

Where in the World is 34° 55 'N 81° 01 'W ? *

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* Where in the World Is 34° 55'N 81° 01' W? These are the coordinates for Rock Hill, SC. You can substitute the coordinates for your town or another place you want to emphasize in the lesson.

Overview

Reference skills, maps and the atlas are important reference sources. Latitude and longitude is a difficult concept for some students to grasp, but it is important for students to be able to read maps and understand how to find locations around the world using latitude and longitude.

Connection to the Curriculum

Geography, Social Studies, Science, Math

South Carolina Social Studies Academic Standards

None

Social Studies Literacy Elements

F. Ask geographic questions: Where is it located? Why is it there? What is significant about its location? How is its location related to that of other people, places, and environments?

G. Make and record observations about the physical and human characteristics of places

I. Use maps to observe and interpret geographic information and relationships

L. Interpret calendars, time lines, maps, charts, tables, graphs, flow charts, diagrams, photographs, paintings, cartoons, architectural drawings, documents, letters, censuses, and other artifacts

P. Locate, gather, and process information from a variety of primary and secondary sources including maps

Grade Range

3rd and 8th Grades

Time

One to two fifty minute class periods

Materials Needed

South Carolina: An Atlas

Large world map

Globe

Location worksheet

Term worksheet

Objectives

1. The student will give definitions for latitude and longitude.
2. The student will find locations using latitude and longitude.
3. The student will explain the importance of using latitude and longitude.
4. The student will locate on a map or globe the Earth's poles, circles, tropics, and beginning points of measurement for latitude and longitude.
5. The student will understand the cardinal directions when using latitude and longitude.
6. The student will write appropriate coordinates of a given location.
7. The student will become more aware of locations of the world.

Suggested Procedures

1. Have students turn to page 1 of *South Carolina: An Atlas* and find the absolute location of South Carolina based on the lines of latitude and longitude.
2. Look at lines of latitude and longitude on a globe and world map. Tell students that lines of latitude are parallel. They never meet and they never touch. Lines of longitude are all the same length, they originate at the poles. The intersecting lines make a grid.
3. Discuss and give students the list of "terms to know" to record information about latitude and longitude.
4. On a world map handout have students label global reference points such as the Equator, Prime meridian, the cardinal directions, the North and South Poles.
5. Using an overhead transparency or a large wall map show students how to locate a place starting with latitude and then longitude. Memory Aid: latitude is listed before longitude, think alphabetical order: la comes before lo. Also, latitude is like a ladder, the lines never meet. Longitude runs long from pole to pole.
6. Using an atlas or map handouts students will:
 - a.) practice locating places on a map using latitude and longitude
 - b.) list the latitude and longitude of various locations on a map
7. After students have completed the group assignment they will be given the worksheet listing cities to locate by coordinates, and a list of coordinates to find the cities.

Lesson Extensions

1. Research and explain the three types of latitude or climate zones found on earth.
2. Thinking about the climate zones, where are the largest cities located? Where are the majority of peoples located?
3. Use latitude and longitude to plot on the map the path of Hurricane Hugo or a storm that has been in the news lately (hurricane maps can be ordered from the newspaper to plot storms).
4. Research world time zones, how are they related to longitude?
5. What factors beside latitude determine climate?

Suggested Evaluation

Students will be evaluated throughout the lesson as they are working by teacher walking around the room and observing. Students will locate places on map using coordinates. Students will find the latitude and longitude (coordinates) of given places.

Resources

South Carolina: An Atlas and South Carolina Interactive Geography CD-ROM

Produced and distributed by the South Carolina Geographic Alliance

1-888-895-2023

www.cas.sc.edu/cege

World outline map from South Carolina Geographic Alliance Map Folio – available on line at

www.sc.edu/cege

Name _____ Class _____ Date _____

1. Where in the World is $34^{\circ} 55' N$ $81^{\circ} 01' W$? _____
2. List coordinates of Charlotte, North Carolina _____
3. List coordinates of Denver, Colorado _____
4. List coordinates of Memphis, Tennessee _____
5. List coordinates of New Orleans, Louisiana _____
6. List coordinates of Philadelphia, Pennsylvania _____
7. List coordinates of Seattle, Washington _____
8. List coordinates of Athens, Greece _____
9. List coordinates of Sydney, Australia _____
10. List coordinates of Nairobi, Kenya _____
11. What city is at $38^{\circ} 50' N$ $77^{\circ} 00' W$ _____
12. What city is at $34^{\circ} 00' N$ $81^{\circ} 00' W$ _____
13. What city is at $34^{\circ} 03' N$ $118^{\circ} 14' W$ _____
14. What city is at $19^{\circ} 28' N$ $99^{\circ} 09' W$ _____
15. What city is at $61^{\circ} 12' N$ $149^{\circ} 48' W$ _____
16. What city is at $33^{\circ} 26' S$ $70^{\circ} 40' W$ _____
17. What city is at $35^{\circ} 42' N$ $139^{\circ} 46' W$ _____
18. What city is at $0^{\circ} 17' S$ $78^{\circ} 32' W$ _____
19. What city is at $28^{\circ} 43' N$ $77^{\circ} 18' E$ _____
20. What city is at $30^{\circ} 00' N$ $31^{\circ} 17' W$ _____

Name _____ Class _____ Date _____

Terms to Know

Antarctic Circle

Arctic Circle

Equator

Grid

Tropic of Cancer

Tropic of Capricorn

North Pole

International Date Line

Latitude

Location

Longitude

Meridian

Hemisphere

Parallels

Prime Meridian

Scale

South Pole

Cardinal directions