to change, and identify regions of Indiana.

The World in Spatial Terms

4.3.1 Use latitude* and longitude* to locate places in Indiana and other parts of the world.

4.3.2 Estimate distances between two places on a map, using a scale of miles, and use cardinal* and intermediate* directions when referring to relative location.

4.3.3 Explain the essential facts of Earth/sun relationships* and be able to relate these to the climate of Indiana.

* latitude: imaginary lines that circle the globe from east to west; the equator is the line of latitude that divides the globe into two equal hemispheres
* longitude: imaginary lines that circle the globe from north to south and pass through the poles
* cardinal directions: north, south, east, west
* intermediate directions: northeast, southeast, northwest, southwest
* Earth/sun relationships: the rotation and tilt of Earth on its axis and the revolution of Earth around the sun influence climate variation on Earth; Indiana has major seasonal differences in climate relating to changes in the position of the sun and the amount of sunlight received

Places and Regions

4.3.4 Locate Indiana on a map of the United States; indicate the state capital, major cities, and rivers in Indiana; and be able to place these on a blank map of the state.

4.3.5 Map the physical regions of Indiana and identify major natural resources and crop regions.

Physical Systems

4.3.6 Explain how glacial periods shaped Indiana’s landscape and environment.
4.3.7 Describe Earth’s atmosphere*, lithosphere*, hydrosphere*, and biosphere* and explain how these systems affect life in Indiana.

* atmosphere: the gases that surround Earth, including the air we breathe
* lithosphere: the soil and rock that form Earth’s surface
* hydrosphere: all the water on Earth’s surface, including the hydrologic cycle (precipitation, evaporation, and condensation)
* biosphere: all plants and animals

**Human Systems**

4.3.8 Create a map tracing the routes and methods of travel used by settlers to reach Indiana and identify ways in which settlers have changed the landscape in Indiana over the past two hundred years.

**Environment and Society, Uses of Geography**

4.3.9 Create maps of Indiana at different times in history showing regions and major physical and cultural features; give examples of how people in Indiana have modified their environment over time.

4.3.10 Read and interpret thematic maps — such as transportation, population, and products — to acquire information about Indiana in the present and the past.

**Standard 4**

**Economics**

*Students will study and compare the characteristics of Indiana’s changing economy in the past and present.*

4.4.1 Give examples of the kinds of goods* and services* produced in Indiana in different historical periods.

4.4.2 Define productivity* and provide examples of how productivity has changed in Indiana during the past 100 years. Example: Improved farm equipment has helped farms to produce more. Computers have helped businesses to produce more.

4.4.3 Explain why both parties benefit from voluntary trade* and give examples of how people in Indiana engaged in trade in different time periods.

4.4.4 Explain that prices change as a result of changes in supply* and demand* for specific products.

4.4.5 Give examples of Indiana’s role in world trade. Example: Identify products made by Indiana companies that are exported and foreign-owned companies that are manufacturing products in Indiana.

4.4.6 List the functions of money* and compare and contrast things that have been used as money in the past in Indiana, the United States, and the world.
4.4.7 Identify entrepreneurs* who have influenced Indiana and the local community.
Example: the Studebaker brothers, Madam C.J. Walker, Eli Lilly, and Marie Webster.

4.4.8 Define profit* and describe how profit is an incentive for entrepreneurs.

4.4.9 Identify important goods and services provided by state and local governments by giving examples of how state and local tax revenues are used.

4.4.10 Explain how money helps people to save and develop a savings plan in order to make a future purchase.

* goods: tangible objects, such as food or toys, that can satisfy people’s wants
* services: actions that someone does for someone else, such as dental care or trash removal
* productivity: the amount of goods and services produced in a period of time divided by the productive resources used
* trade: the voluntary exchange of goods or services
* supply: what producers are willing and able to sell at various prices
* demand: what consumers are willing and able to buy at various prices
* functions of money: helps people trade, measures the value of items, facilitates saving
* entrepreneur: a person who takes a risk to start a business
* profit: revenues from selling a good or service minus the costs of producing the good or service

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**Standard 5**

**Individuals, Society, and Culture**

*Students will examine the interaction between individual and group behavior in community life; analyze the roles and relationships of diverse groups of people contributing to Indiana’s cultural heritage; and describe the impacts of science, technology, and the arts on Indiana’s culture.*

4.5.1 Identify ways that social groups* influence individual behavior and responsibilities.
Example: When people belong to a group they usually interact with each other frequently and follow the rules of the group.

4.5.2 Identify the different types of social groups to which people belong and the functions these groups perform.
Example: Social groups may have social, religious, recreational, cultural, educational, service, civic, political, or other functions.

4.5.3 Define the term cultural group* and give examples of the challenges faced by diverse cultural groups in Indiana history.
Example: Quakers faced religious and social differences. Recent Asian and Hispanic immigrants face the challenge of adapting to a new language and culture.

4.5.4 Describe the role of Indiana artists in American visual arts, literature, music, dance, and theatre.
Example: James Whitcomb Riley, Gene Stratton-Porter, T.C. Steele, Janet Scudder, and the Hoosier Group.

4.5.5 Give examples of the impacts of science and technology* on the migration and settlement patterns of various groups.
Example: The invention of the steam engine changed the technology of travel and made it easier for immigrants to reach Indiana.

4.5.6 Investigate the contributions and challenges experienced by people from various cultural, racial, and religious groups in Indiana during different historical periods by reading biographies, historical accounts, stories, and electronic media, such as CD-ROMs and Web sites.

* social group: a group of people who share common goals and interests
* cultural group: a group of people who share common language, religion, and customs
* technology: the knowledge of how to make things, as well as the invention and development of tools, machines, and skills by humans
Grade 4

Language Arts

Standard 1
READING: Word Recognition, Fluency, and Vocabulary Development

Students understand the basic features of words. They see letter patterns and know how to translate them into spoken language by using phonics (an understanding of the different letters that make different sounds), syllables, word parts (un-, re-, -est, -ful), and context clues (the meaning of the text around a word). They apply this knowledge to achieve fluent (smooth and clear) oral and silent reading.

Decoding and Word Recognition

4.1.1 Read aloud grade-level-appropriate narrative text (stories) and expository text (information) with fluency and accuracy and with appropriate timing, changes in voice, and expression.

Vocabulary and Concept Development

4.1.2 Apply knowledge of synonyms (words with the same meaning), antonyms (words with opposite meanings), homographs (words that are spelled the same but have different meanings), and idioms (expressions that cannot be understood just by knowing the meanings of the words in the expression, such as couch potato) to determine the meaning of words and phrases.

4.1.3 Use knowledge of root words (nation, national, nationality) to determine the meaning of unknown words within a passage.

4.1.4 Use common roots (meter = measure) and word parts (therm = heat) derived from Greek and Latin to analyze the meaning of complex words (thermometer).

4.1.5 Use a thesaurus to find related words and ideas.

4.1.6 Distinguish and interpret words with multiple meanings (quarters) by using context clues (the meaning of the text around a word).

Standard 2
READING: Comprehension

Students read and understand grade-level-appropriate material. They use a variety of comprehension strategies, such as asking and responding to essential questions, making predictions, and comparing information from several sources to understand what is read. The selections in the Indiana Reading List (available online at www.doe.state.in.us/standards/readinglist.html) illustrate the quality and complexity of the materials to be read by students. At Grade 4, in addition to regular classroom reading, students read a variety of grade-level-appropriate narrative (story) and expository (informational and technical) texts, including classic and contemporary literature, poetry, magazines, newspapers, reference materials, and online information.
Structural Features of Informational and Technical Materials

4.2.1 Use the organization of informational text to strengthen comprehension.
Example: Read informational texts that are organized by comparing and contrasting ideas, by discussing causes for and effects of events, or by sequential order and use this organization to understand what is read. Use graphic organizers, such as webs, flow charts, concept maps, or Venn diagrams to show the organization of the text.

Comprehension and Analysis of Grade-Level-Appropriate Text

4.2.2 Use appropriate strategies when reading for different purposes.
Example: Read and take notes on an informational text that will be used for a report. Skim a text to locate specific information. Use graphic organizers to show the relationship of ideas in the text.

4.2.3 Make and confirm predictions about text by using prior knowledge and ideas presented in the text itself, including illustrations, titles, topic sentences, important words, foreshadowing clues (clues that indicate what might happen next), and direct quotations.
Example: While reading a mystery, such as Encyclopedia Brown: Boy Detective by Donald Sobol, predict what is going to happen next in the story. Confirm or revise the predictions based on further reading. After reading an informational text, such as Camouflage: A Closer Look by Joyce Powzyk, use information gained from the text to predict what an animal might do to camouflage itself in different landscapes.

4.2.4 Evaluate new information and hypotheses (statements of theories or assumptions) by testing them against known information and ideas.
Example: Compare what is already known and thought about ocean life to new information encountered in reading, such as in the book Amazing Sea Creatures by Andrew Brown.

4.2.5 Compare and contrast information on the same topic after reading several passages or articles.
Example: Read several fictional and informational texts about guide dogs, such as A Guide Dog Puppy Grows Up by Carolyn Arnold, Buddy: The First Seeing Eye Dog by Eva Moore, and Follow My Leader by James B. Garfield, and compare and contrast the information presented in each.

4.2.6 Distinguish between cause and effect and between fact and opinion in informational text.
Example: In reading an article about how snowshoe rabbits change color, distinguish facts (such as Snowshoe rabbits change color from brown to white in the winter) from opinions (such as Snowshoe rabbits are very pretty animals because they can change colors).

4.2.7 Follow multiple-step instructions in a basic technical manual.
Example: Follow directions to learn how to use computer commands or play a video game.

Standard 3
READING: Literary Response and Analysis

Students read and respond to a wide variety of significant works of children’s literature. They identify and discuss the characters, theme (the main idea of a story), plot (what happens in a story), and the setting (where a story takes place) of stories that they read. The selections in the Indiana Reading List
Structural Features of Literature

4.3.1 Describe the differences of various imaginative forms of literature, including fantasies, fables, myths, legends, and fairy tales.
Example: Show how fables were often told to teach a lesson, as in Aesop’s fable, *The Grasshopper and the Ant*. Discuss how legends were often told to explain natural history, as in the stories about *Johnny Appleseed* or *Paul Bunyan and Babe, the Blue Ox*. Use a graphic organizer to compare the two types of literature.

Narrative Analysis of Grade-Level-Appropriate Text

4.3.2 Identify the main events of the plot, including their causes and the effects of each event on future actions, and the major theme from the story action.
Example: After reading *Sarah, Plain and Tall* by Patricia MacLachlan, discuss the causes and effects of the main event of the plot, when the father in the story acquires a mail-order bride. Describe the effects of this event, including the adjustments that the children make to their new stepmother and that Sarah makes to living on the prairie. Plot the story onto a story map, and write a sentence identifying the major theme.

4.3.3 Use knowledge of the situation, setting, and a character’s traits, motivations, and feelings to determine the causes for that character’s actions.
Example: After reading *The Sign of the Beaver* by Elizabeth George Speare, tell how the Native American character’s actions are influenced by his being in a setting with which he is very familiar and feels comfortable, as opposed to the reactions of another character, Matt.

4.3.4 Compare and contrast tales from different cultures by tracing the adventures of one character type. Tell why there are similar tales in different cultures.
Example: Read a book of trickster tales from other countries, such as *The Barefoot Book of Trickster Tales* retold by Richard Walker. Describe the similarities in these tales in which a main character, often an animal, outwits other animals, humans, or forces in nature. Then, tell how these tales are different from each other.

4.3.5 Define figurative language, such as similes, metaphors, hyperbole, or personification, and identify its use in literary works.
- Simile: a comparison that uses *like* or *as*
- Metaphor: an implied comparison
- Hyperbole: an exaggeration for effect
- Personification: a description that represents a thing as a person

Example: Identify a simile, such as *Twinkle, twinkle little star...like a diamond in the sky*. Identify a metaphor, such as *You were the wind beneath my wings*. Identify an example of hyperbole, such as *Cleaner than clean, whiter than white*. Identify an example of personification, such as *The North Wind told the girl that he would blow so hard it would be impossible to walk up the steep hill.*
Standard 4  
WRITING: Process

Students write clear sentences and paragraphs that develop a central idea. Students progress through the stages of the writing process, including prewriting, drafting, revising, and editing multiple drafts.

Organization and Focus

4.4.1 Discuss ideas for writing. Find ideas for writing in conversations with others and in books, magazines, newspapers, school textbooks, or on the Internet. Keep a list or notebook of ideas.

4.4.2 Select a focus, an organizational structure, and a point of view based upon purpose, audience, length, and format requirements for a piece of writing.

4.4.3 Write informational pieces with multiple paragraphs that:
  - provide an introductory paragraph.
  - establish and support a central idea with a topic sentence at or near the beginning of the first paragraph.
  - include supporting paragraphs with simple facts, details, and explanations.
  - present important ideas or events in sequence or in chronological order.
  - provide details and transitions to link paragraphs.
  - conclude with a paragraph that summarizes the points.
  - use correct indentation at the beginning of paragraphs.

4.4.4 Use common organizational structures for providing information in writing, such as chronological order, cause and effect, or similarity and difference, and posing and answering a question.

Research and Technology

4.4.5 Quote or paraphrase information sources, citing them appropriately.

4.4.6 Locate information in reference texts by using organizational features, such as prefaces and appendixes.

4.4.7 Use multiple reference materials and online information (the Internet) as aids to writing.

4.4.8 Understand the organization of almanacs, newspapers, and periodicals and how to use thoseprint materials.

4.4.9 Use a computer to draft, revise, and publish writing, demonstrating basic keyboarding skills and familiarity with common computer terminology.

Evaluation and Revision

4.4.10 Review, evaluate, and revise writing for meaning and clarity.
Proofread one’s own writing, as well as that of others, using an editing checklist or set of rules, with specific examples of corrections of frequent errors.

Revise writing by combining and moving sentences and paragraphs to improve the focus and progression of ideas.

**Standard 5**

**WRITING: Applications (Different Types of Writing and Their Characteristics)**

*At Grade 4, students are introduced to writing informational reports and responses to literature. Students continue to write compositions that describe and explain familiar objects, events, and experiences. Student writing demonstrates a command of Standard English and the drafting, research, and organizational strategies outlined in Standard 4 — Writing Process. Writing demonstrates an awareness of the audience (intended reader) and purpose for writing.*

*In addition to producing the different writing forms introduced in earlier grades, such as letters, Grade 4 students use the writing strategies outlined in Standard 4 — Writing Process to:*

4.5.1 Write narratives (stories) that:

- include ideas, observations, or memories of an event or experience.
- provide a context to allow the reader to imagine the world of the event or experience.
- use concrete sensory details.

**Example:** Prepare a narrative on how and why immigrants come to the United States. To make the story more realistic, use information from an older person who may remember firsthand the experience of coming to America.

4.5.2 Write responses to literature that:

- demonstrate an understanding of a literary work.
- support judgments through references to both the text and prior knowledge.

**Example:** Write a description of a favorite character in a book. Include examples from the book to show why this character is such a favorite.

4.5.3 Write informational reports that:

- ask a central question about an issue or situation.
- include facts and details for focus.
- use more than one source of information, including speakers, books, newspapers, media sources, and online information.

**Example:** Use information from a variety of sources, such as speakers, books, newspapers, media sources, and the Internet, to provide facts and details for a report on life in your town when it was first settled or for a report about the water cycle.

4.5.4 Write summaries that contain the main ideas of the reading selection and the most significant details.

**Example:** Write a book review, including enough examples and details about the plot, character, and setting of the book to describe it to a reader who is unfamiliar with it.
4.5.5 Use varied word choices to make writing interesting.
Example: Write stories using descriptive words in place of common words; for instance, use enormous, gigantic, or giant for the word big.

4.5.6 Write for different purposes (information, persuasion) and to a specific audience or person.
Example: Write a persuasive report for your class about your hobby or interest. Use charts or pictures, when appropriate, to help motivate your audience to take up your hobby or interest.

**Standard 6**

**WRITING: English Language Conventions**

*Students write using Standard English conventions appropriate to this grade level.*

**Handwriting**

4.6.1 Write smoothly and legibly in cursive, forming letters and words that can be read by others.

**Sentence Structure**

4.6.2 Use simple sentences (Dr. Vincent Stone is my dentist.) and compound sentences (His assistant cleans my teeth, and Dr. Stone checks for cavities.) in writing.

4.6.3 Create interesting sentences by using words that describe, explain, or provide additional details and connections, such as adjectives, adverbs, appositives, participial phrases, prepositional phrases, and conjunctions.

- **Adjectives:** brown eyes, younger sisters
- **Adverbs:** We walked slowly.
- **Appositives:** noun phrases that function as adjectives, such as We played the Cougars, the team from Newport.
- **Participial phrases:** verb phrases that function as adjectives, such as The man walking down the street saw the delivery truck.
- **Prepositional phrases:** in the field, across the room, over the fence
- **Conjunctions:** and, or, but

**Grammar**

4.6.4 Identify and use in writing regular (live/lived, shout/shouted) and irregular verbs (swim/swam, ride/rode, hit/hit), adverbs (constantly, quickly), and prepositions (through, beyond, between).

**Punctuation**

4.6.5 Use parentheses to explain something that is not considered of primary importance to the sentence, commas in direct quotations (He said, “I’d be happy to go.”), apostrophes to show
possession (Jim’s shoes, the dog’s food), and apostrophes in contractions (can’t, didn’t, won’t).

4.6.6 Use underlining, quotation marks, or italics to identify titles of documents.
- When writing by hand or by computer, use quotation marks to identify the titles of articles, short stories, poems, or chapters of books.
- When writing on a computer italicize the following, when writing by hand underline them: the titles of books, names of newspapers and magazines, works of art, and musical compositions.

Capitalization

4.6.7 Capitalize names of magazines, newspapers, works of art, musical compositions, organizations, and the first word in quotations, when appropriate.

Spelling

4.6.8 Spell correctly roots (bases of words, such as unnecessary, cowardly), inflections (words like care/careful/caring), words with more than one acceptable spelling (like advisor/adviser), suffixes and prefixes (-ly, -ness, mis-, un-), and syllables (word parts each containing a vowel sound, such as surprise or e•col•o•gy).

Standard 7
LISTENING AND SPEAKING: Skills, Strategies, and Applications

Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation (raising and lowering voice). Students deliver brief oral presentations about familiar experiences or interests that are organized around a coherent thesis statement (a statement of topic). Students use the same Standard English conventions for oral speech that they use in their writing.

Comprehension

4.7.1 Ask thoughtful questions and respond orally to relevant questions with appropriate elaboration.
4.7.2 Summarize major ideas and supporting evidence presented in spoken presentations.
4.7.3 Identify how language usage (sayings and expressions) reflects regions and cultures.
4.7.4 Give precise directions and instructions.

Organization and Delivery of Oral Communication

4.7.5 Present effective introductions and conclusions that guide and inform the listener’s understanding of important ideas and details.
4.7.6 Use traditional structures for conveying information, including cause and effect, similarity and difference, and posing and answering a question.
4.7.7 Emphasize points in ways that help the listener or viewer follow important ideas and concepts.

4.7.8 Use details, examples, anecdotes (stories of a specific event), or experiences to explain or clarify information.

4.7.9 Engage the audience with appropriate words, facial expressions, and gestures.

**Analysis and Evaluation of Oral and Media Communications**

4.7.10 Evaluate the role of the media in focusing people’s attention on events and in forming their opinions on issues.

**Speaking Applications**

4.7.11 Make narrative (story) presentations that:
- relate ideas, observations, or memories about an event or experience.
- provide a context that allows the listener to imagine the circumstances of the event or experience.
- provide insight into why the selected event or experience should be of interest to the audience.

4.7.12 Make informational presentations that:
- focus on one main topic.
- include facts and details that help listeners focus.
- incorporate more than one source of information (including speakers, books, newspapers, television broadcasts, radio reports, or Web sites).

4.7.13 Deliver oral summaries of articles and books that contain the main ideas of the event or article and the most significant details.

4.7.14 Recite brief poems (two or three stanzas long), soliloquies (sections of plays in which characters speak out loud to themselves), or dramatic dialogues, clearly stating words and using appropriate timing, volume, and phrasing.


**Grade 4**

**Mathematics**

*In this technological age, mathematics is more important than ever. When students leave school, they are more and more likely to use mathematics in their work and everyday lives — operating computer equipment, planning timelines and schedules, reading and interpreting data, comparing prices, managing personal finances, and completing other problem-solving tasks. What they learn in mathematics and how they learn it will provide an excellent preparation for a challenging and ever-changing future.*

*The state of Indiana has established the following mathematics standards to make clear to teachers, students, and parents what knowledge, understanding, and skills students should acquire in Grade 4:*

**Standard 1 — Number Sense**
Understanding the number system is the basis of mathematics. Students extend their understanding of the place value system to count, read, and write whole numbers up to 1,000,000 and decimals to two places. They order and compare whole numbers using the correct symbols for greater than and less than. They extend the concept of fractions to mixed numbers, learning how fractions are related to whole numbers. They also extend their skills with decimals and how they relate to fractions.

**Standard 2 — Computation**
Fluency in computation is essential. As students learn about numbers, they also learn how to add, subtract, multiply, and divide them. They understand the special roles of 0 and 1 in multiplication and division. They also add and subtract fractions and decimals, learning how these different representations of numbers can be manipulated.

**Standard 3 — Algebra and Functions**
Algebra is a language of patterns, rules, and symbols. Students at this level develop an understanding of the fundamental concept of a variable — having a letter represent all numbers of a certain kind. They use this to write formulas and equations, including equations that give the rule for a function. They continue number patterns involving multiplication and division. They recognize and apply the relationships among the four operations of addition, subtraction, multiplication, and division. They further develop the connection between numbers and number lines, including estimating positions on a number line.

**Standard 4 — Geometry**
Students learn about geometric shapes and develop a sense of space. They identify, describe, and draw such concepts as acute angles and parallel lines. They describe shapes and objects, including special quadrilaterals such as rhombuses and trapezoids. They identify congruent quadrilaterals and explain their reasoning using specific geometric terms. They draw lines of symmetry for various polygons, and they construct cubes and prisms, developing their ability to work in three dimensions.
Standard 5 — Measurement
The study of measurement is essential because of its uses in many aspects of everyday life. Students measure length to the nearest eighth-inch and millimeter and subtract units of length. They develop and use the formulas for calculating perimeters and areas of rectangles. They compare the concepts of volume and capacity. They add time intervals and calculate the amount of change from a purchase.

Standard 6 — Data Analysis and Probability
Data are all around us — in newspapers and magazines, in television news and commercials, in quality control for manufacturing — and students need to learn how to understand data. At this level, they represent data on a number line and in frequency tables, interpret data graphs to answer questions, and summarize the results of probability experiments in an organized way.

Standard 7 — Problem Solving
In a general sense, mathematics is problem solving. In all mathematics, students use problem-solving skills: they choose how to approach a problem, they explain their reasoning, and they check their results. As they develop their skills with numbers, geometry, or measurement, for example, students move from simple ideas to more complex ones by taking logical steps that build a better understanding of mathematics.

As part of their instruction and assessment, students should also develop the following learning skills by Grade 12 that are woven throughout the mathematics standards:

Communication
The ability to read, write, listen, ask questions, think, and communicate about math will develop and deepen students’ understanding of mathematical concepts. Students should read text, data, tables, and graphs with comprehension and understanding. Their writing should be detailed and coherent, and they should use correct mathematical vocabulary. Students should write to explain answers, justify mathematical reasoning, and describe problem-solving strategies.

Reasoning and Proof
Mathematics is developed by using known ideas and concepts to develop others. Repeated addition becomes multiplication. Multiplication of numbers less than ten can be extended to numbers less than one hundred and then to the entire number system. Knowing how to find the area of a right triangle extends to all right triangles. Extending patterns, finding even numbers, developing formulas, and proving the Pythagorean Theorem are all examples of mathematical reasoning. Students should learn to observe, generalize, make assumptions from known information, and test their assumptions.

Representation
The language of mathematics is expressed in words, symbols, formulas, equations, graphs, and data displays. The concept of one-fourth may be described as a quarter, \( \frac{1}{4} \), one divided by four, 0.25, \( \frac{1}{2} + \frac{1}{8} \), 25 percent, or an appropriately shaded portion of a pie graph. Higher-level mathematics involves the use of more powerful representations: exponents, logarithms, \( \pi \), unknowns, statistical representation, algebraic and geometric expressions. Mathematical operations are expressed as representations: +, =, divide, square. Representations are dynamic tools for solving problems and communicating and expressing mathematical ideas and concepts.
Connections
Connecting mathematical concepts includes linking new ideas to related ideas learned previously, helping students to see mathematics as a unified body of knowledge whose concepts build upon each other. Major emphasis should be given to ideas and concepts across mathematical content areas that help students see that mathematics is a web of closely connected ideas (algebra, geometry, the entire number system). Mathematics is also the common language of many other disciplines (science, technology, finance, social science, geography) and students should learn mathematical concepts used in those disciplines. Finally, students should connect their mathematical learning to appropriate real-world contexts.

Standard 1
Number Sense

Students understand the place value of whole numbers* and decimals to two decimal places and how whole numbers and decimals relate to simple fractions.

4.1.1 Read and write whole numbers up to 1,000,000.
Example: Read aloud the number 394,734.

4.1.2 Identify and write whole numbers up to 1,000,000, given a place-value model.
Example: Write the number that has 2 hundred thousands, 7 ten thousands, 4 thousands, 8 hundreds, 6 tens, and 2 ones.

4.1.3 Round whole numbers up to 10,000 to the nearest ten, hundred, and thousand.
Example: Is 7,683 closer to 7,600 or 7,700? Explain your answer.

4.1.4 Order and compare whole numbers using symbols for “less than” (<), “equal to” (=), and “greater than” (>).
Example: Put the correct symbol in 328 __ 142.

4.1.5 Rename and rewrite whole numbers as fractions.
Example: $3 = \frac{6}{2} = \frac{9}{3} = \frac{2}{4} = \frac{9}{5}$.

4.1.6 Name and write mixed numbers, using objects or pictures.
Example: You have 5 whole straws and half a straw. Write the number that represents these objects.

4.1.7 Name and write mixed numbers as improper fractions, using objects or pictures.
Example: Use a picture of 3 rectangles, each divided into 5 equal pieces, to write $2\frac{3}{5}$ as an improper fraction.

4.1.8 Write tenths and hundredths in decimal and fraction notations. Know the fraction and decimal equivalents for halves and fourths (e.g., $\frac{1}{2} = 0.5 = 0.50$, $\frac{1}{4} = 1\frac{1}{4} = 1.75$).
Example: Write $2\frac{3}{100}$ and $2\frac{3}{4}$ as decimals.

4.1.9 Round two-place decimals to tenths or to the nearest whole number.
Example: You ran the 50-yard dash in 6.73 seconds. Round your time to the nearest tenth.
* whole number: 0, 1, 2, 3, etc.
Standard 2
Computation

Students solve problems involving addition, subtraction, multiplication, and division of whole numbers and understand the relationships among these operations. They extend their use and understanding of whole numbers to the addition and subtraction of simple fractions and decimals.

4.2.1 Understand and use standard algorithms* for addition and subtraction.
Example: 45,329 + 6,984 = ?, 36,296 – 12,075 = ?.

4.2.2 Represent as multiplication any situation involving repeated addition.
Example: Each of the 20 students in your physical education class has 3 tennis balls. Find the total number of tennis balls in the class.

4.2.3 Represent as division any situation involving the sharing of objects or the number of groups of shared objects.
Example: Divide 12 cookies equally among 4 students. Divide 12 cookies equally to find out how many people can get 4 cookies. Compare your answers and methods.

4.2.4 Demonstrate mastery of the multiplication tables for numbers between 1 and 10 and of the corresponding division facts.
Example: Know the answers to 9 × 4 and 35 ÷ 7.

4.2.5 Use a standard algorithm to multiply numbers up to 100 by numbers up to 10, using relevant properties of the number system.
Example: 67 × 3 = ?.

4.2.6 Use a standard algorithm to divide numbers up to 100 by numbers up to 10 without remainders, using relevant properties of the number system.
Example: 69 ÷ 3 = ?.

4.2.7 Understand the special properties of 0 and 1 in multiplication and division.
Example: Know that 73 × 0 = 0 and that 42 ÷ 1 = 42.

4.2.8 Add and subtract simple fractions with different denominators, using objects or pictures.
Example: Use a picture of a circle divided into 6 equal pieces to find \( \frac{5}{6} - \frac{1}{3} \).

4.2.9 Add and subtract decimals (to hundredths), using objects or pictures.
Example: Use coins to help you find $0.43 – $0.29.

4.2.10 Use a standard algorithm to add and subtract decimals (to hundredths).
Example: 0.74 + 0.80 = ?.

4.2.11 Know and use strategies for estimating results of any whole-number computations.
Example: Your friend says that 45,329 ÷ 6,984 = 5,213. Without solving, explain why you think the answer is wrong.

4.2.12 Use mental arithmetic to add or subtract numbers rounded to hundreds or thousands.
Example: Add 3,000 to 8,000 without using pencil and paper.

* algorithm: a step-by-step procedure for solving a problem
Standard 3
Algebra and Functions

Students use and interpret variables, mathematical symbols, and properties to write and simplify numerical expressions and sentences. They understand relationships among the operations of addition, subtraction, multiplication, and division.

4.3.1 Use letters, boxes, or other symbols to represent any number in simple expressions, equations, or inequalities (i.e., demonstrate an understanding of and the use of the concept of a variable).
Example: You read the expression “three times some number added to 5” and you write “3x + 5.” What does x represent?

4.3.2 Use and interpret formulas to answer questions about quantities and their relationships.
Example: Write the formula for the area of a rectangle in words. Now let l stand for the length, w for the width, and A for the area. Write the formula using these symbols.

4.3.3 Understand that multiplication and division are performed before addition and subtraction in expressions without parentheses.
Example: You go to a store with 90¢ and buy 3 pencils that cost 20¢ each. Write an expression for the amount of money you have left and find its value.

4.3.4 Understand that an equation such as \( y = 3x + 5 \) is a rule for finding a second number when a first number is given.
Example: Use the formula \( y = 3x + 5 \) to find the value of \( y \) when \( x = 6 \).

4.3.5 Continue number patterns using multiplication and division.
Example: What is the next number: 160, 80, 40, 20, …? Explain your answer.

4.3.6 Recognize and apply the relationships between addition and multiplication, between subtraction and division, and the inverse relationship between multiplication and division to solve problems.
Example: Find another way of writing 13 + 13 + 13 + 13 + 13.

4.3.7 Relate problem situations to number sentences involving multiplication and division.
Example: You have 150 jelly beans to share among the 30 members of your class. Write a number sentence for this problem and use it to find the number of jelly beans each person will get.

4.3.8 Plot and label whole numbers on a number line up to 100. Estimate positions on the number line.
Example: Draw a number line and label it with 0, 10, 20, 30, …, 90, 100. Estimate the position of 77 on this number line.
Standard 4
Geometry

Students show an understanding of plane and solid geometric objects and use this knowledge to show relationships and solve problems.

4.4.1 Identify, describe, and draw rays, right angles, acute angles, obtuse angles, and straight angles using appropriate mathematical tools and technology.
Example: Draw two rays that meet in an obtuse angle.

4.4.2 Identify, describe, and draw parallel, perpendicular, and oblique lines using appropriate mathematical tools and technology.
Example: Use the markings on the gymnasium floor to identify two lines that are parallel. Place a jump rope across the parallel lines and identify any obtuse angles created by the jump rope and the lines.

4.4.3 Identify, describe, and draw parallelograms*, rhombuses*, and trapezoids*, using appropriate mathematical tools and technology.
Example: Use a geoboard to make a parallelogram. How do you know it is a parallelogram?

4.4.4 Identify congruent* quadrilaterals* and give reasons for congruence using sides, angles, parallels, and perpendiculars.
Example: In a collection of parallelograms, rhombuses, and trapezoids, pick out those that are the same shape and size and explain your decisions.

4.4.5 Identify and draw lines of symmetry in polygons.
Example: Draw a rectangle and then draw all its lines of symmetry.

4.4.6 Construct cubes and prisms* and describe their attributes.
Example: Make a 6-sided prism from construction paper.

* parallelogram: a four-sided figure with both pairs of opposite sides parallel

* rhombus: a parallelogram with all sides equal

* trapezoid: a four-sided figure with one pair of opposite sides parallel

* congruent: the term to describe two figures that are the same shape and size

* quadrilateral: a two-dimensional figure with four sides

* prism: a solid shape with fixed cross-section (a right prism is a solid shape with two parallel faces that are congruent polygons and other faces that are rectangles)
**Standard 5**  
**Measurement**

*Students understand perimeter and area, as well as measuring volume, capacity, time, and money.*

4.5.1 Measure length to the nearest quarter-inch, eighth-inch, and millimeter.  
Example: Measure the width of a sheet of paper to the nearest millimeter.

4.5.2 Subtract units of length that may require renaming of feet to inches or meters to centimeters.  
Example: The shelf was 2 feet long. Jane shortened it by 8 inches. How long is the shelf now?

4.5.3 Know and use formulas for finding the perimeters of rectangles and squares.  
Example: The length of a rectangle is 4 cm and its perimeter is 20 cm. What is the width of the rectangle?

4.5.4 Know and use formulas for finding the areas of rectangles and squares.  
Example: Draw a rectangle 5 inches by 3 inches. Divide it into one-inch squares and count the squares to find its area. Can you see another way to find the area? Do this with other rectangles.

4.5.5 Estimate and calculate the area of rectangular shapes using appropriate units, such as square centimeter (cm²), square meter (m²), square inch (in²), or square yard (yd²).  
Example: Measure the length and width of a basketball court and find its area in suitable units.

4.5.6 Understand that rectangles with the same area can have different perimeters and that rectangles with the same perimeter can have different areas.  
Example: Make a rectangle of area 12 units on a geoboard and find its perimeter. Can you make other rectangles with the same area? What are their perimeters?

4.5.7 Find areas of shapes by dividing them into basic shapes such as rectangles.  
Example: Find the area of your school building.

4.5.8 Use volume and capacity as different ways of measuring the space inside a shape.  
Example: Use cubes to find the volume of a fish tank and a pint jug to find its capacity.

4.5.9 Add time intervals involving hours and minutes.  
Example: During the school week, you have 5 recess periods of 15 minutes. Find how long that is in hours and minutes.

4.5.10 Determine the amount of change from a purchase.  
Example: You buy a chocolate bar priced at $1.75. How much change do you get if you pay for it with a five-dollar bill?

**Standard 6**  
**Data Analysis and Probability**

*Students organize, represent, and interpret numerical and categorical data and clearly communicate their findings. They show outcomes for simple probability situations.*

4.6.1 Represent data on a number line and in tables, including frequency tables.  
Example: The students in your class are growing plants in various parts of the classroom.
Plan a survey to measure the height of each plant in centimeters on a certain day. Record your survey results on a line plot.

4.6.2 Interpret data graphs to answer questions about a situation.
Example: The line plot below shows the heights of fast-growing plants reported by third-grade students. Describe any patterns that you can see in the data using the words “most,” “few,” and “none.”

```
X    X    X
X
X
X    X
X    X
X    X
```

Plant Heights in Centimeters

4.6.3 Summarize and display the results of probability experiments in a clear and organized way.
Example: Roll a number cube 36 times and keep a tally of the number of times that 1, 2, 3, 4, 5, and 6 appear. Draw a bar graph to show your results.

**Standard 7**

**Problem Solving**

*Students make decisions about how to approach problems and communicate their ideas.*

4.7.1 Analyze problems by identifying relationships, telling relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.
Example: Solve the problem: “Find a relationship between the number of faces, edges, and vertices of a solid shape with flat surfaces.” Try two or three shapes and look for patterns.

4.7.2 Decide when and how to break a problem into simpler parts.
Example: In the first example, find what happens to cubes and rectangular solids.

*Students use strategies, skills, and concepts in finding and communicating solutions to problems.*

4.7.3 Apply strategies and results from simpler problems to solve more complex problems.
Example: In the first example, use your method for cubes and rectangular solids to find what happens to other prisms and to pyramids.

4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures.
Example: In the first example, make a table to help you explain your results to another student.

4.7.5 Express solutions clearly and logically by using the appropriate mathematical terms and notation. Support solutions with evidence in both verbal and symbolic work.
Example: In the first example, explain what happens with all the shapes that you tried.
4.7.6 Recognize the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy. Example: You are telling a friend the time of a TV program. How accurate should you be: to the nearest day, hour, minute, or second?

4.7.7 Know and use appropriate methods for estimating results of whole-number computations. Example: You buy 2 CDs for $15.95 each. The cashier tells you that will be $49.90. Does that surprise you?

4.7.8 Make precise calculations and check the validity of the results in the context of the problem. Example: The buses you use for a school trip hold 55 people each. How many buses will you need to seat 180 people?

Students determine when a solution is complete and reasonable and move beyond a particular problem by generalizing to other situations.

4.7.9 Decide whether a solution is reasonable in the context of the original situation. Example: In the last example, would an answer of 3.27 surprise you?

4.7.10 Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems. Example: Change the first example so that you look at shapes with curved surfaces.
Indiana’s academic standards for science contain six standards. Each standard is described below. On the pages that follow, age-appropriate concepts are listed underneath each standard. These ideas build a foundation for understanding the intent of each standard.

**Standard 1 — The Nature of Science and Technology**
It is the union of science and technology that forms the scientific endeavor and that makes it so successful. Although each of these human enterprises has a character and history of its own, each is dependent on and reinforces the other. This first standard draws portraits of science and technology that emphasize their roles in the scientific endeavor and reveal some of the similarities and connections between them. In order for students to truly understand the nature of science and technology, they must model the process of scientific investigation through inquiries, fieldwork, lab work, etc. Through these experiences, students will practice designing investigations and experiments, making observations, and formulating theories based on evidence.

**Standard 2 — Scientific Thinking**
There are certain thinking skills associated with science, mathematics, and technology that young people need to develop during their school years. These are mostly, but not exclusively, mathematical and logical skills that are essential tools for both formal and informal learning and for a lifetime of participation in society as a whole. Good communication is also essential in order to both receive and disseminate information and to understand others’ ideas as well as have one’s own ideas understood. Writing, in the form of journals, essays, lab reports, procedural summaries, etc., should be an integral component of students’ experiences in science.

**Standard 3 — The Physical Setting**
One of the grand success stories of science is the unification of the physical universe. It turns out that all natural objects, events, and processes are connected to each other. This standard contains recommendations for basic knowledge about the overall structure of the universe and the physical principles on which it seems to run, with emphasis on Earth and the solar system. This standard focuses on two principle subjects: the structure of the universe and the major processes that have shaped planet Earth, and the concepts with which science describes the physical world in general – organized under the headings of Matter and Energy and Forces of Nature. In Grade 4, students learn that the properties of rocks reflect the processes that formed them. They investigate force and energy.

**Standard 4 — The Living Environment**
People have long been curious about living things – how many different species there are, what they are like, how they relate to each other, and how they behave. Living organisms are made of the same components as all other matter, involve the same kinds of transformations of energy, and move using the same basic kinds of forces. Thus, all of the physical principles discussed in Standard 3 – The Physical Setting, apply to life as well as to stars, raindrops, and television sets. This standard offers recommendations on basic knowledge about how living things function and how they interact with one another and their environment. In Grade 4, students learn that all organisms need energy and matter to live and grow.
Standard 5 — The Mathematical World
Mathematics is essentially a process of thinking that involves building and applying abstract, logically connected networks of ideas. These ideas often arise from the need to solve problems in science, technology, and everyday life — problems ranging from how to model certain aspects of a complex scientific problem to how to balance a checkbook.

Standard 6 — Common Themes
Some important themes pervade science, mathematics, and technology and appear over and over again, whether we are looking at ancient civilization, the human body, or a comet. These ideas transcend disciplinary boundaries and prove fruitful in explanation, in theory, in observation, and in design. A focus on Constancy and Change within this standard provides students opportunities to engage in long-term and on-going laboratory and fieldwork, and thus understand the role of change over time in studying The Physical Setting and The Living Environment.

Standard 1
The Nature of Science and Technology

Students, working collaboratively, carry out investigations. They observe and make accurate measurements, increase their use of tools and instruments, record data in journals, and communicate results through chart, graph, written, and verbal forms.

The Scientific View of the World

4.1.1 Observe and describe that scientific investigations generally work the same way in different places.

Scientific Inquiry

4.1.2 Recognize and describe that results of scientific investigations are seldom exactly the same. If differences occur, such as a large variation in the measurement of plant growth, propose reasons for why these differences exist, using recorded information about investigations.

The Scientific Enterprise

4.1.3 Explain that clear communication is an essential part of doing science since it enables scientists to inform others about their work, to expose their ideas to evaluation by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.

4.1.4 Describe how people all over the world have taken part in scientific investigation for many centuries.

Technology and Science

4.1.5 Demonstrate how measuring instruments, such as microscopes, telescopes, and cameras, can be used to gather accurate information for making scientific comparisons of objects and
events. Note that measuring instruments, such as rulers, can also be used for designing and constructing things that will work properly.

4.1.6 Explain that even a good design may fail even though steps are taken ahead of time to reduce the likelihood of failure.

4.1.7 Discuss and give examples of how technology, such as computers and medicines, has improved the lives of many people, although the benefits are not equally available to all.

4.1.8 Recognize and explain that any invention may lead to other inventions.

4.1.9 Explain how some products and materials are easier to recycle than others.

**Standard 2**

**Scientific Thinking**

*Students use a variety of skills and techniques when attempting to answer questions and solve problems. They describe their observations* \(^*\) accurately and clearly, using numbers, words, and sketches, and are able to communicate their thinking to others. They compare, explain, and justify both information and numerical functions.*

**Computation and Estimation**

4.2.1 Judge whether measurements and computations of quantities, such as length, area \(^*\), volume \(^*\), weight, or time, are reasonable.

4.2.2 State the purpose, orally or in writing, of each step in a computation.

*observation: gaining information through the use of one or more of the senses, such as sight, smell, etc.

*area: a measure of the size of a two-dimensional region

*volume: a measure of the size of a three-dimensional object

**Manipulation and Observation**

4.2.3 Make simple and safe electrical connections with various plugs, sockets, and terminals.

**Communication Skills**

4.2.4 Use numerical data to describe and compare objects and events.

4.2.5 Write descriptions of investigations, using observations and other evidence as support for explanations.

**Critical Response Skills**

4.2.6 Support statements with facts found in print and electronic media, identify the sources used, and expect others to do the same.
4.2.7 Identify better reasons for believing something than “Everybody knows that ...” or “I just know,” and discount such reasons when given by others.

**Standard 3**  
**The Physical Setting**

*Students continue to investigate changes of Earth and the sky and begin to understand the composition and size of the universe. They explore, describe, and classify materials, motion*, and energy*.*

**The Universe**

4.3.1 Observe and report that the moon can be seen sometimes at night and sometimes during the day.

* motion: the change in position of an object in a certain amount of time  
* energy: what is needed to make things move

**Earth and the Processes That Shape It**

4.3.2 Begin to investigate and explain that air is a substance that surrounds us and takes up space, and whose movements we feel as wind.
4.3.3 Identify salt as the major difference between fresh and ocean waters.
4.3.4 Describe some of the effects of oceans on climate.
4.3.5 Describe how waves, wind, water, and glacial ice shape and reshape Earth’s land surface by the erosion* of rock and soil in some areas and depositing them in other areas.
4.3.6 Recognize and describe that rock is composed of different combinations of minerals.
4.3.7 Explain that smaller rocks come from the breakage and weathering of bedrock and larger rocks and that soil is made partly from weathered rock, partly from plant remains, and also contains many living organisms.
4.3.8 Explain that the rotation of Earth on its axis every 24 hours produces the night-and-day cycle.
4.3.9 Draw or correctly select drawings of shadows and their direction and length at different times of day.

* erosion: the process by which the products of weathering* are moved from one place to another  
* weathering: breaking down of rocks and other materials on Earth’s surface by such processes as rain or wind

**Matter* and Energy**

4.3.10 Demonstrate that the mass* of a whole object is always the same as the sum of the masses of its parts.
4.3.11 Investigate, observe, and explain that things that give off light often also give off heat*.
4.3.12 Investigate, observe, and explain that heat is produced when one object rubs against another, such as one’s hands rubbing together.
4.3.13 Observe and describe the things that give off heat, such as people, animals, and the sun.
4.3.14 Explain that energy in fossil fuels* comes from plants that grew long ago.

* matter: anything that has mass* and takes up space
* mass: a measure of how much matter is in an object
* heat: a form of energy characterized by random motion at the molecular level
* fossil fuels: a fuel, such as natural gas or coal, that was formed a long time ago from decayed plants and animals

Forces of Nature

4.3.15 Demonstrate that without touching them, a magnet pulls all things made of iron and either pushes or pulls other magnets.
4.3.16 Investigate and describe that without touching them, material that has been electrically charged pulls all other materials and may either push or pull other charged material.

Standard 4
The Living Environment

Students learn about an increasing variety of organisms – familiar, exotic, fossil, and microscopic. They use appropriate tools in identifying similarities and differences among them. They explore how organisms satisfy their needs in their environments.

Diversity of Life

4.4.1 Investigate, such as by using microscopes, to see that living things are made mostly of cells.

Interdependence of Life and Evolution

4.4.2 Investigate, observe, and describe that insects and various other organisms depend on dead plant and animal material for food.
4.4.3 Observe and describe that organisms interact with one another in various ways, such as providing food, pollination, and seed dispersal.
4.4.4 Observe and describe that some source of energy is needed for all organisms to stay alive and grow.
4.4.5 Observe and explain that most plants produce far more seeds than those that actually grow into new plants.
4.4.6 Explain how in all environments, organisms are growing, dying, and decaying, and new organisms are being produced by the old ones.
**Human Identity**

4.4.7 Describe that human beings have made tools and machines, such as x-rays, microscopes, and computers, to sense and do things that they could not otherwise sense or do at all, or as quickly, or as well.

4.4.8 Know and explain that artifacts and preserved remains provide some evidence of the physical characteristics and possible behavior of human beings who lived a very long time ago.

4.4.9 Explain that food provides energy and materials for growth and repair of body parts. Recognize that vitamins and minerals, present in small amounts in foods, are essential to keep everything working well. Further understand that as people grow up, the amounts and kinds of food and exercise needed by the body may change.

4.4.10 Explain that if germs are able to get inside the body, they may keep it from working properly. Understand that for defense against germs, the human body has tears, saliva, skin, some blood cells, and stomach secretions. Also note that a healthy body can fight most germs that invade it. Recognize, however, that there are some germs that interfere with the body’s defenses.

4.4.11 Explain that there are some diseases that human beings can only catch once. Explain that there are many diseases that can be prevented by vaccinations, so that people do not catch them even once.

**Standard 5**

**The Mathematical World**

*Students apply mathematics in scientific contexts. Their geometric descriptions of objects are comprehensive. They realize that graphing demonstrates specific connections between data. They identify questions that can be answered by data distribution.*

**Numbers**

4.5.1 Explain that the meaning of numerals in many-digit numbers depends on their positions.

4.5.2 Explain that in some situations, “0” means none of something, but in others it may be just the label of some point on a scale.

**Shapes and Symbolic Relationships**

4.5.3 Illustrate how length can be thought of as unit lengths joined together, area as a collection of unit squares, and volume as a set of unit cubes.

4.5.4 Demonstrate how graphical displays of numbers may make it possible to spot patterns that are not otherwise obvious, such as comparative size and trends.

**Reasoning and Uncertainty**

4.5.5 Explain how reasoning can be distorted by strong feelings.
Standard 6
Common Themes

Students work with an increasing variety of systems and begin to modify parts in systems and models and notice the changes that result. They question why change occurs.

Systems

4.6.1 Demonstrate that in an object consisting of many parts, the parts usually influence or interact with one another.

4.6.2 Show that something may not work as well, or at all, if a part of it is missing, broken, worn out, mismatched, or incorrectly connected.

Models and Scale

4.6.3 Recognize that and describe how changes made to a model can help predict how the real thing can be altered.

Constancy and Change

4.6.4 Observe and describe that some features of things may stay the same even when other features change.