



HOW BIG IS AFRICA?

Objectives:

- Students will learn about the size of the African continent.
- Students will learn how big Africa is in relation to the United States and their home state.
- Students will understand the concept of scale and how to apply it by measuring distances in Africa.

Recommended Grades: 3-6

Materials (all included in the trunk):

- Blue nylon straps (scale bars)

Preparation: 5 minutes

- Read over the activity, and make adaptations for student grade level.

Rules:



Shoes are not allowed on the map. Please have students remove shoes before walking on the map.



No writing utensils on the map.

Introduction

Ask students this question: Is Africa taller than it is wide? Or is Africa wider than it is tall? Let's find out!

Select a few students to lie on their stomachs, head to toe, across Africa along its widest area (from the coast of Senegal in West Africa to the coast of Somalia on the East African "horn"). Select another group of students to do the same from the southernmost coast of South Africa to the northernmost coast in Tunisia. How many students "tall" is Africa? How many students "wide" is Africa? [It is usually about the same, depending on the height of the students chosen.]

To get an exact measure of these distances, have students use the blue nylon straps included in the trunk. These straps equal 500 miles. Students should verify that by placing the strap on the scale bar found in each corner of the map. Assign some groups of students to measure the East/West distance and other small groups to measure the North/South distance. Multiple groups of students should do this and compare results. Compare the two distances. [They are similar.]

See how close they come to the actual distances.

[The East – West distance from the coast of Gabon to the coast of Somalia is 4,655 miles. The North – South distance from the coast of Tunisia to the tip of South Africa is 4,989 miles – only 334 miles difference.]



Share these comparisons with the students:

- Distance from New York City to Los Angeles, California is 2,462 miles.
- The total area of Africa is 11,686,111 square miles.
- The total area of the United States (including Alaska and Hawaii) is 3,537,438 square miles. Africa is more than three times the size of the U.S.

How Big is Africa in Relation to Your State?

Sudan is the largest country in Africa. How many times could you fit your state into Sudan? How many times could you fit your state into Africa? Use the data table that follows to find out.

Optional Extension: How Big Is the Sahara Desert?

Have all the students sit on the Sahara Desert. This area is about equal in size to the lower 48 U.S. states. Notice how much more of Africa there is outside of the Sahara.

Print out your state to the scale of the Giant Map of Africa (PDF file provided) and compare its size with the size of several countries in Africa.

State	How many times could you fit your state into Sudan?	How many times could your state in Africa?
Alabama	18	223
Alaska	1	18
Arizona	8	103
Arkansas	18	220
California	6	71
Colorado	9	112
Connecticut	172	2,110
Delaware	382	4,699
District of Columbia	13,930	171,175
Florida	15	178
Georgia	16	197
Hawaii	87	1,070
Idaho	11	140
Illinois	16	202
Indiana	26	321
Iowa	17	208
Kansas	12	142
Kentucky	24	289
Louisiana	18	226
Maine	27	331
Maryland	77	943
Massachusetts	90	1,108
Michigan	10	121
Minnesota	11	134
Mississippi	20	242
Missouri	14	168
Montana	7	80
Nebraska	12	151
Nevada	9	106
New Hampshire	102	1,251
New Jersey	110	1,341
New Mexico	8	96
New York	7	214
North Carolina	18	217
North Dakota	14	165

Ohio	21	261
Oklahoma	14	167
Oregon	10	119
Pennsylvania	21	254
Rhode Island	616	7,571
South Carolina	30	365
South Dakota	12	151
Tennessee	23	278
Texas	4	44
Utah	11	138
Vermont	99	1,217
Virginia	22	273
Washington	13	164
West Virginia	39	483
Wisconsin	15	179
Wyoming	10	120

All data measurements are in square miles.

Data on the area of African countries from Population Reference Bureau 2006 World Population Data Sheet www.prb.org

Data on the area of United States from United States Census Bureau, 2000 Census, www.census.gov