

STATE GEOGRAPHIC BROWNIE

STANDARDS

See summary of National Science Education Standards.

Original: <http://books.nap.edu/readingroom/books/nses/>

Standard Concept	General standard	Specific standard	General standard	Specific standard	General standard	Specific standard
Grade Level		K-4		5-8		9-12
Science as inquiry (A)	Abilities ... to do ... inquiry	A.1.4.1	Abilities ... to do ... inquiry	A.1.8.4		
		A.1.4.5				
Earth and space science (D)	Properties of Earth materials	D.1.4.1	Structure of Earth system	D.1.8.3		
Science in ... social perspectives (F)	Types of resources	F.3.4.1	Natural hazards	F.3.8.1	Natural Resources	F.3.12.1
			Risks and benefits	F.4.8.1		
					Natural and human-induced hazards	F.5.12.1



STATE GEOGRAPHIC BROWNIE

INTRODUCTION

The physical geography of the state includes locations and social significance of such features as mountains, valleys, and rivers.

OBJECT:

To help students learn about the geographical elements found in their state. Students will read both topographical and road maps. The students are active participants in making their own edible map of their state and learning geography as well as creating a delicious work of art!

MATERIALS:

- Road map of your State
- Topographical State Map
- Butcher paper
- Prepared pan of brownies, not cut into squares (13x9 or 11x17 for each group)
- Chocolate bars
- Chocolate kisses
- Chocolate and/or butterscotch chips
- Food coloring
- Cool Whip
- Licorice shoe strings (assorted colors)
- Plastic knives & spoons
- Stir sticks
- Bowls

INSTRUCTIONS:

- 1) Hang a road map of the State in the classroom to familiarize the students with the State's geographical shape. Divide the class into small groups of 4 or 5 and have a brownie for each table.
- 2) On the butcher paper have the students draw the outline of the state and draw in the bordering States, place the Brownie on top of the butcher paper then have them cut the Brownie to resemble the shape of their State.
- 3) Discuss the geography of the State including its mountain ranges, rivers, lakes, etc. This can be expanded to include more detailed information on how the state was formed.
- 4) Nevada Example: Use the chocolate bars (broken into pieces or the cut off pieces of the Brownie) for the Sierra Nevada Mountains on Nevada's western border. Use the kisses and chips for smaller mountain ranges such as: Goshute, Toiyabe, Silver Peak, Pahrnagat, Sheep, Wilson, Delamar, Mormon, and Spring mountains.
- 5) Use the food coloring to color small cups of **Cool Whip**, blue, green and tan. Use the blue for bodies of water, the green for forests and the tan to designate basins within the mountain ranges. Use some of the white Cool Whip for snow on the highest mountain peaks. Note the highest peak in Nevada is Boundary Peak at



13,142 feet, and the highest peak entirely in the state of Nevada is Wheeler Peak at 13,063 feet.

- 6) Using one color of the licorice shoe strings, mark the major road systems throughout the State. With another color of the licorice, mark off the county borders. Different colored M&M's can be used to identify and mark county seats, the State Capital or other Points of Interest.

OTHER OPTIONS:

- Use M&M's to locate the major cities and/or mines in the state. Have students explain why certain minerals are found in the areas located. To incorporate some History, have students research the major westward trails used by the pioneers to traverse the State and mark those trails on the map. Students can then describe the different hardships encountered in each trail.
- Using a colored Geological Map of your State, students can use the colored Cool Whip to identify the various geological ages of the deposited rocks and minerals in the state. Using an earthquake map, students could identify where our major earthquakes have occurred and the faults they centered on.
- Eat the brownie and enjoy!
- Note: Before the class, students can be assigned to find the highest peaks in their State, what minerals are mined within the State or other pertinent geographical information on their State.

