

Unit 4: Water In Alabama History

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Unit 4: Water in Alabama History

Objectives: Each student will be able to:

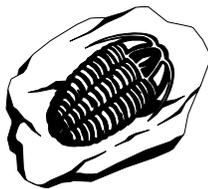
- Discuss the importance of water in early Alabama history.
- Describe the different geographical regions in the state.
- List ways in which dams and the Tennessee-Tombigbee waterway altered Alabama rivers.
- Explain the importance of studying history and geography.

Words to Remember:

- agriculture
- Black Belt
- Coastal Plain
- dam
- fall line
- fossil
- geography
- habitat
- Horseshoe Bend
- hydroelectric power
- industry
- latitude
- mussel
- navigate
- plantation
- port
- shoal
- steamboat
- Tennessee-Tombigbee Waterway
- Tennessee Valley Authority (TVA)
- timber

Background Information

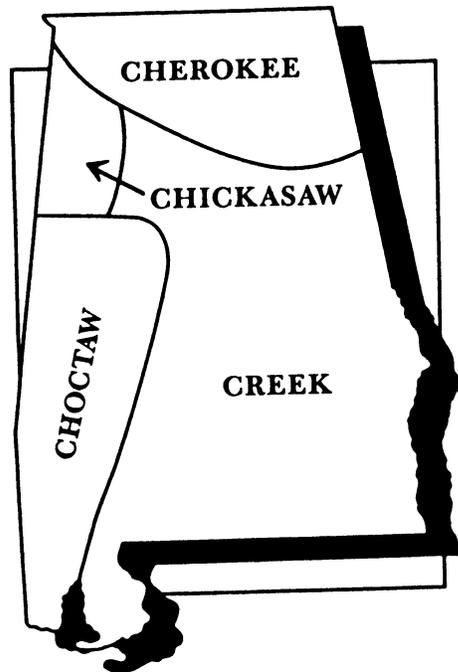
Water has always influenced the history and development of the state of Alabama. Millions of years ago it is believed that a large ocean covered present-day Alabama. Today, we can find **fossils** from creatures that lived in the seas of prehistoric times. Rivers and other landforms were created after volcanoes erupted and the seas withdrew from the land.



Rivers and other waterways in Alabama were important to early wildlife, Native Americans and to how the state was settled by the European explorers. When humans settled Alabama, it was important to be near water. Water is needed for

agriculture, for fishing, in **industry**, for recreation, for plant and animal life and for drinking, cooking, and washing. Water was especially needed for transportation before the invention of trains and automobiles. If you look at a map, you will see that most major cities in the world are located near water. The two oldest cities in Alabama, Montgomery and Mobile, are located on major waterways (the Alabama River and the Gulf of Mexico).

The earliest people in Alabama were the Native Americans. The four main Indian tribes in our state were the Creeks, Choctaws, Cherokees and Chickasaws. Water was useful to these Native Americans for drinking, cooking, washing, fishing and transportation. They used water to make mud for building huts in their tribal villages. Rivers provided a way for trading and communication between different tribes. The largest tribe of Alabama Indians were the Creeks. They used to occupy over

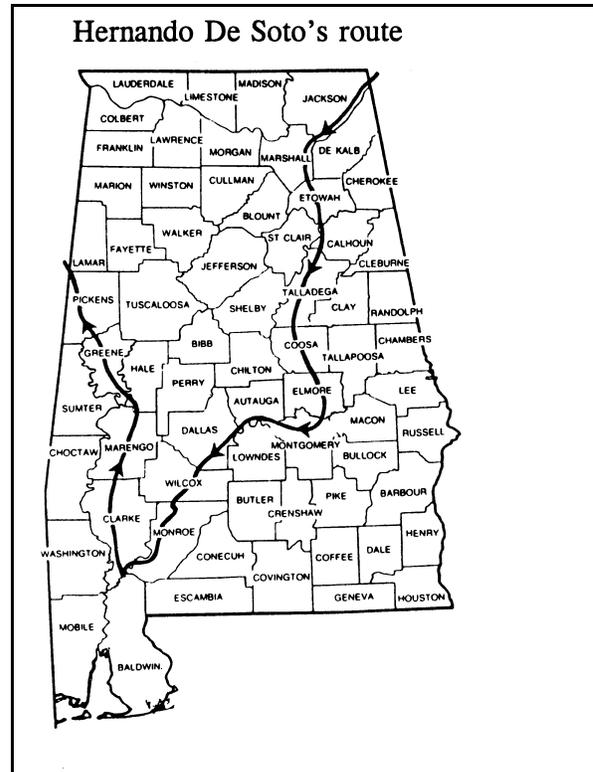


Source: Harris, W.S. 1987.

50% of present day Alabama. Even the name "Creek" reflects an association with water. Early explorers named these Indians Creeks because they lived in areas that had many creeks and streams.

Most of the early European explorers entered Alabama through major waterways. Hernando De Soto, from Spain, was one of the most widely travelled in the state of Alabama. He explored Alabama and the southeast United States between 1539 to 1542. He entered Alabama along the Tennessee and Coosa river valleys in northeast Alabama (see map of Alabama's rivers in Unit 1). If you look at his route (as historians have imagined it), you can see that it follows along major Alabama rivers. Other Spanish explorers came to Mobile Bay in the early 1500's.

After the 16th century, Spain's power in the world declined. The French and English began to explore the Americas. In Alabama, the French moved in through what is today Mobile Bay and the English



Source: Hamilton, V.V. 1986.

moved west from the Charleston, South Carolina settlement into the Coosa and Tallapoosa valleys of eastern Alabama. The rivers of Alabama were especially responsible for the eventual dominance of England over our state. English settlers moved downriver through the Tallapoosa, Coosa and Chattahoochee rivers. It was much more difficult to move upriver from Mobile Bay to the Alabama River for the French. Because English settlers had difficulties with the mostly Creek tribes in eastern Alabama, many moved eventually to the Alabama River area. Since the western shore of the Alabama River had fewer Indians, many of the new settlers made homes there. (Part of this area, known as the **Black Belt**, later became important in the history of the state--we will discuss this later in the chapter).

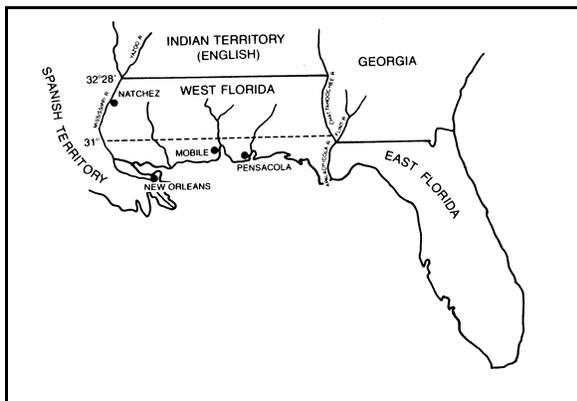
Both the English and the French settlers tried to establish trade and friendship with the Indian tribes. Generally, the Chickasaws and Cherokees became more loyal to the English and the Choctaws and Creeks more supportive of the French.

There was a lot of conflict between England and France in America. In 1763, England defeated France in what is known as the French and Indian War. Because of this war, the French surrendered Canada and all land east of the Mississippi River. Thus, all of Alabama (including the port city of Mobile) came under England's control.

In the Revolutionary War, the American colonists rebelled against England. During this war, Spain joined the Americans in their fight against England. In 1783 the war was over and the United States became an independent country. Spain controlled the territory of Florida and the area of present-day Alabama was controlled by the U.S. The boundary of

included Alabama belonged to the United States, Indians still populated most of this area until the early 1800's. But more and more white Americans came in to settle Alabama (it still was not a state until 1819). The many settlers moving through Georgia and the Carolinas had to travel through Creek lands. This invasion of white people angered the Creeks. Indians had their land taken and many died from diseases introduced by the white man. The habits of the white man were very different from Indian culture. This anger grew and led to the Creek Indian War. Several different battles took place from 1813-1814 in this war.

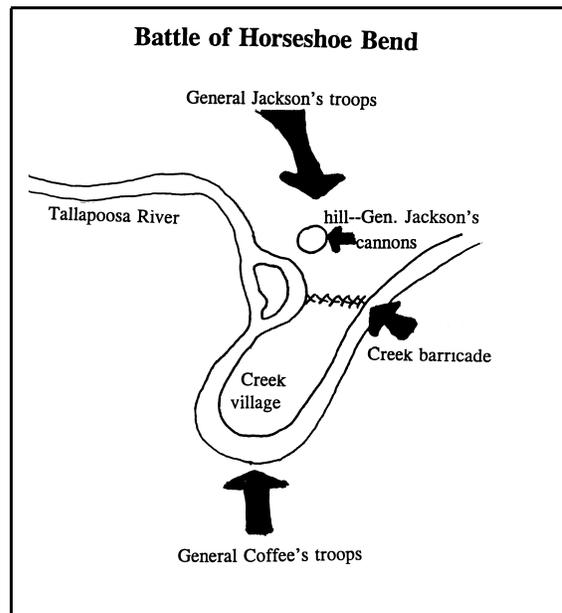
One of Alabama's rivers was important in the final battle of this war. This battle was called the **Battle of Horseshoe Bend**. It took place on a large horseshoe-shaped bend of the Tallapoosa River (near the present-day town of Dadeville). The Creeks barricaded



Source: Hamilton, V.V. 1986.

Florida extended to the 31° parallel. (Look at a map to see the **latitude** lines; these are the lines that are east-west on a map). This boundary is one reason that Alabama does not have a big coastline and the panhandle of Florida belongs to that state instead of Alabama.

Even though the territory which



themselves on the land and thought the river would protect them. Instead, they were surrounded by their white attackers (General Andrew Jackson and General

John Coffee) and lost many men in a bloody battle. Today, this site is Horseshoe Bend National Military Park and is open to visitors.

When the Creeks lost this war, they were forced to give up most of their land to the United States. The Choctaws, Chickasaws and Cherokees were not involved in this battle and were often friendly with the whites, but they also were forced to give up their land. The American government forced most of the Indians to leave the state. They were moved west of the Mississippi River. One such march of the Indians was called "The Trail Of Tears." Many Indians died in this march and by 1838 almost no Indians were left in Alabama.

After gaining control of former Indian lands, many more white pioneers moved into Alabama. They especially moved into the Coosa and Tallapoosa river valleys, which previously belonged to the Creeks. The land and the rivers were very important to how the state was settled. By looking at our state's **geography**, we can understand why different areas were important in different ways.

The land in Alabama is divided into several different areas: mountains, hills and valleys in the north and the **coastal plain** in the south (see Figure 4.1). The **fall line** is the natural boundary between the coastal plain and the northern region. At the fall line, the land drops from the higher hills to the lower plains.

Waterfalls often form in streams and rivers at the fall line. These waterfalls can create water power. This power was used to run machines in factories before electricity was available in our state. One type of industry that used water power was the cotton mill where cloth was made from cotton. These mills and other types of factories were often built near the fall line.

Towns in Alabama along the fall line include Wetumpka, Tuscaloosa, Phenix City and Muscle Shoals.

Agriculture and the **timber** industry have always been important in the Coastal Plain. One region of this plain, called the Black Belt, is known for its rich, black soil. This band of soil is found along the upper Alabama, Cahaba and Tombigbee rivers. Farmers found these soils perfect for growing cotton. Many white men had settled this area and by the 1830's there were many large **plantations** (mostly cotton plantations) located here. The Alabama River was the main source of transportation to ship cotton to Mobile Bay for exportation. Selma and Montgomery became thriving river towns, largely because of the cotton trade. The invention of the **steamboat** made travel much quicker up and down the Alabama River (especially upriver). Steamboats transported cotton and goods and provided an elegant way to travel for people.

In the early history of Alabama, some rivers were not easy to travel. In the 1870's, after the Civil War, the federal government began to spend money on changing Alabama's rivers. **Dams** were built and areas were dredged (dug out to deepen) to make rivers easier to travel. Two rivers especially affected by these projects were the Coosa and the Alabama rivers.

The Tennessee River, which flows from east to west in the northern hill country of Alabama, was also especially difficult to **navigate** (travel by ship). Many areas of the river were very shallow. At the fall line on the Tennessee River (near present-day Muscle Shoals), rapids dropped 100 feet and lasted for several miles. Travel through this portion of the river was not only dangerous but practically impossible. **Note:** In this area many freshwater **mussels** were found. The town created here was

named Muscle Shoals when someone misspelled "mussel." (A **shoal** is a shallow place in the water).

The Tennessee River, however, was a large river and offered many possibilities for various uses. Others recognized its potential and it became important in the later history of Alabama. In the 1930's, President Franklin D. Roosevelt created the **Tennessee Valley Authority (TVA)**. A series of dams were built on this river and shallow areas were dug out to deepen the river. After these changes, the Tennessee River was open to shipping. Dams helped produce **hydroelectric power** (we'll learn about this in another chapter). This power made electricity available to millions of people.

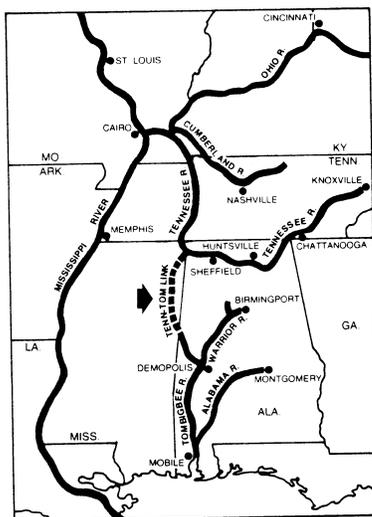
The **Tennessee-Tombigbee Waterway** was another important addition to the Tennessee River and north Alabama. This waterway was a canal that was finished in 1985. It joined the Tennessee and the Tombigbee rivers. Because of this waterway, Mobile Bay and the Gulf of Mexico were now joined to northern Alabama and the central United States by

way of the Tennessee River.

Another important waterway in the state of Alabama is Mobile Bay. Mobile is important because it is a **port** city. Ports are important because they are protected places for ships to dock. Goods can be shipped in and out of Alabama because of Mobile Bay. As we have learned, this area was settled first by Spain, then France and then the English. These early settlers recognized the value of the bay and it is a great resource of our state. When the Tennessee-Tombigbee Waterway was completed, Mobile became an even larger port city.

After the arrival of railroads and automobiles in later Alabama history, rivers were not as important for transportation. These rivers were now useful in a new way. In the early 1900's, under the direction of Alabama Power, many more dams were built on rivers in the southern part of Alabama, some of these before TVA had developed the Tennessee River. Rivers in Alabama were now important as sources of electrical power. Dams built on rivers created lakes and the series of lakes across the state are valued for recreation. The largest lake in our state, Lake Martin, is named for an early president of Alabama Power--Thomas W. Martin. Eventually, many dams were built on the Coosa, Tallapoosa and Alabama rivers. New industries like paper mills and cotton mills located along these rivers and dams.

Of course, the creation of dams and lakes along Alabama's rivers did change the nature of these waterways. Rivers that once had rapids now had lakes and this changed the **habitats** of fish, mussels, snails and other creatures who depended on water. Farmers and other landowners had their lands flooded by lakes after dams were built. Often, industries along the rivers polluted the water. Although these dams helped make electrical power available to



Source: Hamilton, V.V. 1986.

many Alabamians and beautiful lakes for all to enjoy, the rivers of Alabama had been changed forever.

It is important to study the early history and geography of Alabama to understand how our rivers, bay and other waterways affected the development of our state. Alabama's waterways are one of the state's greatest resources. Perhaps this is why our state seal features the rivers of Alabama (Figure 4.2).

Questions for Review

1. Why was it important for Native Americans and early European settlers in Alabama to be near water?
2. What was the largest Indian tribe in Alabama and how is its name associated with water?
3. How has the location of rivers in Alabama affected the way the state was settled?
4. Which river was involved in the Battle of Horseshoe Bend?
5. What is the **fall line**?
6. What important contribution did the **steamboat** make in river travel?
7. How did the building of dams affect the rivers of Alabama?

Questions for Thought

1. If Alabama did not have as many rivers, how do you think the state would have been settled? If these rivers had not been altered by dams or construction such as the Tennessee-Tombigbee Waterway, how would Alabama be today?
2. Imagine that the Florida Panhandle was a part of Alabama. What are some of the ways this would affect the state?
3. How do you think Alabama would be

different today if the Native Americans had not been forced to leave the state?

4. Why is it important to study geography?

Teacher Notes:

Many natural wonders in Alabama were created partly by water processes. Among these are:

- caves (such as Russell Cave near Bridgeport in Jackson County)
- canyons (such as Little River Canyon in DeSoto State Park)--it is one of the deepest canyons east of the Rocky Mountains, Little River is the only river in the U.S. that forms and flows on top of a mountain.
- natural bridges--formed when streams wash away the land underneath (such as Natural Bridge near Haleyville in Winston County)
- waterfalls (such as the 100 foot De Soto Falls on top of Lookout Mountain)
- Mobile Bay and the Mobile-Tensaw Delta, important natural wonders on the Gulf of Mexico
- wetlands, there are many in different parts of Alabama, including the Sipsey River Swamp, a public wetland conservation area

And, of course, there are Alabama's 14 major rivers. If you are located near any of these natural wonders, try to arrange a field trip to the area or be sure to include a discussion of these features in the state.

FIGURE 4.1: Regions of Alabama

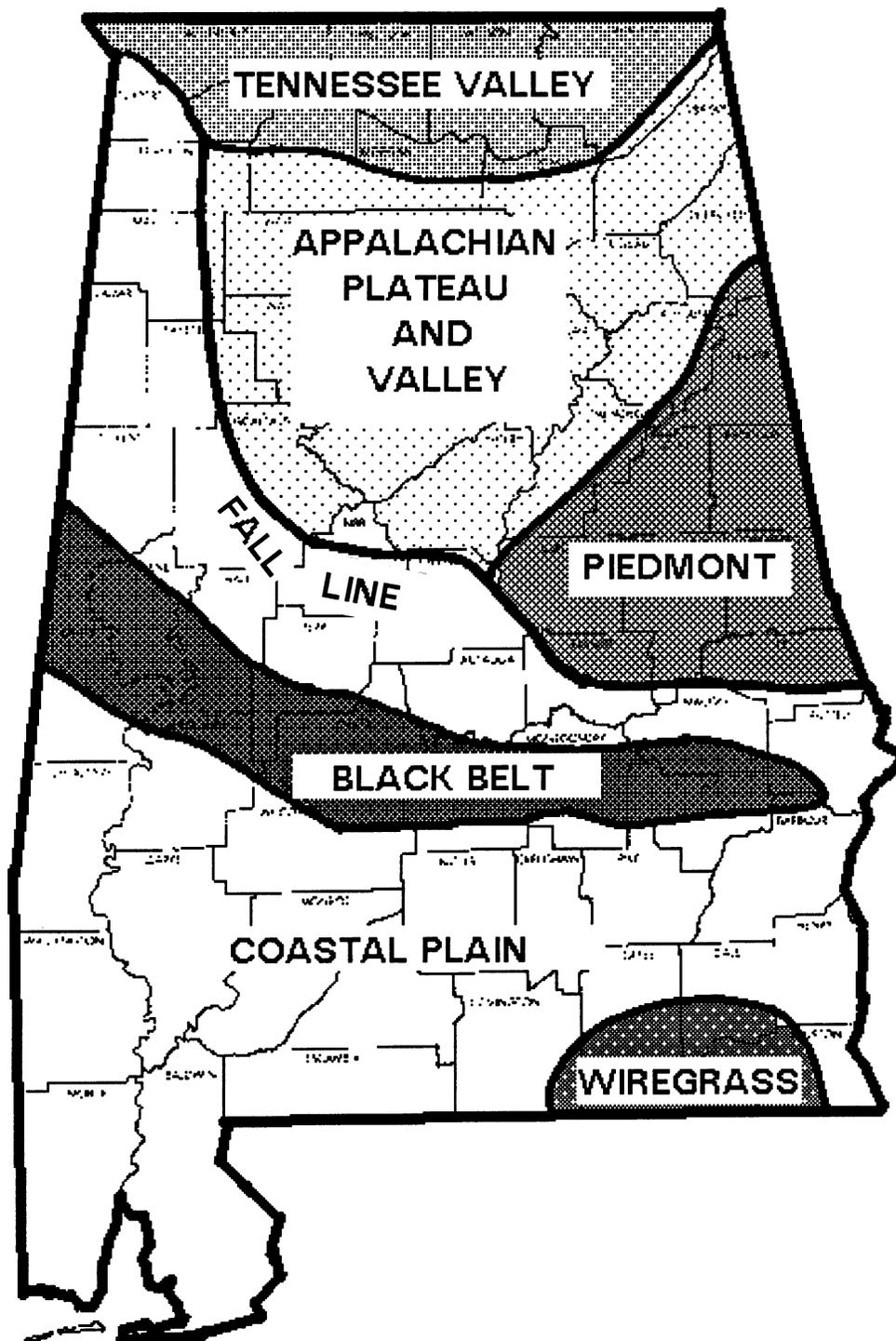
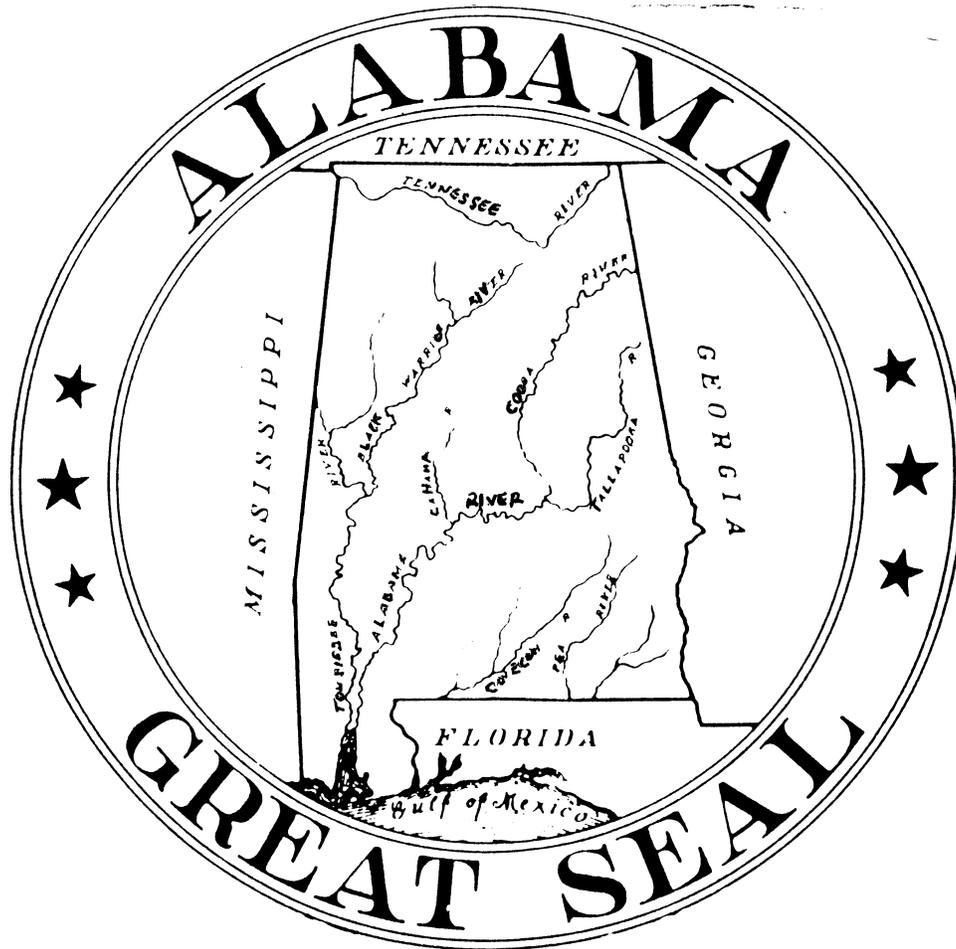


FIGURE 4.2: State Seal of Alabama



FACT SHEET: Water In Alabama History

Interesting facts to remember about water in the history of Alabama:

1. In prehistoric times, present-day Alabama was covered by water.
2. Native Americans and early European explorers mainly settled near important waterways in Alabama.
3. The Creek Indians (the largest tribe in Alabama) were named "Creek" because they usually lived near creeks and streams.
4. Hernando De Soto explored Alabama by following major rivers.
5. Mobile Bay was controlled first by the Spanish, next by the French and later by the English before becoming part of the United States.
6. **Horseshoe Bend** is a bend in the Tallapoosa River and was the site of an important battle in the Creek Indian War.
7. Alabama is divided into 2 major regions: mountains, hills and valleys in the north and the **coastal plain** in the south.
8. The **fall line** separates the two major geographical regions in Alabama.
9. The invention of the **steamboat** made travel much quicker up and down the Alabama River.
10. The **Tennessee Valley Authority (TVA)** built many dams along the Tennessee River.

GLOSSARY: Water In Alabama History

agriculture	The science of preparing the soil, growing crops and raising farm animals; farming.
Black Belt	The area in west-central Alabama called this because of its black-colored soils.
Coastal Plain	The region of southern Alabama which covers approximately sixty percent of the state; it is separated by the Black Belt into the Upper and Lower Coastal Plains.
dam	A barrier across a waterway which is built to control water.
fall line	The natural boundary which separates the coastal plain from the northern hilly regions of Alabama.
fossil	The remains of plants or animals from prehistoric times; often they are preserved in rock.
geography	The study of the different parts of the earth.
habitat	The place where a plant or animal naturally lives.
Horseshoe Bend	A horseshoe-shaped bend of the Tallapoosa River; it was the site of an important battle between the Creek Indians and the white men.
hydroelectric power	Power produced by using water as a natural resource.
industry	A business or factory which makes large amounts of particular types of goods.
latitude	The distance north or south of the earth's equator; it is measured in degrees.
mussel	A type of shellfish which has narrow bluish-black shells; it can be found in freshwater or saltwater.
navigate	To travel by ship.

plantation	A large farm or estate on which crops (usually cotton in Alabama) are grown.
port	A city which has a protected body of water where ships can dock.
shoal	A shallow place in water.
steamboat	A boat which is powered by a steam engine (the power is produced by water vapor under pressure).
Tennessee-Tombigbee Waterway	The waterway that was built when the Tennessee and Tombigbee rivers were joined.
Tennessee Valley Authority (TVA)	The Tennessee Valley Authority--a governmental agency which helps manage the Tennessee River watershed.
timber	Wood which is used for building.

WORKSHEET 4.1: Definitions

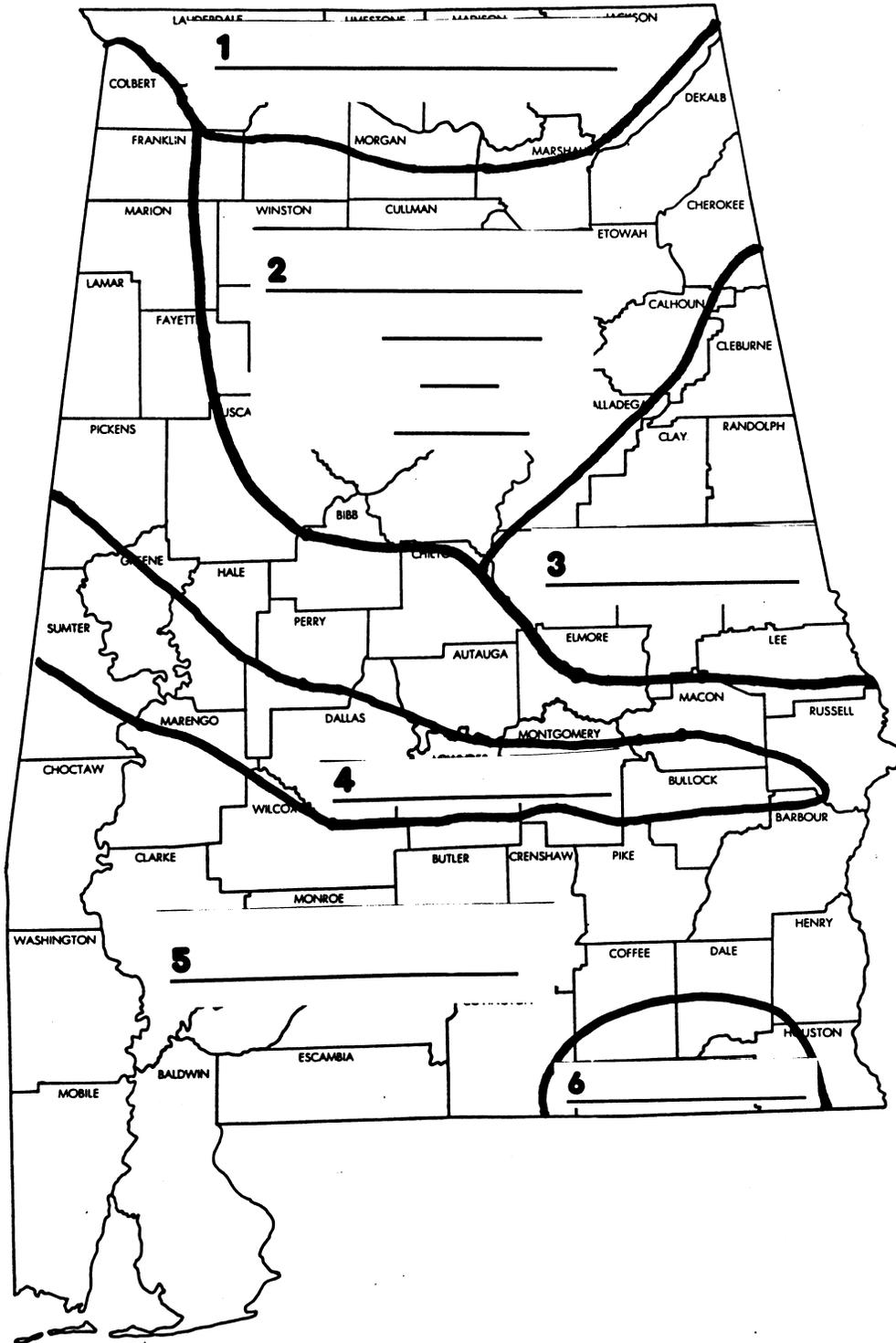
Definitions: In the left column are definitions to the *Words to Remember* and in the right column are the words. Match the words with the correct definitions. Place the letter of the correct definition in the blank to the left of the word.

-
- | | |
|---|-------------------------------------|
| ___ 1. The study of the different parts of the earth. | A. agriculture |
| ___ 2. The natural boundary which separates the coastal plain from the northern hilly regions of Alabama. | B. Black Belt |
| ___ 3. A business or factory makes large amounts of particular types of goods. | C. Coastal Plain |
| ___ 4. The region of southern Alabama which covers approximately sixty percent of the state; it is separated by the Black Belt into the Upper and Lower Coastal Plains. | D. dam |
| ___ 5. A type of shellfish which has narrow bluish-black shells; it can be found in freshwater or saltwater. | E. fall line |
| ___ 6. Wood which is used for building. | F. fossil |
| ___ 7. A shallow place in water. | G. geography |
| ___ 8. A governmental agency which helps manage the Tennessee River watershed. | H. habitat |
| ___ 9. The science of preparing the soil, growing crops and raising farm animals; farming. | I. Horseshoe Bend |
| ___ 10. The place where a plant or animal naturally lives. | J. hydroelectric power |
| ___ 11. To travel by ship. | K. industry |
| ___ 12. Power produced by using water as a natural resource. | L. latitude |
| ___ 13. The waterway that was built when the Tennessee and Tombigbee Rivers were joined. | M. mussel |
| ___ 14. A city which has a protected body of water where ships can dock. | N. navigate |
| | O. plantation |
| | P. port |
| | Q. shoal |
| | R. steamboat |
| | S. Tennessee-Tombigbee Waterway |
| | T. Tennessee Valley Authority (TVA) |
| | U. timber |

- ___ 15. A boat which is powered by a steam engine (the power is produced by water vapor under pressure).
- ___ 16. The area in west-central Alabama called this because of its black-colored soils.
- ___ 17. A barrier across a waterway which is built to control water.
- ___ 18. The distance north or south of the earth's equator; it is measured in degrees.
- ___ 19. A large farm or estate on which crops (usually cotton in Alabama) are grown.
- ___ 20. The remains of plants or animals from prehistoric times; often they are preserved in rock.
- ___ 21. A horseshoe-shaped bend of the Tallapoosa River; it was the site of an important battle between the Creek Indians and the white men.

WORKSHEET 4.3: Regions of Alabama

Directions: Below is a figure of the regions of Alabama. Write the name of the region corresponding to each numbered line.



ACTIVITY 4.1: Making a Fossil

Goal:

To make an impression of an object into mud to simulate the natural process of fossilization.

Objective:

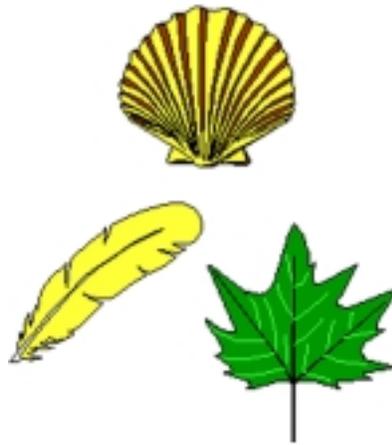
To demonstrate how a fossil is made in nature.

Materials:¹

- fresh leaves, twigs, shells or feathers
- clay soil (not sandy) or plaster of paris
- water
- large dishpan
- round hard plastic caps (such as margarine tub caps, yogurt container lids, etc.)
- toothpicks
- several sheets of newspaper (if done indoors)
- large spoon or measuring cup

Procedure:

1. If possible, take students outside for this activity. Otherwise, use newspaper to cover tables. Collect specimens outdoors or have several available for use.
2. Take pre-mixed mud mixture out of dishpan with a spoon or cup and place inside plastic lid. Or, prepare "mud" mixture from plaster of paris, following directions.
3. Press "fossil" onto mud mixture (shell, leaf, twig, feather, etc.).
4. Let mixture dry for a few days.² Put outside in sun or in a sunny window, if possible.
5. After mixture dries, pick out "fossil" with toothpicks. Take dried piece out of plastic lid.



Teacher Notes:

¹ Before activity, teacher should mix clay soil and water to make thick consistency.

² Before mixture dries, you may want to place a small hole at the top of the circle so that it could be hung with ribbon or string.

Discussion:

When objects in nature are sealed in mud, and this mud hardens to rock, fossils may be preserved for a very long time.

Because Alabama was once covered by an ocean, fossils of whale and shark bones and other sea creatures have been found beneath the soils in our state. Also, when mountains formed in the northern half of the state, rocks were made from soil that had previously been on the bottom of the ocean. Plants and animals from prehistoric times were preserved in these rocks when they hardened.

Discussion Questions:

1. Which "fossil" was easiest to make?
2. Where do you think would be a good place to look for fossils?
3. What do fossils tell us about our past and why are they important to study?

Desired Outcome:

The objects selected will make an impression onto the mud when dried. It may take several days for it to dry completely.

Evaluation:

Students will be able to visualize the process by which a fossil is formed. They should be able to see that objects found in their area could be preserved as fossils in the future. This makes an unwritten history of our environment.

Optional Activities:

1. Do a report on the zeuglodon (*species basilosaurus cetoides*) which is the official Alabama state fossil. This ancient creature was a member of the whale family and many fossils have been found in Alabama, particularly in Clarke, Choctaw and Washington Counties. They

are now displayed at the Red Mountain Museum in Birmingham and at the Smithsonian Institution Museum in Washington, D.C. The fact that this was a water-dwelling creature supports the theory that Alabama was covered by water in prehistoric times. In fact, very few fossils from land-swelling creatures have been found in Alabama.

2. The Anniston Museum of Natural History has many interesting exhibits on Native Americans and early Alabama history. If close to Anniston, see if you can take a field trip to this museum.¹
3. Make an "edible fossil" with cookies. A firm cookie works best--try the slice and bake variety for even shapes. Press a hard object (non-toxic) into the dough before baking, then pick out after done with toothpick.

References:

Joiner, H.M. Alabama Then And Now. Athens, AL: Southern Textbook Publishers, 1986.

US Geological Survey Learning Web:
<http://www.usgs.gov/education/learnweb/Lesson3.html>

AlaWeb General Information Page, Alabama Emblems and Symbols:
http://www.asc.edu/archives/emblems/st_fossil.html

Harris, W.S. A History of Alabama. Montgomery, AL: Clairmont Press, 1987.

Teacher Note:

¹ The museum often offers summer expeditions, led by archaeologists, for teachers and high school students. Participants explore prehistoric sites in Alabama.

ACTIVITY 4.2: A Model of your Region

Goal:

To gain a better appreciation and awareness of your particular region of the state.

Objective:

To make a small-scale replica of your watershed/region by building either a three-dimensional or flat model using native samples of soil, plants, etc. Try to focus on water resources of the region.

Materials:

- large box or large piece of posterboard
- map of area (preferably a topographic map--available at outdoor sporting supply stores or U.S. Geological Survey; Alabama Highway maps are available free of charge at Welcome Centers)
- samples of native specimens of your area (leaves, soil, rocks, wildflowers, insects, local crops, etc.)
- modelling clay
- colored markers
- sand
- newspapers
- pictures of area (from state parks, postcards, Chambers of Commerce, etc.)
- field guides to trees, insects, wildflowers, etc. (optional)
- camera (optional)
- glue
- tape
- scissors
- small plastic houses, farm animals, automobiles, trees, etc.

Procedure:

1. Decide whether or not to build your model in a box or on a posterboard. In a hilly region, a three-dimensional model would better illustrate your environment.
2. Select an area of your region which you would like to represent. It could be a waterway, a town, a recreational area, etc. Decide if you want to do a large scale model (such as your whole county) or a detailed model of a smaller area. Use area maps to get a clearer picture of your region.
3. With the map as your guide, plan out your model. You may want to sketch it first in pencil.
4. Refer to Activity 7.5 "Making a Model of a Watershed" for making hills in your model. Crumpled pieces of newspaper covered with sand or soil may work well. Use blue markers or blue ribbon for waterways.

5. Take pictures of different areas in your region or obtain pictures from other sources. Cut and paste or tape pictures along walls of box or on poster.
6. Attach samples of local specimens to your model with tape or glue. Using the field guides, label the leaves, flowers, etc.

Optional Activity:

Recreate what you imagine your area would have been when Native Americans lived in your area. Make a model of this era. Research which tribe lived predominantly in your region.

Discussion:

An investigation of your region of Alabama will increase your awareness of the natural features in your area. If you build a model of a watershed, you may get a better idea of how different parts of the area influence the watershed, e.g. towns, farms, factories, etc.

Discussion Questions:

1. What do you think is the most unique natural area in your community?
2. How do you think your region has changed since the early history of the state?
3. What are the major rivers or lakes in your area?
4. Which Indian tribe was in your area? Are there any towns with Indian names in your community?
5. Look at the map of DeSoto's route in the background information of this unit. Did he come through your area when he explored Alabama?

Extensions:

1. Try an exchange program with another club or class from a different area of your state. Box up different materials that are unique or predominant to your region and send these to another group of students. You could include plant samples (no live animals or insects), important crops, pictures, newspaper articles about environmental concerns in your region, information about recreational areas, etc. Try to cooperate with another class to send you materials from their region.
2. Have a local park ranger, college professor, Extension County Agent, etc. come and talk to your group about your region and important wildlife, geology or other characteristics of your part of the state.
3. Make a time line of events in your area to go along with your model. Try to include events which most significantly altered the natural environment.

Evaluation:

Students will be able to visualize the major features of their region. A model built of a larger area (such as a watershed) will give a better representation of how different features in the region interact.

References:

Internet: www.gene.com/ae (Access Excellence/Genentech Activities Exchange), "Biomes in a Box," "Biome Exchange - Send the "Stuff" Not The Kids"

ACTIVITY 4.3: Rivers in Alabama

Goal:

To gain an awareness of the importance of rivers in Alabama history.

Objective:

To focus on a particular river system in Alabama and its influence on the state and to make a report on this river.

Materials:

- topographic map of your area (available at outdoor sporting stores or the U.S. Geological Survey*)
 - * address for USGS:
USGS Branch of Distribution
Box 25286
Denver Federal Center
Denver, CO 80225
Telephone : (303) 236-7477
- Alabama History books (available at your school or library)
- Chamber of Commerce information

Procedure:

Select one of the following rivers and write a report on its importance in the state. Include significant historical facts and present-day importance. Be sure to mention which Native American tribe inhabited the region and how the river has changed since early times. Also, be sure to include the geographic region of the state in which it is located (i.e., Piedmont, Coastal Plain, Mountains, etc.)

Optional or Extended Activity:

Write a "folktale" or make up a Native American legend about the river. Storytelling was an important part of Native American culture. In the story, include any unique landforms in the area and make up a tale about these (e.g., a mountain range, a particular turn in the river, a swamp, etc.). For example, Nocalula Falls near Gadsden is named for a legendary Cherokee princess named Nocalula who jumped over the falls rather than marry a man she did not love.

Major Alabama Rivers

Alabama River

This river is formed by the union of the Coosa and the Tallapoosa rivers south of Wetumpka. It is the largest river that begins and ends in the state. It is the longest river in Alabama and is named for the Alabama Indians.

Black Warrior River

This river is formed by the union of Mulberry, Locust Fork, and Sipsey Fork Creeks. It is important to agricultural and mineral areas of west-central Alabama. Before dams were constructed, there were big falls north of Tuscaloosa. The Choctaw word "tuska loosa" means "black warrior."

Cahaba River

This river begins in the mountains in St. Clair county and meets the Alabama River south of Selma. Because it is the only undammed major river in the state, it is the state's largest free-flowing river. This river crosses many different regions: from mountains to piedmont to coastal plain and is said to contain more fish species per mile than any other river of its size in North America.

Chattahoochee River

This river begins in the mountains of Georgia, goes by Atlanta and enters Alabama at West Point in Chambers County. It forms the eastern border of Alabama with Georgia for about 200 miles. It is called the Apalachicola River in Florida where it flows to the Gulf of Mexico.

Coosa River

This river is formed by two rivers in Rome, Georgia. It enters Alabama in Cherokee County and meets the Tallapoosa in Wetumpka. In Choctaw, "coosa" means "cane."

Tallapoosa River

This river begins about 40 miles west of Atlanta, and enters Alabama at Cleburne County. It flows through the Piedmont Plateau. Before dams made Lake Martin, there used to be big waterfalls near Tallassee. There were many **shoals**, reefs, and rapids which made navigation for boats very difficult. "Tali pushi" means "pulverized rocks" in Choctaw.

Tennessee River

This river begins near Knoxville, Tennessee and enters Alabama in Jackson County. It travels westward at Lake Guntersville, then flows south, then northwest, eventually flowing into the Ohio River at Paducah, Kentucky. It was very difficult to navigate the Tennessee River before the construction of dams, especially in the area of Muscle Shoals. This river is unique because it flows south and then north.

Tombigbee River

This river begins in northeastern Mississippi. It enters Alabama in Pickens County and flows into the Black Warrior River. The Tennessee-Tombigbee Waterway linked the Tennessee River and the Tombigbee River, making it the longest river *system* (not river), in the state. "Etomba ikibee" means "coffin maker" in Choctaw. Legend is that an Indian coffin maker lived near this river.

Optional Activity:

Students may wish to do a report on one of the dams built in the state. Make sure they do research on why it was built and how it has altered the river. Other possibilities for reports include the Tennessee-Tombigbee Waterway, Mobile Bay and the Gulf of Mexico or one of the smaller rivers in the state, e.g. Mobile, Tensaw, Pea, Choctawhatchee, Conecuh, Perdido, etc.

Discussion:

This activity will help the students be more aware of the importance of rivers in Alabama. By researching a particular river, its role in shaping history should be better appreciated. Certain rivers, like the Tennessee and Tombigbee have been altered quite significantly from their natural origins.

Discussion Questions:

1. What was the most interesting thing you learned about the river you investigated?

2. What is the importance of this river to Alabama?
3. How has this river changed since the early days of the state and what are the advantages and disadvantages of these changes?

Desired Outcome:

Students will complete a report on a river system in the state and be able to highlight the importance of this river to Alabama history. Hopefully, they will be able to see changes in the role this river has played throughout history.

Evaluation:

Students' reports will be judged on the basis of how well they have described a river's role in Alabama history. They should include the geographical region in which the river is located.

ANSWER KEY
WORKSHEET 4.1: Definitions

Definitions: In the left column are definitions to the *Words to Remember* and in the right column are the words. Match the words with the correct definitions. Place the letter of the correct definition in the blank to the left of the word.

-
- | | |
|--|-------------------------------------|
| <u>G</u> 1. The study of the different parts of the earth. | A. agriculture |
| <u>E</u> 2. The natural boundary which separates the coastal plain from the northern hilly regions of Alabama. | B. Black Belt |
| <u>K</u> 3. A business or factory makes large amounts of particular types of goods. | C. Coastal Plain |
| <u>C</u> 4. The region of southern Alabama which covers approximately sixty percent of the state; it is separated by the Black Belt into the Upper and Lower Coastal Plains. | D. dam |
| <u>M</u> 5. A type of shellfish which has narrow bluish-black shells; it can be found in freshwater or saltwater. | E. fall line |
| <u>U</u> 6. Wood which is used for building. | F. fossil |
| <u>Q</u> 7. A shallow place in water. | G. geography |
| <u>T</u> 8. A governmental agency which helps manage the Tennessee River watershed. | H. habitat |
| <u>A</u> 9. The science of preparing the soil, growing crops and raising farm animals; farming. | I. Horseshoe Bend |
| <u>H</u> 10. The place where a plant or animal naturally lives. | J. hydroelectric power |
| <u>N</u> 11. To travel by ship. | K. industry |
| <u>J</u> 12. Power produced by using water as a natural resource. | L. latitude |
| <u>S</u> 13. The waterway that was built when the Tennessee and Tombigbee Rivers were joined. | M. mussel |
| <u>P</u> 14. A city which has a protected body of water where ships can dock. | N. navigate |
| | O. plantation |
| | P. port |
| | Q. shoal |
| | R. steamboat |
| | S. Tennessee-Tombigbee Waterway |
| | T. Tennessee Valley Authority (TVA) |
| | U. timber |

- R** 15. A boat which is powered by a steam engine (the power is produced by water vapor under pressure).
- B** 16. The area in west-central Alabama called this because of its black-colored soils.
- D** 17. A barrier across a waterway which is built to control water.
- L** 18. The distance north or south of the earth's equator; it is measured in degrees.
- O** 19. A large farm or estate on which crops (usually cotton in Alabama) are grown.
- F** 20. The remains of plants or animals from prehistoric times; often they are preserved in rock.
- I** 21. A horseshoe-shaped bend of the Tallapoosa River; it was the site of an important battle between the Creek Indians and the white men.

**ANSWER KEY
WORKSHEET 4.2: Vocabulary**

Directions: Use the following words to write four sentences about water in Alabama history. Underline these words in the sentences.

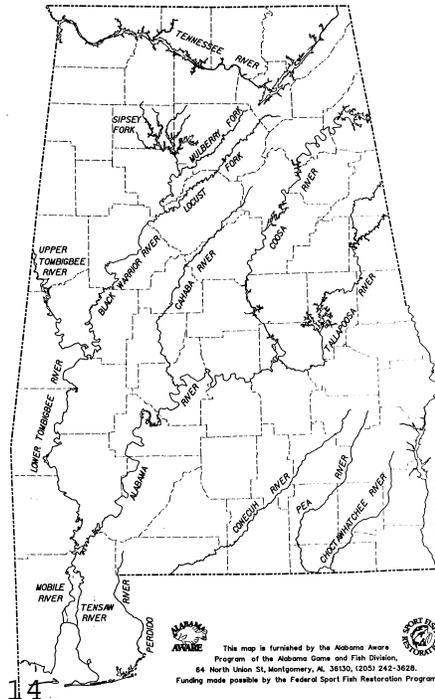
Mobile Bay

Coastal Plain

fall line

Tennessee Valley
Authority (TVA)

Alabama River



agriculture

Creek Indians

steamboat

dam

Horseshoe Bend

Tennessee-
Tombigbee
Waterway

1. Mobile Bay is important to Alabama because it is a port city.

2. The Coastal Plain is in South Alabama.

3. The fall line is a natural boundary between the hilly region of North Alabama and Coastal Plain in the south.

4. The Tennessee River had many dams built by TVA projects.

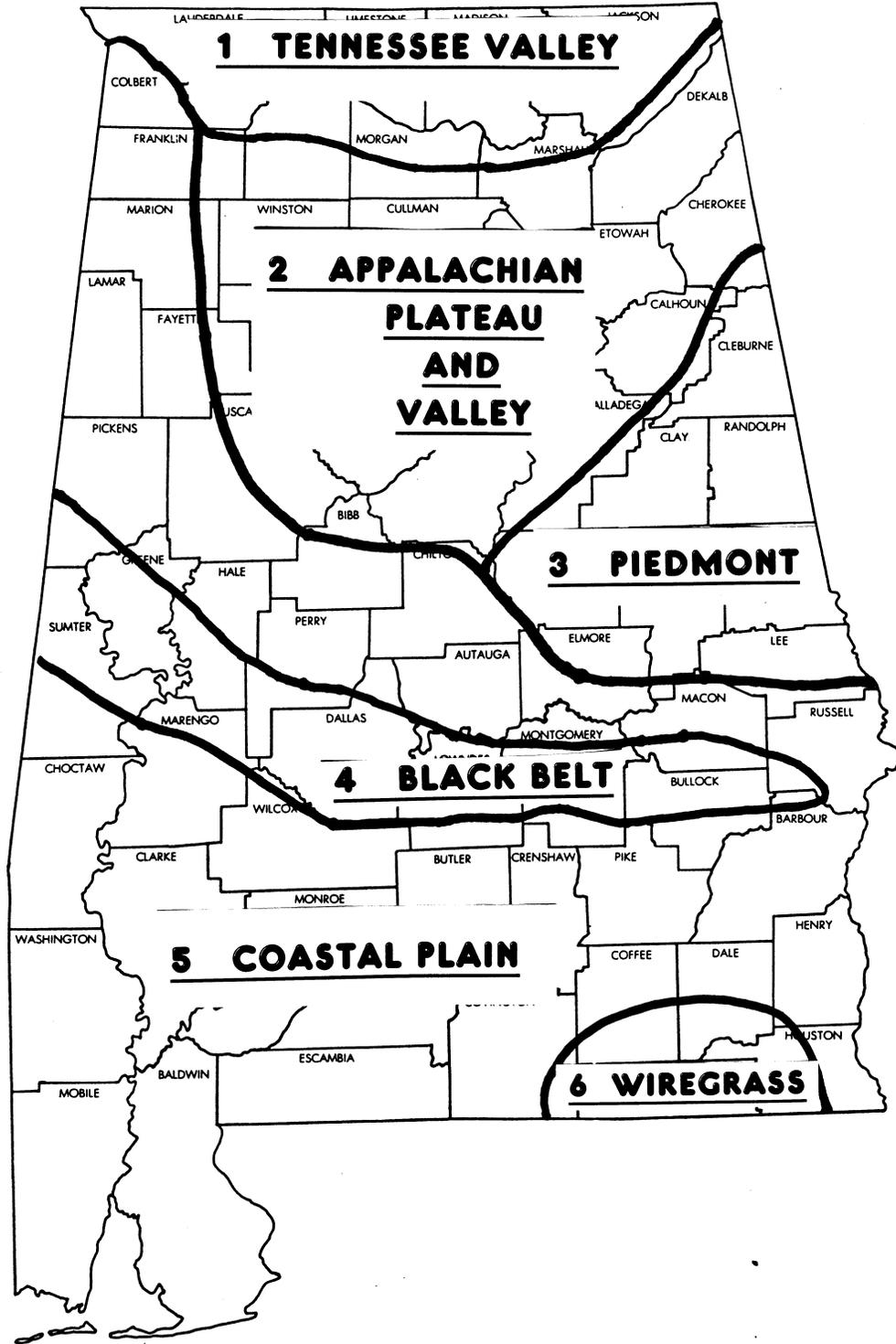
5. Steamboats used to travel up and down the Alabama River in the 1800's.

6. The rich soils of the Black Belt made agriculture important to this region.

7. The Creek Indians were the biggest Indian tribe in Alabama. They lost a bloody in the Creek Indian War at Horseshoe Bend.

8. The Tennessee-Tombigbee Waterway joined the Tennessee and Tombigbee rivers, creating a shipping route from the Tennessee River to the Gulf of Mexico.

ANSWER KEY
WORKSHEET 4.3: Regions in Alabama



HOW AM I DOING?

<u>Page</u>	<u>Yes</u>	<u>No</u>	<u>Date</u>
4-3 Practice reading and saying Words to Remember	_____	_____	_____
4-8 Answer Questions for Review	_____	_____	_____
4-8 Answer Questions for Thought	_____	_____	_____
4-11 Read Fact Sheet	_____	_____	_____
4-12 Review Glossary	_____	_____	_____
	<u>Possible Score</u>	<u>My Score</u>	<u>Date</u>
4-14 Worksheet 4.1: Definitions	<u>21</u>	_____	_____
4-16 Worksheet 4.2: Vocabulary	<u>11</u>	_____	_____
4-17 Worksheet 4.3: Regions of Alabama	<u>6</u>	_____	_____
	<u>Complete</u>	<u>In- Complete</u>	<u>Date</u>
4-18 Activity 4.1: Making a Fossil	_____	_____	_____
4-20 Activity 4.2: A Model of Your Region	_____	_____	_____
4-22 Activity 4.3: Rivers in Alabama	_____	_____	_____