

From Yellowstone to Yosemite: Investigating the National Parks through Measurement

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NCTM 2016: Friday, April 15, 2016: 8:00-9:15 A.M.

Your task today is to find the area of Yellowstone National Park using the map you are given and any of the following tools (please be ready to present your solution at the end of class):

- Modeling Dough
- Graph Paper (1/8, 1/4, 1/2, and 1-inch sizes)
- 1-inch tiles
- String
- Weighing Scale

1. Describe how you found the area of the park and the tool you used. What did you do first, second, third, etc? and why?

2. Could you envision using another tool to find the area of the park? How might you use that particular tool?

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<p>Task 1: Yellowstone Lake is the largest freshwater lake above 7,000 ft in North America. In your packet, you also have a map of Lake Michigan. Your task is to describe and compare the surface areas of both lakes.</p>
<p>Task 2: When people think of National Parks, they often think of Yellowstone National Park and Yosemite National Park. Yosemite had about 4 million visitors last year while Yellowstone had about 3 million visitors. Your task is to compare the two parks.</p>
<p>Task 3: Volcanos are kind of scary. In 1980 Mt. St. Helens erupted and spewed ash a few states over. Did you know we live pretty close to a super volcano? Your task is to compare the caldera in Yellowstone to Mt. St. Helens's caldera.</p>
<p>Task 4: Sometimes it is hard to imagine how big our state, Montana, is. Your task is to compare Yellowstone National Park to the state of Montana. How big is one compared to the other?</p>
<p>Task 5: It is very hard to imagine how big our country is compared to Yellowstone National Park. Compare Yellowstone to the map of the United States. What proportion of the country does Yellowstone take up?</p>
<p>Questions you might want to consider:</p> <ol style="list-style-type: none">1. Which one is larger (or are they about the same size) in terms of surface area?2. How many times bigger is one than the other?3. What did you have to consider when comparing maps