

Title of Lesson: *A Study of the Physical Regions of Alabama*
(Suggested grade level: 4)

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Background Information:

- The following link provides a taped video presentation by Dr. John Hall on January 15, 2009, detailing the physical geography and geology of Alabama. This presentation was a part of the *ArchiTreats* series of lectures presented by the Alabama Department of Archives and History in celebration of the Year of Alabama History, 2009.

<http://www.archives.alabama.gov/video/at0109.cfm>

(This presentation is also available on the *APTPlus* Web site:

<http://www.aptv.org/APTPPLUS/Digitallibrary/digitalmediadetail.asp?ConVidID=65>)

- For additional information about the physical geography and geology of Alabama, the [Encyclopedia of Alabama](http://encyclopediaofalabama.org/face/Home.jsp) <http://encyclopediaofalabama.org/face/Home.jsp> provides several articles on these topics.

Overview of Lesson: In this lesson, students will learn the characteristics of the five geographic regions of Alabama by researching the regions using maps, the Internet, and books. The students will also make a salt dough map depicting Alabama's land regions.

Content Standards

[*Alabama Course of Study: Social Studies*](#) (Bulletin 2004, No. 18)

Fourth Grade: Standard 1, p. 29

[*Alabama Course of Study: Science*](#) (Bulletin 2005, No. 20)

Fourth Grade: Standard 7, p. 24

National Council for Geographic Education, 1994

Geographic Standard 4-Grades K-4 (p. 113)

Places and Regions

The student is able to:

- A. Describe and compare the physical characteristics of places at a variety of scales, local to global, as exemplified by being able to
 - Use a variety of visual materials and data sources (e.g., photographs, satellite-produced images, pictures, tables, charts) to describe the physical characteristics of a region, noting items that have similar distributions (e.g., trees in river valleys)
 - Use cardboard, wood, clay, or other materials to make a model of a region that shows its physical characteristics (e.g., landforms, bodies of water, vegetation)

Primary Learning Objective(s):

- The student will be able to recognize and identify the land regions of Alabama; describe the natural resources and environments of the regions; and demonstrate map skills by making, painting, and labeling a physical map of the land regions of Alabama.

Additional Learning Objective(s):

- The student will be able to categorize geological features of Alabama, e.g. plateaus - Cumberland Plateau, plains - East Gulf Coastal Plain

Time allotted: Two class sessions of 30 minutes each for instruction and activity

Materials and Equipment:

- Primary source maps of land regions
- Alabama Land Regions handout (*Attachment 1*)
- Items for display (*optional, see Extension*) from the five regions of Alabama such as: cotton, coal, soil, corn, soybeans, limestone, marble, iron
- History journals
- Anchor chart with the five geographic regions of Alabama listed as headings
- Sticky notes
- Cardboard or stock for map base
- Food coloring - Five colors will be needed. This could be an opportunity to teach how colors combine to form other colors.
- Grading rubric for map (*Attachment 2*)
- Salt dough (Find a recipe online or use the one below) or clay

- Recipe for dough:

Ingredients:

1 cup of salt

2 cups of flour

1 cup of water

5 zipper quart or gallon storage bags to be used to mix the dough

Directions:

You may add 2 or 3 teaspoons of lemon juice to make your dough finish harder.

In the storage bag, knead the dough with the desired food coloring. The average drying time is 28-50 hours.

(It would be expedient to have dough premixed and separated. If you have parent volunteers, have them mix the dough.)

Technology Resources Needed:

- Computer with Internet access
 - LCD projector
- (If computer and projector are not available, have hard copies of maps for students.)

Background/Preparation:

- The students should be able to read and interpret a relief map.
- An excellent presentation on Alabama's geology and geography was given by Dr. John Hall at *ArchiTreats*, a monthly lecture series, at the Alabama Department of Archives and History in January, 2009. This presentation contains some very beautiful photographs of Alabama and is available on the ADAH Web site and on the *APTPlus* Web site:

<http://www.aptv.org/APTPPLUS/Digitallibrary/digitalmediadetail.asp?ConVidID=65>. This presentation or parts of the presentation may be shown to students for background information.

Procedures/Activities:

Engagement/Motivation Activity:

- In a story-like manner, teach students that the land regions were formed before the first inhabitants of Alabama arrived by saying:

“Let me tell you about something that happened long before you were a baby, long before I was a baby, long before the ‘Choctaw-Chickasaw-Cherokee-Creek,’ and even before the Paleo-Indians reached Alabama at the end of the Ice Age - not the movie. There were no counties, no cities, just the land. Alabama had formed naturally into five major land regions. Think about land regions and about what you think they are. I am going to show you some maps that might help you to get a better understanding of what a land region might be.”
- Show primary source maps. Teach students that a land region has geographic, political, or cultural characteristics that distinguish it from others whether it exists in only one state or country or extends over several.

Primary source maps:

[http://cartweb.geography.ua.edu:9001/StyleServer/calcrn?cat=Special%20Topics&item=Geology/algeology1894.sid&wid=500&hei=400&props=item\(Name,Description\),cat\(Name,Description\)&style=simple/vie w-dhtml.xsl](http://cartweb.geography.ua.edu:9001/StyleServer/calcrn?cat=Special%20Topics&item=Geology/algeology1894.sid&wid=500&hei=400&props=item(Name,Description),cat(Name,Description)&style=simple/vie w-dhtml.xsl)

<http://alabamamaps.ua.edu/contemporarymaps/alabama/physical/relief.jpg>

Step 1	Show map of Alabama land regions from the following Web site: http://alabamamaps.ua.edu/contemporarymaps/alabama/physical/basemap6.jpg http://www.encyclopediaofalabama.org/face/assets/PDFs/Physiographic%20Sections%20Figure%202.pdf Give an overview of the five regions and point out land forms.
Step 2	Instruct students that although the work will be completed in groups, each student will be responsible for knowing the characteristics of all five regions, and each group will be responsible for a presentation on one region (Jigsaw). Divide students into five groups and distribute <i>Alabama Land Regions</i> handout. Students may also utilize information in textbooks and on the internet. Students will work in groups to find important facts about each region such as its natural resources, its land forms, and its flora and fauna. Students should also note the role of the fall line in the geography of the state and that some counties cross land regions. Groups will present learned information in jigsaw fashion. As this information is presented, each student will write facts about each region on sticky notes.
Step 3	On an anchor chart, each group will place its sticky notes on the appropriate region.

Step 4	<p>The students will play the game “Which Region Is it?” in which students divided into teams attempt to identify the various land regions of Alabama based upon clues taken from the handout, “Land Regions of Alabama.”</p> <ul style="list-style-type: none"> • Students will be divided into teams of three or four and they will select a team spokesman. • Each team will create and label index cards with the names of the land regions of Alabama. • After the teacher reads a clue about the land regions of Alabama, the team will discuss and select an answer. • The team spokesman will hold up the correct answer. • Remember that certain characteristics may be found in more than one land region, such as growing cotton. The team with the most correct answers wins.
Step 5	<p>Students will write a description of the five land regions of Alabama in their journals and write what they want to learn about Alabama in future lessons.</p>
Step 6	<p>The students will use salt dough to make maps of Alabama using different colors of dough to depict each land region. Students will label the maps after they have dried.</p>

Assessment Strategies:

- Teacher will assess student-made maps using the attached map rubric. (*Attachment 2*)
- Knowledge of vocabulary will be assessed on a unit test.

Extension:

- The students will create a brochure depicting the five land regions and the natural resources found in each region. (Students may use a computer program to create the brochure or they may create the brochures using paper and photographs collected from magazines or from Web sites.)
- Using a display of different types of natural resources, rocks, and soils from the land regions, the students will determine in which region(s) the item could be found.

Land Regions of Alabama

Highland Rim

- located just north of the Tennessee River
- sometimes called the Interior Low Plateau
- flat land, good for growing soybeans, cotton, and corn

East Gulf Coastal Plain

- largest land region
- most of its land less than 500 feet above sea
- covers most of the central and southern parts of Alabama
- contains pine forests
- areas of rich, loamy soil
- oil and gas resources

Cumberland Plateau

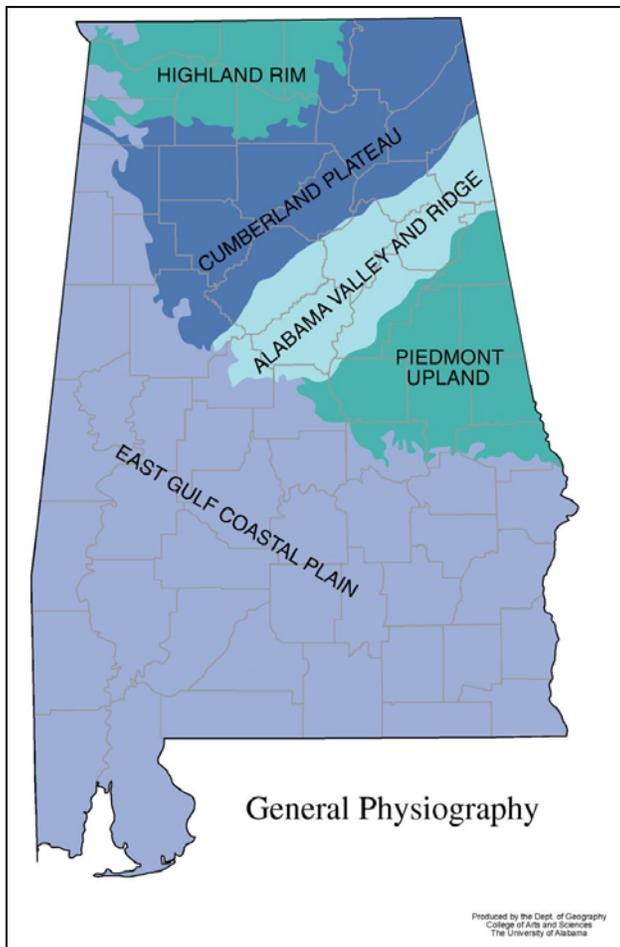
- also called the Appalachian Plateau
- varied land forms including tree-covered mountains, flat land, and rolling hills

Alabama Valley and Ridge

- rich in iron ore, coal, and limestone
- mountains are part of the Appalachian Mountains
- contains limestone valleys and sandstone mountain ridges

Piedmont Upland

- tree-covered rolling hills and sandy valleys
- hills contain iron ore, limestone, and marble



Vocabulary

- physiography – the study of the physical features of the Earth's surface
- plateau – an elevated, comparatively level expanse of land; a tableland
- plain – an area of land that has low relief, meaning that it is flat
- fall line – marks the area where the upland region and the coastal plain meet
- river valley – a depression which extends in one direction
- flood plain – a formation at the base of a river valley created by the deposit of sediment
- delta – a landform at the mouth of a river
- loam – soil which contains sand, silt, and clay and is usually fertile and ideal for agricultural use

Making A Map : Land Regions of Alabama

Student Name: _____

Date: _____

CATEGORY	4 points	3 points	2 points	1 point	Score
Neatness of Color and Lines	All straight lines are ruler-drawn, all errors have been neatly corrected and all features are colored completely.	All straight lines are ruler-drawn, most errors have been neatly corrected and most features are colored completely.	Most straight lines are ruler-drawn, most errors have been neatly corrected and most features are colored completely.	Many lines, corrections of errors, and/or features are not neatly done.	
Labels - Accuracy	At least 90% of the items are labeled and located correctly.	80-89% of the items are labeled and located correctly.	79-70% of the items are labeled and located correctly.	Less than 70% of the items are labeled and located correctly.	
Knowledge Gained	All five land regions are depicted accurately on the salt-dough map.	At least four of the regions are depicted accurately on the salt-dough map.	At least three of the regions are depicted accurately on the salt-dough map.	Fewer than three land regions are depicted accurately on the salt-dough map.	
Map Legend/Key	Legend is easy to find and contains a complete set of symbols, including a compass rose.	Legend contains a complete set of symbols, including a compass rose.	Legend contains an almost complete set of symbols, including a compass rose.	Legend is absent or lacks several symbols.	
Title	Title tells the purpose/content of the map, is clearly distinguishable as the title (e.g. larger letters, underlined, etc), and is printed at the top of the map.	Title tells the purpose/content of the map and is printed at the top of the map.	Title tells the purpose/content of the map, but is not located at the top of the map.	Purpose/content of the map is not clear from the title.	

TOTAL _____