**Objectives**  
Students will:

* become familiar with physical maps and their functions by reading a physical map of South America and creating a physical map of a portion of the Andes
* learn about the geography, environment, and human cultures of the Andes by researching and presenting oral reports on a specific region of the mountain range.

**Materials**

* Computer with Internet access
* Internet Videos about Human and Physical Geography of South America
* Geography texts and library resources
* Physical map of South America

**Procedures**

1. 1. Open the lesson by talking about the human and physical geography of South America and the Andes. A good way to introduce both is to view videos about the geography of South America and the Andes.
2. Briefly discuss the geology of the Andes and how this mountain range has helped shape South America. Discuss how the Andes is comprised of several small mountain ranges. Show students a physical map of South America and demonstrate how to read the map, pointing out where the Andes mountains are higher or lower, and where they are wider or narrower.
3. Tell students that the Andes may be broadly divided into three regional zones: the Northern Andes, which includes the mountains that run through Colombia, Venezuela, Ecuador, and parts of northern Peru; the Central Andes, which includes the part of the range that runs through Bolivia, the rest of Peru, northern Argentina, and Chile; and the Southern Andes, which includes the mountains that run through southern Chile and Argentina, through Patagonia, and down to the southernmost tip of South America, Tierra del Fuego.
4. Divide the class into three groups, one for each of the Andes' three regional zones: northern, central, and southern. Explain that the groups will put together oral reports on their regional zones and then present them to the rest of the class. The reports must be at least five minutes long and include these eight criteria:

* + A physical map of the zone (large enough to be used as a visual aid during the presentation)
  + Information on the zone's topography (Is this a wide section of the Andes? How high are the mountains? Etc.)
  + Typical climate by season
  + Vegetation
  + Animals found there
  + Unique geographic features (highest peaks, major rivers or volcanoes, archeological finds, etc.)
  + Description of the human cultures, if any, found in the zone (Are there unique tribes who call this area home? If nobody lives there, why not? Etc.)
  + Issues or problems (environmental or otherwise)

1. Talk about how best to divide the work among the group members. One easy way is to assign people specific topics to research and then present during the oral report. (For example, two people could be in charge of finding cultural information, one person in charge of determining climate, two people in charge of creating a physical map, and so on.)
2. Give students time in class and as a homework assignment to research and practice their presentations. Students may use travel magazines; geography texts, encyclopedias, and other library resources; and the Internet to conduct their research. These Web sites have good information on the Andes:

<http://www.blueplanetbiomes.org/andes.htm>  
<http://www.wbu.com/chipperwoods/photos/andes.htm>  
<http://peruperu.com/andes-mountains.htm>  
<http://www.vivecuador.com/html2/eng/northern_andes.htm>  
<http://www.andes.org/bookmark.html>

1. Have the groups present their reports to the rest of the class. Allow time for students to ask the presenters questions after each report. Once all the reports have been given, discuss the differences and similarities among the regions.

**Evaluation**  
Use the following three-point rubric to evaluate students' work during this lesson.

* **Three points:**Students actively participated in class discussions; worked well in their groups without teacher guidance; used research materials wisely; were attentive during other group presentations; presented a well-organized group oral report that met the five-minute minimum time limit and correctly included all eight criteria.
* **Two points:**Students somewhat participated in class discussions; were able to work in their groups with limited teacher guidance; used research materials wisely; were somewhat attentive during other group presentations; presented a group oral report that was at least four minutes in length and correctly included five of the eight criteria.
* **One point:**Students did not participate in class discussions; were unable to work in their groups or use resource materials without teacher guidance; were inattentive during other group presentations; presented an unfinished group oral report that correctly included only two of the eight criteria.

**Vocabulary**  
Andes  
Definition: A mountain system that stretches along the west coast of South America  
Context:Running north to south along the west coast of South America, the Andes mountain range is one of the longest and highest in the world.

rain forest  
Definition: A dense, broad-leaf, largely evergreen forest occurring mostly in tropical regions of the world that receive large amounts of rain  
Context**:**The Amazon region of South America contains one of the world's largest rain forests.

pampas  
Definition: Grasslands of Argentina  
Context:Vast, grassy plains known as pampas cover much of northern Argentina.

equator  
Definition: An imaginary line circling the Earth at 0? latitude; the equator is equidistant from the north and south poles.  
Context:The equator runs through northern Ecuador and southern Colombia.

mestizo  
Definition: A person of mixed European (mainly Spanish) and American Indian ancestry  
Context:There is a large mestizo population in the Andes.

**Standards**  
The National Council for the Social Studies (NCSS) has developed national standards to provide guidelines for teaching social studies. To become a member of the NCSS, or to view the standards online, go to: <http://www.socialstudies.org>.  
   
This lesson plan addresses the following standards:

* People, Places, and Environments
* Culture
* Individual Development and Identity
* Global Connections

The National Council for Geographic Education (NCGE) provides 18 national geography standards that the geographically informed person knows and understands. To view the standards online, go to[http://www.ncge.org](http://www.ncge.org/).

This lesson plan addresses the following standards:

* The World in Spatial Terms
* Places and Regions
* Physical Systems
* Environment and Society

**Credits**  
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