

Where Should We Camp? Lake Blanco

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Grade Level 3
Duration 1-2 class periods

National Standards

GEOGRAPHY

Element 1: The World in Spatial Terms

1. How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

AZ Standards

MATHEMATICS

Number and Operations in Base Ten

3.NBT.A.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

Measurement and Data

3.MD.C.6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).

Standards for Mathematical Practice

3.MP.1. Make sense of problems and persevere in solving them.

3.MP.4. Model with mathematics.

Other Arizona Standards

The use of geographic representations and tools helps individuals understand their world.

3.G1.1 Use and construct maps and graphs to represent changes in Arizona over time.

Overview

Maps can provide much information for the reader. Some of this information includes compass direction, the location of human and natural features, as well as the sizes of these features.

Purpose

In this lesson, students will interpret a map using its legend and scale and then construct a map counting unit squares to calculate square feet on a map.

Materials

- Colored pencils (optional)
- Lake Blanco map
- Reading the Map/Using Your Math Skills worksheet and Answer Key
- Lake Mapping Activity
- Map Making Scoring Guide
- Campsite Selection

Objectives

The student will be able to:

1. Locate human and physical features on a map using a grid system.
2. Count unit squares to determine size of features on the map.
3. Evaluate data and decide on the "best" location for a class campsite.

Procedures

SESSION ONE

1. Begin the lesson by asking:
 - What are some natural features you might find at a campsite?
 - What are some manmade features you might find at a campsite?
 - What features would make a great campsite?
2. Distribute the Lake Blanco map to the students and discuss the features of the map. Have students complete Reading the Map and Using Your Math Skills worksheet. This can be done as a whole group, small group, or individually. Share the correct answers.
3. Divide the students into groups of threes. Distribute the Lake Mapping Activity worksheets (map and assignment). Assign the groups the task of creating a new map for a camping area. Be sure to go over the human and natural features that must

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be situated on the map. Reinforce the directions on how to create a map key. Distribute colored pencils. (optional)

SESSION TWO

4. Have the groups from Session One continue to work on their maps and create and answer the map reading and math questions on the back of the map.
5. Distribute the Campsite Selection worksheet. Have groups exchange their maps with a partner group and select their site for the class campsite. Once the groups have decided the best campsite location, they should compose three or more sentences explaining their choice of site.

Assessment

Geography

The Lake Mapping Activity can be evaluated according to the Map Making Scoring Guide.

Mastery is considered 18 out of the 22 points possible.

Use the 1 to 3 point rubric on the Campsite Selection worksheet for assessing the desirability of this site location. Mastery will be considered 3 out of 3.

Mathematics

The Lake Mapping Activity can be evaluated using the Math Scoring Guide. Mastery is considered 10 out of the 12 points possible.

Extensions

Students could create other maps that relate to literature read in class that has "journeys or trips" as a theme.